KENYA - NETHERLANDS
RURAL DOMESTIC WATER SUPPLY AND SANITATION PROGRAMME
(RDWSSP)

FORMULATION REPORT

FOR PHASE III

(FINAL)

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Submitted to:

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Permanent Secretary
Ministry of Land Reclamation
Regional and Water Development
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PREFACE

Given the complexity of the programme, discussions on the formulation of phase III of the RDWSSP have been going on for a number of months. In November 1996 it was decided that this formulation would be shaped as an interactive process in which all stakeholders would participate and RNE and GOK agreed on the Terms of Reference.

The formulation process was divided in two distinct periods. During the first period (24 November - 7 December) four team members visited 7 districts in Nyanza Province where discussions were held with the district staff involved in the project. Also 12 communities were visited. At the end of this first period a mini-workshop was held in Kisumu in which representatives from the districts, the programme and NGOs participated. One of the core issues during this workshop was the planning of the interactive workshop in January 1997.

For this workshop, the DWSDCs and participating NGOs were requested to formulate their own strategic agendas for Phase III. Although time was very short, the DWSDCs managed to conduct meetings for this preparation and to have their strategic agendas ready in time for the workshop, held near Kisumu from January 15 to 17, 1997.

In this workshop representatives of all groups which are directly or indirectly involved in RDWSSP participated, such as representatives from various communities, district programme staff, some provincial and even national staff from the Ministries involved, the PMEU and NGO representatives. Mr. Tom Oyieke, senior consultant from Matrix Kenya and member of the Formulation Mission acted as the facilitator of this challenging getting-together. It is here the right place to thank all those who contributed to this event. Thanks to people from the districts and from PMEU who spent a lot of time and energy to prepare this meeting and to ease the participants. The multi-disciplinary background of the participants ensured a lively atmosphere during the sessions on the several issues highlighted for discussion.

After the workshop the Formulation Mission could start the second part of its task, i.e. the formulation of this document. This would not have been possible without the ongoing input of the team leader and staff of the PMEU, including the drivers who also took part of the mission for some field visits. Support staff gave valuable assistance in typing parts of the manuscript.

The staff of the Development Training Centre, Kiboswa, where the workshop was held and where the mission members stayed throughout the formulation period, are thanked for their caring support. The mission is grateful for all this assistance but carries of course the full responsibility for this document.

The mission would like to express its gratitude towards the Royal Netherlands Embassy in Nairobi that it got the opportunity to rework the first draft on the basis of the comments made by the Ministry of Land Reclamation Regional and Water Development and of the Embassy. The quality and the consistency of the report has improved substantially in that way.

EXECUTIVE SUMMARY

Access to safe drinking water and sanitary means of waste disposal are important determinants of good health and socio-economic development. In recognition of this fact, the Kenyan Government in the early 1980s set a goal of providing universal access to safe and potable water at a source less than one kilometre from home in water-rich areas and less than five kilometres away in water-deficient areas by the year 2000. Although this target may not be met, the provision of safe drinking water remains a priority item in the Government's development agenda. The links between safe drinking water and adequate environmental sanitation can hardly be exaggerated.

The Rural Domestic Water Supply and Sanitation Programme (RDWSSP) provides important services in an area where there is a serious demand for clean and safe water. The health situation in Nyanza Province is one of the worst in the whole of Kenya. The child mortality rate is the highest in this area in particular due to the prevalence of water-borne diseases.

The target beneficiaries of the programme are the following:

- Communities which are able to take their own initiatives for water and sanitation facilities and will get - on their request - technical support to realise physical structures and assistance to develop managerial skills to sustain these facilities
- Women and children who are traditionally responsible for domestic water supply and sanitation facilities
- Women whose organisational capabilities to manage watsan facilities will be increased resulting in increased self-reliance
- Needy areas: areas where water and sanitation coverage is the lowest as well as where other health and social indicators are mostly lagging behind.

After the programme started in 1982 it went through different phases and interim phases and has experienced a sometimes rather turbulent history.

The programme is implemented as a joint enterprise between the Ministry of Land Reclamation Regional and Water Development (MLRRWD) of the Government of Kenya and the Government of the Netherlands. The institutional framework of the programme is based on the principle of decentralization of programme activities to the district level and target communities. It is the third phase which forms the subject of the present formulation document and which covers the period mid 1997 - mid 2002.

The strategy for this phase envisages an integrated approach in which water supply, latrine sanitation, environmental sanitation and sustainable water resources management constitute the components. Hygiene, health and environmental education will form the basis of and the cement between these components.

The main components of the strategy for phase III are the following:

Communities - the carrying bodies of the programme

- At the community level local communities will become the responsible bodies for the realisation of watsan activities. Strong local *water and sanitation committees* will have to be constituted, composed of men and women, which represent, from the very beginning, even prior to the implementation, *the ownership* of the communities and which embody the interests of the community in a fair and gender balanced way. The committees should be able to carry the responsibilities of the community projects effectively and take adequate decisions.

Privatization

- The starting point is that the RDWSSP be privatized and that the privatization process be undertaken systematically. The Formulation Mission is opting for a *two tier approach*. This approach implies that the implementation of the programme continues (tier 1), but that at the same time the *concept of privatization* is studied and worked out in further detail (tier 2). After a period of about 2 years the results of this study are integrated into tier 1 (implementation).

Mobilization

- The methodology for community mobilization has to be more focused on the components of the project. Many of the activities of the PRA can be used, but in general the approach has to be more flexible and more geared towards finding the cultural beliefs and concepts which determine behaviour in each community and harnessing these into implementation practice. A general review of the community mobilization approach is envisaged.

- Health components are to be incorporated in the hygiene education package. Subjects in the package are selected on the basis of the participatory assessment of the existing health and hygiene conditions and beliefs. Education is also used as a tool for mobilization.

- Existing groups at community level are to be used as much as possible in the mobilization process. The method of selection and training of volunteers does not need to be changed.

- Gender concerns are to be integrated at all levels of the programme.

- Monitoring is to be as much as possible carried out by the community. Selection of indicators for monitoring is done on the basis of the participatory assessment at the beginning of the project.

Technology

- A choice to be made for simple, appropriate technologies which can be applied on cost sharing basis and have the best chance to prove sustainable.

Sustainability

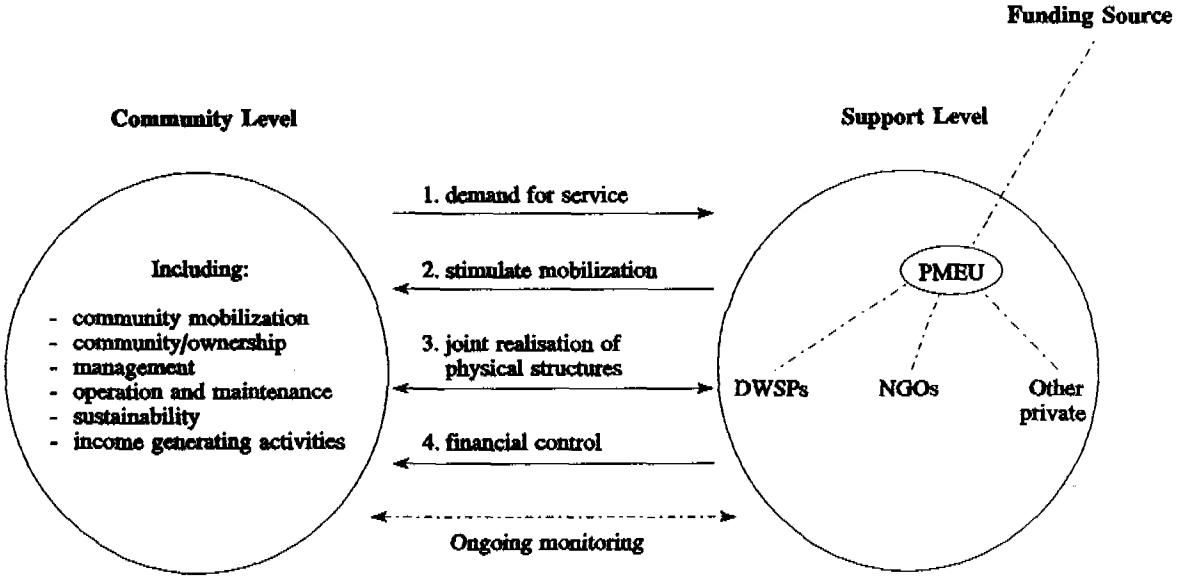
- For the long term sustainability of the programme's realisation the following elements should be addressed:

  - the concept of sense of ownership
  - village level operation and management of maintenance
  - availability and affordability of spare parts
  - appropriate technology
  - cost and size of the project
  - social/cultural acceptance
  - appropriate institutional framework
  - environmental conservation concerns

Institutional structure

The Formulation Mission has observed that the institutional structure which has been applied in its present form since the interim phase is effective and transparent. An important indicator for effectiveness is the physical output, i.e. the number of community drinking water projects that could be realised which has increased substantially during the interim phase. Further the mission has observed that the interaction between the various stakeholders has developed satisfactorily during the interim phase. For this reason the Formulation Mission has come to the conclusion that there is no reason to change the existing institutional structure fundamentally. The interaction between the communities and the institutional set-up of the programme is visualised in the following figure:

Interaction between Communities and Institutional Set-Up of RDWSSP programme Phase III



Planned activities

Water supply

A summary overview of water point construction is presented in the table below. The planned output for the coming 5 years is 900 water points.

SUMMARY OF WATER POINT CONSTRUCTION PROGRAMME

Period 1997 - 2002

District	S/P	H/dug	H/dr	B'holes	GFS	Pans	Total
Siaya	-	30	-	30	3(15)	25	100
Kisumu	5	25	15	50	4(20)	5	120
Rachwonyo	-	25	-	20	5(25)	10	80
Homa Bay	-	35	-	20	3(15)	10	80
Suba	-	15	-	55	8(40)	10	120
Kisii	60	10	-	10	4(20)	-	100
Nyamira	60	10	-	10	4(20)	-	100
Migori	-	20	-	45	6(30)	25	120
Kuria	35	10	-	20	2(10)	10	80
Totals	**160**	**180**	**15**	**260**	**39(195)**	**90**	**900**

Sanitation

During phase III the latrine construction component of the programme will be delinked from water supply in that sense that sanitation will become optional. This implies that it is not possible to give firm figures for latrine construction.It is expected that between 10.000 and 12.000 latrines will be constructed during phase III.

Health

Health related training activities will be integrated in the programme during phase III, especially linked to the sanitation component and focusing on environmental health. This being a new activity, it is not yet possible to give firm indicators on the estimated output for the health component of the programme. A Health Education Consultant will advise the programme staff to develop the health component of the programme.

Budget

Activities based on the targets indicated above are described in detail in the report.The planned donor budget exceeds NFl. 25 million for 5 years. The Kenyan contribution to phase III is not included in this budget, but mainly consist of government staff, made available to the programme and the contribution of the communities in the construction and the Operation & Maintenance of the facilities.

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ANNEXES

1. BACKGROUND INFORMATION

1.1 Introduction

By its very nature, the Rural Domestic Water Supply and Sanitation Programme (RDWSSP) in the Nyanza Province of Kenya incorporates the following aspects:

- water development;
- sanitation, health and hygiene;
- community mobilization.

The impact of the programme during the past phases (1981 - 1996) could only be determined through an assessment study, which so far has not yet been realised. However the following baseline information is documented by means of the strategic agendas, which were prepared by the *District Water and Sanitation Development Committees* (DWSDCs) as a contribution to the formulation process. Table 1 summarises the coverage and impacts of the programme in each districts of the Nyanza province at the end of 1996.

Table 1.1 ANALYSIS OF COVERAGE OF WATSAN ACTIVITIES

DISTRICT	% OF WATER COVERAGE	% OF SANITATION	COMM. MOBIL.	GENERAL REMARKS
KISUMU	39% in rural	60%	still very low	- High infant mortality - Polluted environment and water sources
SIAYA	50% when wet 33% when dry	72%	low commit-ment	- intensive community mobilization to be launched
HOMA BAY	30%	30%	poor	- high incidence of water borne diseases - little impact from several donors
RACHWONYO	31.2%	59%	poor	- high incidence of water borne diseases
SUBA	27%	27%	poor	- high incidence of water borne diseases - general poor hygiene
NYAMIRA	38%	98% (65% good; improved design)	satisfac-tory	- water borne diseases 10% of illnesses - need for health education around water points
KISII	43%	94%	fair/satis-factory	- high awareness on environmental health
MIGORI	22%	34%	poor	- high level of gastroenteritis cases - high levels of water and environment pollution
KURIA	15%	42%	low	- high level of poor hygiene - high incidence of diseases

This overview makes sufficiently clear that in a number of districts of the Nyanza Province the coverage of safe drinking water supply is rather low. The coverage of sanitation in some of the districts is surprisingly high, especially in Kisii and Nyamira, the districts with a very high annual rainfall (over 2.000 mm). In the comparatively dry areas of Homa Bay and Suba the coverage of sanitation is very low (30% or lower).

1.2 Government's sectoral policy/strategy

The Ministry of Land Reclamation, Regional and Water Development is in the process of developing an up to date water policy, which has been submitted to Parliament for approval and adoption. The main objective of the water policy is to provide clean and safe drinking water as close to the people as possible. With reference to the Policy Framework Paper 1996 the Government has formulated approaches and strategies to suit the changing economic and environmental situation in line with the general development policies and the global thinking on water resources management and strategy of the government. These integrated policies and strategies, to a large extent, include the following elements:

- Creating an enabling environment for orderly, coordinated and sustained development of water resources including their conservation and protection against pollution and over-exploitation;
- Recognizing that responsibility of MoLRRWD is to formulate policy and legislation concerning water resources management in the country and that the actual realization of water development programmes will involve all the actors involved, including communities and NGOs. The ministry is playing a supervisory, monitoring, coordinating and facilitating role while moving out of direct implementation. To this end, it has to define roles of the different actors in the sector;
- Strengthening institutional capacity building and training. Such capacity building and training will cover sectoral actors at all levels, including the provincial and district offices, NGOs and community organizations, in order to enable them play their changing roles effectively;
- Cost-recovery will be an important consideration. In this regard, tariffs reflecting the economic cost of water will be enacted;
- Continuing to assist the vulnerable population groups in development of water supply, which is expected to act as an impetus to other economic development activities;
- Water resources management to be realised at the lowest level possible and, to this end, consumers will be encouraged and facilitated to run their own water systems;
- Holistic water resources management to be emphasised and appropriate research on the technologies and methodologies geared towards this end will be carried out.

Other policies which have been released by the government in the recent past include those related to civil service reform which introduced measures with far reaching impact on the availability of staff in the civil service who would have been deployed in the sector programmes. Reference is made of the Social Dimensions of Development Document in which the roles for implementation

of programmes are clearly defined for each level. For example, the role of the communities is defined to include to contribute substantially to identifying locally compatible solutions, help in targeting the poor and vulnerable and to provide time and labour resources while meeting part of the material and financial costs. Besides implementation of projects, the roles of NGOs are defined to include provision of training and capacity building.

1.3 Institutional Framework for the Sub-Sector

The Ministry of Water Development was created in 1974. Prior to that, immediately after independence water issues were being handled by the Hydraulics Section in the Ministry of Public Works and thereafter, in 1968 in the Water Resources Branch of the Ministry of Agriculture. The Water Department, is now one of the three departments in the Ministry of Land Reclamation, Regional and Water Development. Currently the Water Department is headed by a Director of Water Development under whom are four branches, i.e. Water Resources Management (WRM), Water Resources Development (WRD), Applied Water Research (AWR), Kenya Water Institute (KEWI). Under these branches are a number of divisions and sections. The Ministry at the national level is involved in policy formulation, regulation, supervision and co-ordination of all actors in the water sector as mandated by the Water Act, Cap 372 of the Laws of Kenya.

At the provincial level the Provincial Water Engineer (PWE) is the chairman of the Programme Steering Committee (PSC) of the RDWSSP. At this level the PWE is charged with the responsibility of monitoring and quality control of water activities. He co-ordinates all water related activities. At the district level the office of the District Water Engineer (DWE) co-ordinates water related activities as a part of his responsibilities, such as monitoring and evaluating the progress and the technical quality of implementation of drinking water projects within his district. He is the chairman of the District's Water and Sanitation Development Committee (DWSDC) where activities related to water development are co-ordinated.

The Ministry of Health is one of the oldest ministries in Kenya, with the first and foremost responsibility of bringing health services closer to the people. Its institutional set up is much like that of the Ministry responsible for Water Development issues. The Ministry is represented at provincial level in the Programme Steering Committee (PSC) of the RDWSSP, by the Provincial Public Health Officer (PPHO) and in the DWSDCs by the District Public Health Officer (DPHO) respectively. In Phase III, the link with the MoH will be strengthened as the health component will be an integrating part of phase III.

During the previous phases of RDWSSP, the Ministry of Culture and Social Services (MOCSS) was called upon to second staff who were to carry out community sensitisation and mobilization. The concept was to have one community development officer and several community development assistants attached to each DWSP. Unfortunately, this secondment arrangement has not worked according to expectation - a fact which has contributed to a serious lag between the construction of watsan facilities and mobilization of target communities towards commitment to ownership, contribution and participation

in the programme implementation. Because of this serious default, the Formulation Mission recommends to review the participation of the MOCSS. Where it is not possible to get suitable secondment from the MOCSS, the programme should recruit qualified and experienced personnel from the open market.

1.4 Prior and on-going assistance

The RDWSSP started as a Pilot Project in 1983, which laid the basis for Phase I which was realised from 1985 to 1988. There was a first Interim Period from 1989 to 1991. Phase II of the RDWSSP started in 1992 and run until June 1995. The programme is now in an extended Interim Phase which started in July 1995, and is due to be terminated in September 1997 and thereby give way to Phase III. The programme has been operating for 15 years. The programme in its implementation has involved NGOs such as CARE-Kenya, KWAHO and other church based NGOs.

Other donor-funded programmes in the watsan sector within the region include the Kenya-Finland Development Co-operation in the Water Sector, Community Water Supply Management Project which has been operating since 1984. Other actors that participate on a small scale only include Kenya Freedom from Hunger Campaign (funds from Germany) in Siaya, and UNICEF (Child Mortality Project) in Homa Bay and in Kisumu.

2. PROJECT JUSTIFICATION

2.1 Diagnosis of present situation

Access to safe drinking water and sanitary means of waste disposal are important determinants of good health and socio-economic development. In recognition of this fact, the Kenyan Government in the early 1980s set a goal of providing universal access to safe and potable water at a source less than one kilometre from home in water-rich areas and less than five kilometres away in water-deficient areas by the year 2000. Although this target may not be met, the provision of safe drinking water remains a priority item in the Government's development agenda. The links between safe drinking water and adequate environmental sanitation can hardly be exaggerated. Many policy makers now recognize the correlation between the prevalence of certain diseases and poor environmental sanitation. Studies show that diarrhoeal and other water-borne diseases are caused largely by inadequate sanitation.

The programme provides important services in an area where there is a serious demand for clean and safe water. The health situation in Nyanza Province is one of the worst in the whole of Kenya. The child mortality rate is the highest in the country, in particular due to the prevalence of water-borne diseases.

Presently there is a low coverage of water and sanitation services partly due to unawareness, but also because of the low economic status of most of the rural population. This low economic status also causes deterioration of the environment in the sense that water catchment areas are not protected and tree species which are high yielding in wood but cause deterioration in water availability, are planted as cash crops.

2.2 Target beneficiaries and parties (institutions) involved

The target beneficiaries and stakeholders at various levels are:

- Women and children who are traditionally responsible for domestic water supply and sanitation facilities
- The poor communities which require outside assistance to improve or construct water and sanitation facilities and be assisted to develop managerial skills to sustain the facilities
- Women whose organizational capabilities to manage watsan facilities will be increased resulting in increased self-reliance
- Strengthening of all institutions in the RDWSSP structure especially DWSDC to play an active role in policy direction, planning and coordination of watsan activities
- Local NGOs and private sector who will be encouraged to develop and participate in the project activities.

2.3 Long term/development objective

- To provide safe water, easily accessible in sufficient quantities, adequate for drinking, food preparation, personal hygiene and in some cases (small)

livestock, at a cost in keeping with the economic level of the communities and through facilities which can easily be operated and maintained by the beneficiary communities.

- To provide health education, with emphasis on the safe disposal of human waste through low cost, easily maintained sanitary facilities, with the aim of protecting the health of the rural people from water and human waste related diseases.

- To ensure the continued participation and responsibility for community projects by promoting *community ownership* through involving men and women of the local communities in site identification, construction and operation and maintenance of the water points.

- To achieve the systematic transfer of management, planning capacity and programme responsibility to the participating communities so that ultimately the programme will be composed of independent community based and district controlled water programmes, ensuring gender sensitivity at all levels and promotion of maximum opportunities for women in programme operation and management.

- To ensure that gender needs and expectations are taken into account during the project implementation process and that the programme aims at giving women access to and control over the facilities and benefits accrued thereof.

- To reduce the burden of carrying water over long distances which, particularly in the case of women who are the chief hauliers of water, will save considerable amounts of time and energy, thus creating resources which can be spent on alternative productive activities.

- To establish an institutionalised organizational framework which safeguards the realisation of these objectives, and activates the organizational capacity of the community.

2.4 Immediate/project objective

- Support communities in the construction of water points for the provision of safe drinking water each with per capita coverage of 250 persons.

- Support communities in the construction of hygienic latrines with per capita coverage of 10 persons.

- Provide hygiene and health education to homesteads aiming at achieving a 65% hygiene behaviour adoption rate in the involved communities.

- Build capacity for effective user organizations based on the participatory approach focusing on involving men and women in the communities concerned and resulting in maintenance of water and sanitation facilities.

- Assist the DWSPs in their privatization process, i.e.transforming them into private, district and community based institutions.

2.5 Expected end-of-project situation/result

- improved community health and socio-economic status;
- improved environmental conditions;
- increased ability of men and women in the rural communities to make decisions on issues affecting their own social and personal lives;
- sustainable organizational structures at community and district level, enabling continued functioning of water and sanitation facilities.

3. HISTORY OF THE PROGRAMME

3.1 Phase I - Inception 1989

RDWSSP started with the concept of shallow wells technology in 1982 in a pilot phase (1982 - 1983). This pilot phase was followed by a Netherlands Government evaluation mission in 1983 which concluded that the physical feasibility of the abstraction of safe drinking water by means of hand pump technology in the province had been established. The mission also emphasised the need for a viable maintenance system and community mobilization. On the basis of the recommendation of a *workshop on shallow wells,* held in that time, technical and socio-economic surveys were started early 1984. One of the objectives of the survey was to identify all rural domestic water supply possibilities as a basis for future construction or improvement of water sources.

The findings of the pilot phase, the recommendations of the shallow wells workshop and the preliminary results of the technical surveys, formed the basis for the RDWSSP with as a basic objective the provision of safe water, easily accessible in quantities adequate for domestic use at a cost in accordance with the economic level of the communities and through facilities which can be easily operated and maintained at the local level.

Phase I of this project was funded under a bilateral agreement between Kenya and Netherlands Governments for the period between 1985 and 1988. Targets were set for the provision of water to rural communities in the then four districts and at the end of that phase about 700 water points had been established. Sanitation approach was mainly on demonstration in public places such as chief's offices and rural health centres. There were a total of 160 demonstration VIP latrines and 1,000 VIP latrine slabs produced for collection by those who found the technology acceptable.

3.2 Phase II

During the second phase over 180 water points and 3,600 homestead based latrines have been completed. The Lake Basin Development Authority (LBDA) was the implementing agency in collaboration with the line ministries of MoH, MOCSS, MLRRWD. The Programme Advisory Team (PAT) consisted of consultants from BKH, and local consultants. During phase II more emphasis was put on community participation in the realisation of the watsan objectives.

Evaluation of phase II took place in May/June 1994, followed by a study which focused upon the Institutional Structure (the so-called Paldim-report, December 1994). These reports proposed to transfer the responsibility of the programme from the LBDA and give the District Water Supply and Sanitation Committees a planning and policy responsibility with respect to the Districts Water Supply and Sanitation Programme (DWSPs)

The Programme Advisory Team (PAT), the implementing arm of the Consultant was to be replaced by a Programme Monitoring and Evaluation Unit (PMEU) which would have an office and the PWE's premises.

3.3 Interim Phase (July 1995 - January 1997)

Starting from both reports mentioned above, a number of meetings and official correspondence have served to shape the definite institutional framework for the Interim Period of RDWSSP. These are:

February 1995:
Kenya Netherlands Bilateral Consultations.

March 1995:
The RNE submitted a proposal for the Interim Period to the Permanent Secretary, MLRRWD, of which most important points were:

- The Lake Basin Development Authority will no longer carry the responsibility for the implementation of the programme;

- The Programme Advisory Team (PAT) is transformed into a Programme Evaluation and Monitory Unit (PMEU);

- The DWSPs will submit 3 monthly work plans and budgets to PMEU; After approval, the PMEU will advise the RNE to transfer the required funds to PMEU district bank accounts. The Programme Advisor (PMEU) and the DWE will be signatories to the DWSP bank account.

- The DWE will be the Chairman of the Programme Tender Committee which will include the Programme Advisor, the District Programme Manager and the District Supplies Officer;

- NGO's participation will get special emphasis during the interim phase so that gradually the implementation of the programme can be transferred by the DWSPs to NGOs.

27 April 1995:
Letter of PS-MLRRWD Ref No. WD/1/2/76/16, to the Royal Netherlands Embassy and meeting between the PS and First Secretary RNE on the same day. In this letter, the **Administrative arrangements proposed for the Implementation of the programme,** was accepted by the Ministry.

15 May 1995:
Letter of PS-MLRRWD Ref. WD/1/2/76/17 to the Royal Netherlands Embassy which confirmed that RNE's proposal for the implementation of RDWSSP (KE 90004) during the Interim Phase, had been studied by the Ministry. The letter established the Programme Steering Committee (PSC) as well as the Programme Management Committee (PMC).

22 May 1995:
Letter of PS-MLRRWD, Ref. WD/1/2/76/20 to the PS-MOF which communicated that the Ministry had agreed that from the 1st July, 1995 the RDWSSP will be implemented directly by the Districts in line with the District Focus strategy. The letter also requested for the extension of the Programme by a transition period of one year from the 1st July, 1995. To implement these decisions, two PMC meetings were held on 18 May and 22 June. On that basis,

a Plan of Operation (POP) document was prepared for the Interim Period of the Programme. The effective date for the start up of the Interim Period was however not 1st July 1995, but **1st August 1995** when LBDA's contract with RNE was terminated.

NGO's Participation in the Programme Implementation.
In the RNE's proposal for the implementation of RDWSSP referred to by the PS MLRRDW in his letter of 15 May 1995, it was proposed that:

> *'NGO's selected to participate in the Programme implementation and allocated specified areas by the DWSDC will enter into separate agreements with PMEU on behalf of RNE, and will therefore receive their funding directly from PMEU'.*

4. OUTLINE OF THE GENERAL PROGRAMME STRATEGY FOR PHASE III

4.1 Introduction

The Rural Domestic Water Supply and Sanitation Programme (RDWSSP) is a programme which has as its basic objective the mobilization of local communities, to support them to obtain drinking water and to improve the sanitation situation in those communities in a sustainable way. The mobilization of the communities is the starting point of the programme's approach.

The strategy for the third phase envisages an integrated approach in which water supply, latrine sanitation, environmental sanitation and sustainable water resources management form the components. Hygiene, health and environmental education will form the basis of and the cement between these components.

The way in which the community approach has been realised in the previous phases of the programme and will be realised during phase III is described in further detail in the following sections of this chapter and in chapter 5.

The programme is implemented as a joint enterprise between the Ministry of Land Reclamation Regional and Water Development (MoLRRWD) and the Government of the Netherlands. The institutional framework of the programme is based on the principle of decentralisation of programme activities to the district and community level. The basis for this framework was developed during Phase II and the Interim Phase and will be adapted in as far as necessary during phase III. District Water and Sanitation Development Committees (DWSDCs), functioning as technical (sub-)committees of the District Development Committees and chaired by the District Water Engineers in all the districts of the Nyanza Province, are charged to guide the programme activities. The DWSDC oversees the District Water and Sanitation Programmes (DWSP) in the district which is responsible for the day to day implementation of the programme. In each district a Programme Management Office has been set up to effectuate the DWSP. So far in these offices, which are headed by a District Programme Manager, who is responsible to the implementing Consultant, staff from various Ministries cooperate. Gradually the DWSPs will become *private companies* during phase III.Further details of this institutional structure is discussed in chapter 6 of this report.

A consultant is acting as the implementing agency of the programme, being responsible for its activities to the Government of Kenya (MoLRRWD) and to the Government of the Netherlands (GON).

In the last interim phase a first experience was gained to contract parts of the programme activities to NGOs within the existing framework and under the full responsibility of the two Governments. It is envisaged that in the third phase the local communities will increasingly carry the responsibility for the formulation of community projects, selection of sites and carrying the responsibility for the mobilization of the community and the implementation of the project and for Operation and Maintenance. Furthermore it will be explored to which extent, apart from privatized DWSPs, other private contractors (consultants or

enterprises) can be involved in the realisation of the programme at community level.

In January 1997 an interactive workshop was held including representatives of the stakeholders of the programme at community, districts, provincial and central level. Prior to that workshop all districts (DWSDCs) and NGOs involved so far were asked to formulate their strategic agenda. During this workshop these agendas were discussed and formed important building stones for the forthcoming strategy of the programme. Important aspects of the Dutch Government Development Policy, i.e. Gender and Environment got full weight during this workshop, which is reflected in this formulation report. In this chapter as well as in the following ones, the programme's strategy for phase III is laid down.

4.2 Community Mobilization as the basis for phase III

4.2.1 Introduction

The RDWSSP is a community based programme for the provision of water supply and sanitation. In order to attain long term sustainability of the facilities constructed during the programme, it is necessary that the communities are able and willing to take care of these facilities by themselves. For this to happen, they have to feel that these facilities are owned by them and that they are responsible to keep them operational.

This sense of ownership is only attained if the men and women of the community are genuinely interested in getting the facilities and are fully involved in all stages of the project cycle.

During phase II and the Interim phase, the PRA methodology was adopted and further developed as an entry strategy and a tool for community mobilization. Moreover, an impressive number of guidelines, manuals and procedures has been developed, which are all of high quality and which aim to mobilize and empower the communities and to have them participate at all stages in the process.

Despite this, the programme still is basically conceived as supply driven (programme staff, NGOs). There is a feeling that communities do not yet sufficiently have a sense of ownership. Contributing to this situation are several issues which are mentioned below and suggestions for change are given.

4.2.2 The level of community commitment required for selection

At present the criteria for inclusion in the project concern walking distance of more than 2 km from an improved source (although in the field the area is more determined by number of households/homesteads which should not exceed 45); willingness to provide land; registration as community with MoCSS; agreement to have a combined water and sanitation package in which the latrines have to be constructed by the users (materials for manufacture provided) and a deposit of at least Ksh 3000 (spring, handdug well), Ksh 5000 (gravity scheme) or Ksh 10,000 (pumped supply). In order to increase the sense of ownership and commitment, the amount for deposit needs to be raised to at least Ksh 5000 for

the spring and handdug well, but should possibly vary per geographical area depending on the socio-economic conditions.

In addition, it is felt that the project has to be conceived (both by staff of the programme as by the community) to be assisting the community in the provision/improvement of their own water supply rather than the project supplying the community with (improved) water supply facilities. This means that the community (with help from the project) has to plan the implementation of the construction work/ carry out the work themselves if possible/ pay the labourers to construct.

To enhance community commitment, an AMREF water programme in Homa Bay, had communities deposit Ksh 20.000 in a bank account in order to qualify for the project. This money was thereafter used to pay fundis from the community to do the digging for the wells. Whatever funds were left after the fundis were paid, was remitted back in the community account as a start for the maintenance fund. (In view of the accidents which have happened with diggers, the RDWSSP project has decided not to involve community people for digging deeper than 15 feet).

Although there is not available one blue print model on how the community will be organized, the basic issue is that the community must be involved/in charge of the planning process and construction. The level of community organization needed for this will ensure a commitment and increase the sense of ownership. Where different options for water supply are possible, they have to be able to make an informed choice. A sense of competition for inclusion in the programme could also enhance the mobilization process, but this may only be possible if there is clustering.

If a community decides to send an application for the programme to sub-locational level, there is no guarantee that the application will be forwarded to the higher level authority. This makes equal access to the programme doubtful. A possible measure against favouritism can be that a copy of the application form is also sent to the DWSP and to the DWE in his capacity as chairman of the DWSDC.

4.2.3 Effectiveness of the PRA

During phase II and the interim phase, the PRA has been developed as a tool for community organization. It is questionable if this has been a good idea. The evaluation mission of 1994 also had reservations about this. The PRA methodology has been developed for more general rural development projects, not to be restricted to water and sanitation. The result of PRA, as it is being used in the project, is, that the community has been given 'empowerment' to state their own priorities, only to later find out that the project cannot help in priorities which are not in the realm of water and sanitation. This is a frustrating situation. Moreover, not all information gathered is being used in the project cycle and hence the exercise may not be necessary (seasonal calendar) for project purposes as all know when harvest and planting times are.

Thus, in phase III, the community mobilization process has to be reassessed. The new strategy can use part of the activities which were already carried out in the PRA, but always has to be kept in mind what has to be done with the

information gathered. Also, the community has to be fully informed of the activities of the project and about the information which is needed from the community in order to develop **together** the approach for their community.

In the PRA guide the purpose of the water use profile is stated to be: ensure a baseline and eventual evaluation on all existing water sources and their average distance from the consumers and uses. The procedure is to list down the sources, the distance and time taken as well as a list of water uses. The result thus is an overview of these sources and uses but not a knowledge on **why** people are using the different sources for different purposes. And this is what is needed for effective community mobilization and hygiene education. If people use a particular source for cooking water because of its perceived cooking quality, then this should be known as it is highly likely that even after (for instance) pump installation, they will still use the former source of water for cooking purposes.

The PRA as it is, seems to have become rigid, directive and not responsive to actual cultural conceptions and behaviour in water and sanitation, also as a result of the low qualification and motivation of the extensionists. It has become an objective in itself rather than a tool for mobilization. The process is based on assumed needs rather than on felt needs and a common understanding of the socio-cultural behaviour of the community through participatory community diagnosis is lacking. The reverse must be true for the mobilization in phase III. Moreover, already during the mobilization process, the basis has to be created for later monitoring by the community.

PRA as such should not necessarily be kept, but in the social mobilization process some PRA activities can be used. Possibilities of changing the name PRA into social mobilization process may be considered. In section 6.3.3 of this report the mission proposes the position of a Methodology Adviser, who among others will make a practical evaluation of the PRA approach and propose adaptation or renewal of the community mobilization methodology.

4.2.4 Use of existing networks/groups at community level

At present it is not clear what is being done with existing groups in the community in the project. In phase III, part of the mobilization process will be to identify these groups such as women groups, church groups, youth groups etc. (there is a PRA exercise related to 'institutions' which might be useful). It has to be discussed if these groups are representative for the community and if they are willing to become involved in water and sanitation.

Similarly, schools located in the community can be involved in the community project. Teachers can be trained in hygiene education, environmental sanitation and environmental education (see chapter 5.1), and mobilize the schoolchildren. There is an existing project (SONBO) located in Homa Bay, in which school teachers are being trained to introduce environmental concerns in their schools - especially tree/plant nurseries.

4.2.5 Strategy for health and hygiene education

During the community mobilization, an assessment is done with the community on health and hygiene conditions, water supply and sanitation, which includes behaviour and local ideas on water. On the basis of this assessment, a

health/hygiene education strategy for the community is developed with the VRPs. The ten messages as currently spread and marketed by the VRPs are clear, but for greater effectiveness have to be linked more to analysis of current conditions and behaviour. It will also include water and sanitation related diseases (cycle of disease transmission), skin problems as well as effects of environmental hygiene (including solid waste, plastics) and the effect of water source protection (especially stabilizing the catchment area by planting of indigenous trees) - see also 5.1.

Bathing and laundry washing near the water point has been an issue in many projects. It is rightly prohibited on top of the apron. However, if during the assessment and the training of the volunteers it is brought forward, this issue may be used to enhance the capability of the volunteers to mobilize the community. The project could make a 'standard' design for washing slab and bathing shed, but the construction has to be left to the community.

Election and training of community volunteers will not basically change from the Interim Period, a priority will be given to females as they are more directly involved with water related issues. The modules prepared over the years by the project for PRA, training of the caretakers, Water and Sanitation Committees and VRPs are for the moment acceptable and can be used in phase III, new ones might be developed under the guidance of the Methodology Adviser. The programme's policy on incentives for the volunteers is sound, giving incentives for volunteers which are supportive for their work, such as jerricans, jembe's, mosquito nets. Volunteers themselves mentioned that back-up visits from the project team, meetings with volunteers from other communities (discussing problems experienced and solutions attempted), use of trained volunteers in training in another community and site visits to other communities would also be a good incentive and raising performance. Similarly, the use of land near the water point for crop growing/tree nursery can have a dual function as demonstration for the community and as income generation for the water fund or incentive for the volunteers. Although these elements are part of the existing project cycle, they seem not to be regularly carried out.

4.2.6 Staffing

The programme staff who are the spearhead into the community are the project teams, community extensionist from MoCSS, public health extensionist from MOH and a field supervisor (technician) from the Water Department. Their supervisors are also from MoCSS. The staff from MoCSS are generally neither competent nor motivated. In view of their important task in community mobilization it is necessary that this is changed (see 4.6 capacity building). As much as possible the community mobilization process should be carried out by women. The staff of MOH is qualified and motivated and can be considered. During the workshop it was mentioned that personnel working in the dispensaries and used to work in the communities would be quite suitable to fulfil the job of community extensionist after training in the techniques used by the project for mobilization. Also either primary school teachers or other women with community development experience could be recruited in the open market.

4.2.7 Conclusions

The concept of the project has to change from the project supplying the communities with water and sanitation facilities to the project assisting the communities to improve their water, sanitation and environmental conditions.

The methodology for community mobilization will have to be revealed to be more focused on the components of the project and the ownership of the community. Many of the activities of the PRA can be used, but in general the approach has to be more flexible and more geared towards finding the cultural beliefs and concepts which determine behaviour in each community.

Health components are incorporated in the hygiene education package. Subjects in the package are selected on the basis of the participatory assessment of the existing health and hygiene conditions and beliefs. The education is also used as a tool for mobilization.

Existing groups at community level are used as much as possible in the mobilization process. The method of selection and training of volunteers does not need to be changed.

Monitoring is as much as possible carried out by the community. Selection of indicators for monitoring is done on the basis of the participatory assessment at the beginning of the project.

4.3 Gender Strategy for Phase III

During the second and interim phase, the programme recognized the significance of integrating gender concerns in water and sanitation planning and implementation. Consequently a number of deliberate measures were undertaken to address gender issues by:

- integrating gender concerns at all levels of the programme
- dissemination and use of project based gender responsive tools in PRA and implementation
- preparation of a gender action plan to ensure focused incorporation of gender activities in the programme
- ensuring implementation of the gender action plan through seminars and workshops
- development of gender responsive indicators during the gender awareness workshop with supervisors and programme managers.

The mission feels that there is much attention for gender issues in the programme and that already much has been done to ensure gender sensitivity at all levels in the programme. In the review of the gender component of the second and interim phase of the programme an evaluation has been done of each stage of the implementation sequence and suggestions for future strategies are made:

Pre-selection phase:

Site selection process for inclusion in the project is currently done by the DWSDCs alongside the District Focus institutions. This is done with special consideration to areas where water and sanitation coverage is lowest as well as where other health and social indicators are mostly lagging behind.

The process is executed through the district officers and chiefs who during public meetings (barazas) tell the community leaders that the project is active in their area. It will be necessary to ensure that women are present in those barazas, but it will also be necessary that women as a group will be requested to put forward their ideas on the project thus: when a project proposal is sent to the District Officer, it not only should have the name of a man but also of a woman on it as 'proposers' for the community. Other details of site 'community' selection are presented below:

- The leaders meeting in which the leaders of the community are orientated on the programme approach and on the selection criteria of the programme has to be held in a location and at a time which also is convenient for women. From each community also a woman has to attend. Therefore women group representatives and women opinion leaders will be identified and will receive a preliminary orientation of the programme to facilitate their understanding and the need for them to attend the leaders meeting. They have to be encouraged to discuss the programme and its requirements with the women in the village.

- At present the programme is too much perceived as a technical programme - hence making it fall in the male domain. Therefore more emphasis has to be put on the health, hygiene and environmental sanitation aspects of the programme at the time of introduction. Introducing the programme as a health intervention will give opportunities for women participation while less challenging the existing cultural beliefs and practices.

Community mobilization, organization and training phase:

- Many PRA activities are especially meant to highlight gender specific issues in the community such as problem ranking; access and control profile; task analysis and daily activities profile. On the basis of a deeper understanding of the differences between the lives and conditions of men and women, planning of the programme and selection of volunteers is done. It has to be stressed that gender balance does not necessarily mean that numbers of men and women have to be equal, nor that women have to outnumber men in all activities. In the selection of a VRP various criteria have to be considered such as sensitivity and motivation. Older and educated members of the community command more respect than younger ones, who may be more energetic. The policy of election of equal numbers of men and women as WSC, VRP and CT members is good as a yardstick.

- Because women are less confident to take on roles within the community, they have to be assisted in finding this confidence. Apart from role play and other PRA activities, it is possible to take women for exposure to communities where females are having leadership roles and fulfil them with

confidence. Overall, the system of community to community training and information exchange has to be developed as a mobilization tool.

- Since women and girls bear the burden of being chief hauliers of water and also the caretakers of the sick, it should be made clear that they will benefit most from sustainable watsan facilities and therefore have to be involved at all stages of the programme.

- On site selection of the water point: this should be done as part of the PRA/mobilization process in which one activity will deal specifically with possible sites for the water source. As the PRA is gender specific - so will the process of site selection. Solutions for specific site selection problems will be dealt within each community during the mobilization process and thus will vary from area to area.

Implementation phase

- The programme covers Luo, Kisii, Suba, Kuria and to a lesser extent Luhya ethnic tribes with different cultural norms and practices. In the implementation cognizance of this fact must be a guiding factor in technology choice and in allocation of roles, to ensure sustainability.

- Studies carried out in the project area indicate a regional variation in women participation. In Luo Nyanza women are more active whereas in Kisii and Kuria they are lagging behind. This is attribute to the difference cultural norms and practices. In this respect if the implementation approach is gender sensitive, flexible and based on actual conditions, regional differences in women participation will be automatically taken care of with extra project inputs where women participation is weak.

- In almost every Luo community there are 'invisible widows', widows who have been inherited by a male relative of the deceased husband. They have a low status, more problems and are more vulnerable than other women. Emphasis should be laid that during PRA these women are not forgotten and that it is discussed how they can best be involved or assisted in the project activities.

- Involvement of men and women in actual implementation/ construction is to a large extent determined by tradition. Thus men dig the well and construct spring protection, women make an access road (if necessary), cook food for the diggers and carry stones. It has to be ensured that in phase III where the community will be expected to organize the planning and implementation of the activities, the tasks for men and women are all analysed (including invisible ones as cooking food) and balance in workload is achieved.

- Inclusion of washing slabs and even bathing areas have to be integrated as they can reduce the workload for women if they do not have to carry water for these activities to the homesteads. During mobilization this has to be discussed, as well as options for design and financial contribution for it.

- Where traditional rules are strictly obeyed, a daughter-in-law cannot share a latrine with the father-in-law because this is perceived as disrespectful. Thus the latrine can only be used by part of the family. During PRA and VPR training, solutions to these socio-cultural restrictions have to be discussed.

Monitoring and evaluation phase

- Participatory monitoring and evaluation activities have to develop a format whereby information is specified according to gender. This facilitates gender analysis and discussion. Care has to be taken that the analysis is followed up by action and that it is determined beforehand who is expected to take action. Monitoring of the community has to be followed up by monitoring of the project teams. They have to assist in deciding what action to take if things go wrong, even if the site is officially off-loaded.

Gender in staffing

In addition to what is recommended in 'Institutional Gender Capacity for RDWSSP Interim Phase, May 1996' the following is recommended with respect to gender in staffing:

- All members of the DWSDC have to be trained on gender and gender responsibilities have to be clearly assigned.

- The new to create job of Assistant District Programme Manager should by preference be filled by a woman, to enhance gender equity at managerial level.

- The project teams (consisting of three persons) have to have each at least one, but preferably two women as it is felt that a female extensionist (MOH) is more effective in mobilization than a male.

- Most project staff have been trained in gender, but this does not necessarily mean that the concept is fully understood. 'Dry' training may not be the best way to retrain, hence a format for on-the-job training in daily activities of staff at different levels may be considered.

4.4 Technology Options

4.4.1 Technology Concept During Phase II

A "process approach" incorporating a more elaborate community involvement at all stages was designed for the second programme phase, in line with the outcome of the International Water Decade which emphasized maximisation of the participation of communities in the development of their water resources. In pursuance of this concept, the programme redefined the working method and reduced its main role to that of supervision.

At the start of Phase II, designs and materials as well as construction procedures were reviewed with the objective of maximising opportunity for community involvement. Designs developed and used in the protection of springs and wells

in Phase I were generally adopted for Phase II, with adaptations to strengthen community involvement. In particular, the SWN-80 hand-pump was replaced with the more VLOM (village level operation and maintenance) friendly AFRIDEV hand-pump. In addition the drainage apron on wells was redesigned in order to eliminate the need for moulds.

Some of the divisions allocated to the RDWSSP did not have opportunities for developing spring and groundwater sources and other alternatives such as small dams/pans were proposed. In this regard pilot projects to define working methods for dams/pans and pipelines were taken up. In addition, some high yielding springs located far from communities or serving larger populations were considered for small gravity schemes.

4.4.2 Technology Options in Phase III

The technology implementation concept proposed for Phase III is expected to adopt cost sharing, the use of local resources as much as possible, smaller "complete" units of a project each serving not more than 45 household and the use of installation components that can be sustained at community level. The main construction and operation and maintenance procedures should be easily understood at community level. In all instances the walking distances to the nearest outlet point should ideally not exceed 15 minutes walk.

In Phase II the programme implemented water points using the following technologies in order of priority:

i Spring protection
ii Hand dug wells (shallow wells)
iii Hand drilled wells (shallow wells)
iv Deep boreholes
v Dams and Pans
vi Small gravity schemes

Dams/pans and small gravity schemes were implemented on a pilot level. In the next phase the following technologies not used yet but could be appropriate will be considered:

i Rainwater harvesting (dams, pans, sub-surface dams, roof/rock catchment)
ii Wind mill powered pumps
iii Solar powered pumps
iv Motorized (electrical) pumps
v Surface water abstraction from Lake Victoria

In Phase III rainwater harvesting (community dam/pan construction) and solar powered small piped schemes will be given special consideration.

Community Dam/Pan Construction

For Phase III the mission proposes small community dams/pans to be constructed by the people themselves, where by only tools and technical advise are provided and in each area pan supervisors are trained, who once they make their rounds are paid an allowance by the communities. It is anticipated that for very minor financial inputs small community based dams/pans will be realised.

This arrangement has worked successfully in Kitui and Makueni districts in Eastern province (Ukambani Area). As there may be cultural differences between Ukambani and Nyanza province, exchange visits prior to the start of such approach in Nyanza seem advisable. Pilots could start in those areas where pans are the only option and where the lake or any other water sources are farthest.

Small Solar Powered Piped Schemes
For Phase III the mission proposes the installation of solar powered pumps in high yielding boreholes drilled under RDWSSP (Phase I,II and Interim) for feeding elevated storage tanks, which supply small gravity systems. The mission proposes these schemes to be implemented initially on a pilot level.

Motorized (electrical) powered piped schemes and surface water abstraction from Lake Victoria
These last two options could also be used for feeding elevated storage tanks, which supply gravity systems. These schemes, if applied, should remain small scale and implemented at pilot basis. The last option, if applied, requires some minimal treatment such as sand filtration and chlorination. This will further require training of the water system operators as is currently being carried out by the Kenya Water Institute and other local institutions.

The sequence of technology choice currently used by the programme works well within the "process" approach adopted and should be continued in the next phase. Water resources potential, water quality and least cost consideration will continue to govern the choice of technology while the pattern of water distribution within a community map will focus on minimising the average walking distance for all users. In order to accomplish this it is proposed whilst maintaining efficiency, pre-selection of communities be elaborately done to provide data sufficient to ensure inclusion of chosen technologies early in the preparation of workplans. For the most cost efficient use of available resources, the technology choice sequence will be according to the following order: springs, small gravity systems, wells and boreholes. The other technologies listed above will only be considered on a pilot level as a last resort. In case of roof catchments there will be no direct programme involvement apart from technical advise when requested. The mission has learnt that this option has had serious operational problems on the ground in the previous phases. The mission therefore recommends that the consultant carries out further investigations into the applicability of this option in some districts. In phase III special attention will continue to be paid to upgrading of traditional sources of water in so far as they can yield water of good quality.

It should be noted that unforeseen circumstances like changes in the characteristics of a spring after construction, or hard rock formations encountered in a well, will lead to the choice of a more expensive technology. Although springs continue to take first priority especially where they have also been traditional sources, the possibility of resorting to the use of wells will continue. This change will mean that more expenditure for the alternative technology should be expected. Small gravity systems should continue to be taken up whenever opportunity allows, since they yield a high cost effectiveness for a wider coverage using springs. It is notable that with sufficient awareness

and reasonable technical assistance support, some communities and individuals could even protect their own springs with only a mould provided.

In an attempt to justify the applicability of the above technologies an assessment of technologies adopted in Phase II is presented in the table below. In assessing the technologies to be applied in Phase III the main programme objectives should be considered, this include:

- Providing safe domestic water
- Reducing walking distances for fetching water
- Reducing time needed for fetching water
- To provide facilities on cost-effective basis
- To provide sustainable facilities.

Table 4.4 ASSESSMENT OF TECHNOLOGIES

	Spring	Hand dug well	Borehole	GFS	Dams Pans	Hand drilled well
Water quality	+	+	++	+	-	+
Distance	-	++	++	++	+	++
Sustainability (o&m at community level)	+	+	+	+	+	+
Sustainability of the water source	+/-	+/-	++	+	-	+/-
Environment	++	0	0	++	-	0
Cost effective	++	+	0	+	-	++
Human impact	+	++	++	++	++	++
Waiting time	+	+	+	++	+	+
Gender	0	++	+	++	++	++
Safe construct	+	-	+	+	+	+

Key

-- very poor, - poor, 0 fair/neutral, -/+ in some cases it is poor, + good, ++ very good

Remarks on the table 'assessment of present technology':

Spring

Doesn't decrease walking distances. Improves water quality but not in all cases. Cost effective, cheap technology, little maintenance. Can increase burden for women in walking distances in difficult terrain. During draught seasons some protected springs are known to disappear.

HD well:

Brings water closer to the people. Safer drinking water but still contamination problem in many cases. Cost efficient but can be jeopardized due to long construction time and overheads. No impact on environment, but safety risk for diggers. Like springs some of these wells have no water during the dry seasons.

Boreholes:

Per capita cost is high but compared to available options could be relatively low. Similar sustainability as HD wells but prone to more pump breakages but

better guarantee for sufficient yield. If hand pumped, no impact on environment. However, the issue of success rate vis à vis the investment cost should be considered seriously.

Gravity Flow Schemes:
Apparently only positive points, but proper community management is the big challenge. Unfortunately, often not a practical option because suitable elevated springs are rare.

Pans, dams:
High contamination risk, when implemented at community level the cost are moderate but if plant machinery are used the cost are high and may Only be justifiable if it is the only feasible option in hard pressed areas

4.5 Privatization strategy for Phase III

4.5.1 Justification and objectives for privatization

The present government policy emphasizes privatization of services which were hitherto rendered by the public sector. This policy is contained in several documents which have recently been released by the government and they affect water and sanitation sector as much as other sectors. The import of the policy was reiterated by the Permanent Secretary, MoLRRWD, in his opening speech during the workshop and was echoed in the speech by the representative of Royal Netherlands Embassy.

The need for the change in approach was founded on the concern that *what was hitherto being done by governmental agencies "Public Sector" in the provision of goods and services, should be left to private sector firms, thus enabling the government agencies involved to shift focus and concentrate more on policies and regulatory functions governing the sector.* This resulted from realisation that government agencies involved in programmes were spending most of their efforts in implementation rather than in monitoring and controlling the activities. Over the years, it became increasingly clear that where services were just delivered to communities (eg. water supply), the question about who carried the responsibility for operation and maintenance for those services remained a constant concern. It therefore frequently happened that the facilities deteriorated or just run into disuse after a few years.

In the recent developments, the government has stressed the divestment of government public sector from project/programme implementation and instead focus more on monitoring and control tasks. In this context, divestment process is seen as *encouraging other actors, through some form of arrangement, to play a more active role in the implementation of projects/programmes, including the provision of some services which were hitherto provided by the public sector under aegis of the government.*

Based on this understanding, the Formulation Mission concludes that the privatization efforts during Phase III of RDWSSP will mean a re-definition of the roles of all the stakeholders involved with the aim of achieving the following main objectives:

a. Improve the efficiency and effectiveness of the programme implementation to accomplish the set objectives by incorporating the target grass roots community, private sector participants and NGOs more effectively in the programme implementation;

b. Relieve the office of the District Water Engineer (DWE) from operational tasks of implementation by privatizing the existing district water and sanitation programme (DWSPs) step by step and to enable the officers to be more functional in their guiding, monitoring and controlling roles;

c. Enhance institutional capacity of the target communities, NGOs and the private sector firms to carry out implementation of the watsan activities and of the government institutions involved in watsan activities in providing efficient guidance, monitoring and control services with the aim of attaining long term sustainability.

4.5.2 Experience gained towards privatization

a. **Experience involving private firms**

As an entry point to the interim phase, the programme made concrete suggestions on modalities and strategies for privatizing the activities so as to increase coverage. The suggestions were aimed at the District Water Sanitation Programmes (DWSPs) starting with Kisii District on a pilot basis. The rationale being to facilitate development of the private sector as well as to incorporate NGOs in the implementation of the programme.

A private sector management consultant was appointed to implement the pilot phase of privatization. The objective was to convert the DWSP to operate purely on commercial basis and as private concern. Apart from implementing the programme, the experiences made during this pilot phase was to be documented and lessons learnt translated for wider application in other districts especially at implementation during the third phase.

Unfortunately, the contract with the private firm was discontinued after only a short duration. Because of this, the opportunity for gaining experience with privatization was lost. There is otherwise very little implementation experience with the private sector under the programme except for machine drilling and hand digging contracts which were issued as part of the old approach.

b. **Experience involving NGOs**

KWAHO and CARE were included in the implementation process during the interim period through what the MLRRWD has called "contracting out". This meant that these institutions were included as sub-contractors in the execution of the programme to augment the capacities of the programme for implementation.

This approach did not work 100% as expected but it provided useful experience with using the NGOs as recorded in the NGO Assessment reports (see Documentation List). Generally, involvement of these NGOs contributed to increased level of implementation as well as exposing the programme to

comparative alternative approaches for implementing similar programmes without compromising the basic philosophy.

Besides KWAHO and CARE, there are about 20 other NGOs in Nyanza Province which are involved in water supply and sanitation activities funded by various donors. All of them have different levels of experience, competence and commitment to execution of planned activities and therefore, differ in the extent to which they are able to execute their roles. They also differ in the funding arrangements for the activities they implement. Most have sufficient direct funding for the total package of activities and a few depend on co-funding arrangements to facilitate implementation of their programmes. The NGOs were all assessed but none of them responded to the minimum requirements set by the programme.

The absence of suitable NGOs in acceptable numbers coupled with the fact that they are basically non-profit entities poses a fundamental question about involving them in the process of privatization. This dilemma compels the Formulation Mission to conclude that privatization of watsan activities involving NGOs must be reviewed carefully so as to place those NGOs which are found to be suitable for implementation under special category of implementors.

c. **Experience gained using DWSPs for implementation**

The decentralization process during Phase II resulted in the formation of six strong District Water and Sanitation Programmes which have been responsible for day to day management of the programme activities on behalf of the executing agencies. The DWSP in each district plans its work in consultation with the District Water and Sanitation Development Committee (DWSDC) for effective coordination with services provided by other similar agencies to harmonise approach and to spread coverage to a wider cluster of communities within the catchment area. The experience gained by these DWSPs contributed to the high quality of performance as recorded during the current interim phase. During the interim phase all management staff of DWSPs were drawn from the open market. At the same time, approaches towards the management of the service delivery was guided to a large extent by private sector principles. Lessons learnt through repositioning and reorganization of DWSP's during the interim phase are summarised as follows:

i that the inclusion of private sector elements in a basically public sector outfit produced impressive positive results;
ii that the capacity thus created and developed should be harnessed for future phases;
iii that the coordinating role of DWSDCs which involved introduction of clustering (zoning) of the areas of intervention, enhanced equitable distribution of watsan facilities in a way which covered the most needy area. This experience should be built upon for future phase.

d. **Experience with communities**

During existence of RDWSSP, the biggest problem has been the extent of community mobilization and involvement. As a prerequisite to sustainable watsan activities, the communities were to be thoroughly prepared for their role

which include being fully involved in identifying their need for watsan, the nature and type of facilities appropriate to their ecological area, describing the scope of their commitment and nature of participation in and contribution towards implementing the identified project and to O & M of the facility. This was the ideal situation.

The reality was different. The pressure to show that the project was operational - in terms of water points and the number of latrines constructed - contributed to the provision of watsan facilities (hardware) going ahead of community mobilization (software). Unfortunately, those charged with providing the software component resigned to their situation and never bothered to formalize community mobilization. The problem became so acute to the extent that the evaluation at the end of Phase I recommended change in approach towards community mobilization.

The recommended PRA approach would have ensured some form of general identification and therefore commitment by the community to the project and subsequent contribution towards its implementation, operation and maintenance. The Formulation Mission noted, that in actual practice, PRA became an end in itself rather than a means towards achieving more effective community participation in watsan service delivery.

4.5.3 General concept of privatization

Generally, privatization means ceding services or activities hitherto provided or performed by public sector to private sector. In this context, privatization of RDWSSP may be interpreted to mean that private sector is involved to a large extent, or maybe wholly, in the process that lead to and actual delivery of watsan service implementation, including O & M and community based monitoring. So far watsan services and activities have been supply driven and executed mainly through a public sector arrangement with the pace of implementation determined on a top down basis. This approach has its base on the notion that the government should provide all services. *Seen from this perspective, privatization may mean changing the top down approach to a bottom up approach towards implementation with increased private sector involvement. The basic question in this respect is who is the private sector, and by extension who should be involved in the RDWSSP privatization process?*

4.5.4 Privatization in Phase III: a two tier strategy

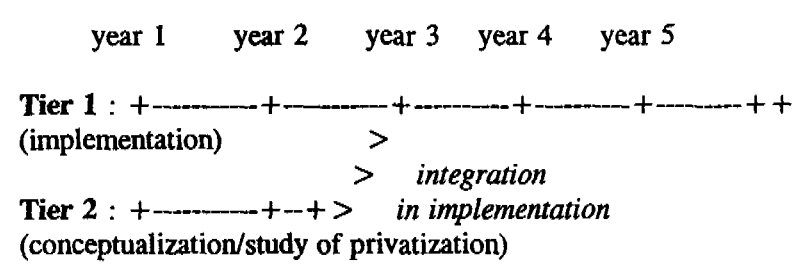
Privatization of the implementation process of the programme activities is a desirable goal. It must nevertheless be undertaken with caution as it is not necessarily a panacea to the solution of problems experienced in the past. The caution that unless done properly (i.e systems and procedures developed and standards set), privatization may contribute to retrogressive development at community level must be taken very seriously. The process of privatization should not be carried out in such a manner as to disrupt effective involvement of the target communities in the implementation process.

The brief analysis in the previous sections makes clear that a consistent definition of *privatization* is not so easy to give and that experiences with respect to *privatization* within the RDWSSP produced varying results. However, as privatization has now become general policy as well of the Kenyan Government and of the World Bank and has also to be applied in the water

sector, a clear privatization strategy for phase III of the RDWSSP has to be worked out. The formulation of such a strategy will take time, but at the same time the implementation of the programme will have to continue as a discontinuation would imply a de-motivation of local communities and a loss of investments in trained manpower and capital.

To overcome this dilemma the Formulation Mission is opting for a *two tier approach*. This approach implies that the implementation of the programme continues as proposed and based on the current institutional set up (tier 1), but that at the same time the *concept of privatization* is studied and worked out in further detail (tier 2). After a period of about 2 years the results of this study are integrated into tier 1 (implementation).

Graphically the two tiers and their interlinkage are presented below.



Tier 1

While the Privatization Task Force will be working out modalities for privatization, implementation of RDWSSP will proceed as it were, subject to necessary modifications, to avoid discontinuation. In this Tier, implementation workplans will be prepared taking into account the need to sensitize the target communities and to involve them fully in identifying their needs, defining the types of watsan facilities they require, indicating their commitment to participation and contribution in the whole watsan delivery activities. The following different approaches will be incorporated in this Tier, at least for the first two years of RDWSSP Phase III:

a. **Demand driven approach - by Communities**

The approach here will be two-pronged. Apart from addressing the needs of watsan for those communities currently prepared for indepth involvement in implementation including O & M, focus will be on the communities which have potential for future involvement. In this case, the following procedure will have to be observed in selecting communities to participate in the programme:

- Based on agreed cluster - area of operation allocated to the RDWSSP by the DWSDC - the project will carry out a general awareness campaign to highlight its objectives, what services are available, who will qualify for the services, how and where will the community establish contact with the project, what criteria will the community meet before inclusion into the

scheme. Interested communities will be required to apply specifically for the watsan services;

- Further contact with communities will follow only after the community applies for consideration and when they meet the basic criteria - see section 4.2 of this report;

- Even after contact from the community, the programme will commit its services when the community demonstrated satisfactory level of commitment to ownership, contribution, O & M including monitoring (see also section 9.2) and future sustainability.

The implementation of the above proposals will require repositioning of the programme in such a way that facilitates the communities which are already prepared for inclusion in the programme at the beginning of the third phase. The programme should also prepare the potential communities for inclusion at a later date. Those facilities which are existing but are non-functional due to various community management problems will equally be considered for inclusion for possible assistance. The first step in this direction will be to carry out a general assessment of the existing installed facilities and to compile an inventory of status.

From analysis in the previous sections it is apparent that the level of community organization is quite low at present. It is unrealistic to expect that the communities are able to take over full O & M responsibility of the existing watsan. Given the number of existing watsan facilities - active and non-active - in the project area, going back to prepare the communities to a desirable level of commitment for ownership and contribution to O & M of those facilities will be a tall order. In addition to calling for a change in approach towards community mobilization, this will also mean re-education and training both of the community workers and the communities themselves with emphasis on ownership and contribution mechanism.

b. **The private sector**

To empower the communities to make effective demands on the programme services, several options are considered: the privatization of the DWSPs, the inclusion of the private sector firms and involvement of NGOs.

With regard to privatization of DWSPs, a gradual approach is proposed. The existing DWSPs will be involved in the implementation to the extent in which they have been during the current interim phase. During this period, modalities will be prepared and implemented for privatizing the DWSPs which meet the basic requirement for implementation of the process.

Based on their past experiences, the DWSPs will be given negotiated contracts for their part in the implementation process for the first two years.

The criteria for inclusion of the private sector have already been detailed in section 4.5.5 in this report but will require adaptation in view of the emphasis on repositioning the programme with emphasis on full involvement of the communities. The proposed task force will work out the details for privatization

of the DWSPs and inclusion of other private sector firms in the programme for the balance of Phase III.

c. **The NGOs**

There are some significant anticipated limitations when proposing the involvement of the NGOs and the private sector in the implementation defined above. First, the NGOs have their own agendas and objectives for existence in the area, which may not be the same as those for the Rural Domestic Water Supply and Sanitation Programme. Secondly, the approaches preferred and used by these organizations may differ. Thirdly, there may be major financial limitations especially due to technological options selected and the procedures for financial management. Lastly, most NGOs have major constraint in their management capacity. This last point is so crucial because it affects many aspects of running of the NGOs and has in several occasions contributed to delayed or poor decision making and possible financial losses. These must be studied very carefully and should be significant when deciding on which NGO or private partner to work with in the programme.

Tier 2

This approach implies that within a period of about 1½ years the concept of privatization will be studied, concretized and operationalized so far that it can be integrated more effectively in the implementation. One aspect of this conceptualization/study period will be the *testing out* of concepts and models on a pilot basis. The results of these tests will be used to further refine and operationalise the concepts and make them ready for application at a larger scale later. At the moment of the mid-term review - after 2 years - the integration will have been completed and the first results will be evaluated as a part of that review.

The privatization study will include all relevant aspects such as:

- the concept of privatization at community level; starting point will be to inculcate the sense of *ownership, commitment to contribution* and *sustainability* of the watsan activities;
- the concept of privatization at the level of *implementation*; special emphasis will be given to privatization of the DWSPs including clarification about their future ownership, by-laws and legal status, management and financial control;
- the *role of NGOs and CBOs including women groups* within the privatized approach;
- *interlinkage* between the various aspects under privatization.

To realise this study a *Privatization Task Force* will be formed, composed of representatives of the community, of the DWSPs, the PMEU, the MLRRWD and some consultants in the institutional/ organizational and the legal field. More detailed *terms of reference* for this Task Force are included in Annex 2 of this report. The budget of the Task Force is integrated in the budget for phase III.

4.5.5 Privatization criteria

In an attempt to respond to the caution that privatization will not necessarily solve all the problems of implementation, some selection criteria which were developed to guide the interim phase in the selection of participants to the privatization process are hereby reproduced with minor amendments. These include the requirement that the suitable partner subscribes to philosophical principles which are similar to those of the programme. In addition, the partners will demonstrate ability and commitment to the following:

- healthy base of financial outlay for own activities as a starting point for negotiations;
- use of the PRA approach to community mobilization and organization and ability to adopt the approach to suit different levels of community development;
- adaption and utilisation of participatory approach to community identification of delivery technology, planning for effective management, contribution to operation and maintenance for sustainability;
- commitment to promotion of hygiene and health along with dissemination of knowledge and improving attitudes on sanitary disposal of faecal matter;
- demonstrated knowledge in the use and application of appropriate technology applicable in the provision of water supply and sanitation facilities;
- proof that the decision making process for the organization is decentralised to the district level in matters affecting implementation.

4.5.6 Conditions for tender and bidding[1]

At the start of the Interim Phase district tender committees were established in all six operational areas. The members of this committee are the DWEs (Chairman), the DPMs (Secretary), the DSO and the DA.

The district tender boards pace of operation was expected not to be able to cope with the dynamics of the programme where swift decisions are indispensable. It was bilaterally agreed that for the convenience of programme, it was necessary to establish committees to specifically address the programmes tenders so as to (i) ensure that the RDWSSP would be integrated, as much as possible in the district procurement procedures which are in conformity with the District Focus for Rural Development Strategy and (ii) facilitate swift programme implementation. All six DWSPs have made use of these committees since the start of the Interim Phase.

The tendering for borehole drilling exercise took place at provincial level with the PMEU as well as the PWE's Office being represented and the involvement of the Ministry Headquarters. In as much as this whole exercise was successful, there is a felt need to further develop the tender procedures especially now that contracting out is expected to gain momentum during Phase III of the programme.

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[1] As far as tendering within the project is concerned, the rules and guidelines apply which the consultant received when signing the contract. In principle, these are in conformity with the Dutch legislation. Given the fact that the consultant has subscribed the contract, a final approval of these tenders by the Embassy will not be necessary.

The mission recommends that clear tendering and bidding procedures are developed jointly by the MoLRRWD and the consultant and agreed upon immediately to form the basis for Phase III implementation. When these tendering and bidding procedures are developed and refined, in consultation with the relevant authorities, they should be introduced into the programme management and be made mandatory for allocating any assignment under the programme. The following broad outline must be incorporated in the tendering and bidding requirement:

- the bidder must show certified proof of competence in the area in which the bid is made. To this effect, the bidder will produce reference on previous jobs done signed by a senior partner for whom the service was rendered;
- the bidder must be registered in Kenya for the provision of the services for which they are bidding;
- the bidder must show proof of availability of working advances performance bond duly executed by a reputable bank in the form of bank guarantee;
- awarding of tenders should only take place after both the MoLRRWD and the Consultant have agreed in writing on the winner and the terms. It is proposed that for each district, the DWSDCs form the tender board for all contacts related to water and sanitation and that the District/Technical Adviser be the secretary to that board;
- wherever the FIDIC regulations apply these should be taken into consideration during tendering procedure. Otherwise the MoLRRWD and the Consultant should agree on the framework within which the contract party should operate;
- variation of quantities after awarding the tender should be limited to very essential cases which in the good judgement of the District/Technical Adviser, the Area Manager and the Team Leader.
- the laws applicable to the contract should be those of the Netherlands in keeping with the conditions of release of the development funds and in case the Consultant is to act on behalf of MoLRRWD as the employer;
- NGOs and any other implementing agencies (OIAs) should be awarded a contract on the basis of competence as detailed in a consultancy proposal. The proposal should be accompanied with a detailed capability statement;
- NGOs and OIAs shall be awarded a contract only after both the MoLRRWD and the Consultant have agreed in writing on the contract terms and the terms of reference. For those contracts where community development plays an important role so called **"long term framework contracts"** should be signed with regular **"cut off points"** built into them to allow for re-evaluation of performance. From community development point of view, it is essential that continuation is, as much as possible, guaranteed;
- NGOs and OIAs have to provide proof of their ability and experience in field of watsan and community development activities. Familiarity with the province and its peculiarity in terms of implementation requirement will be a pre-requisite in the final selection. In addition, they must propose a staff structure acceptable to the programme and include written commitment from the proposed staff to ensure long term availability so long as they continue to provide services to required standards. Track record of successfully implemented projects will be an added advantage.

4.6 Capacity building

4.6.1 General

Based on experiences of the past phases the mission feels there is the need to develop a *capacity building strategy* for phase III, based on the experience of the previous phases and with the objective to contribute in a structural way to the *sustainability* of the programme. Such a strategy has not yet adequately been developed so far. This strategy will be based on the following elements:

- make an inventory of which capacities and roles are needed at the various levels of the programme to ensure sustainability and ownership of the project;

- assess to which extent those capacities are fulfilled at this moment and which are lacking or deficient;

- analyze where lacking or deficiency of capacities have an incidental and where a structural character;

- define the measures to be taken to solve the problem of lacking or deficient capacities; these measures should be as practical as possible and to be implemented at short notice;

- make on the basis of this information a *strategic capacity building plan*, which is valid for phase III as a whole and which will form the basis for *annual capacity building plans*.

Capacity building has a number of aspects which are complementary such as: *selection and motivation* of community leaders and staff, *training* (both through workshops and on the spot-training), performance and interaction between the community on the one side and their trainers/leaders on the other.

Capacity building has to be analysed at the various levels of the programme such as:

- community level;
- divisional and sub-divisional level;
- district level;
- provincial level (including PMEU-level).

Under the aegis of privatization of the programme a basic capacity for the realisation of a durable watsan programme has to be developed.

In the following sections essential elements for the different levels will be highlighted.

4.6.2 Community level

The available documentation (eg. *Manuals and Procedures)* adequately describes measures and methods to enhance capacity building. However it has been observed that the *carrying capacity* at the community level for the programme still is too low, especially from the perspective of internal organization, ownership and sustainability. This issue may refer back to the way of *entrance*

into the community and the selection of local leadership to cooperate with. Communication between the leadership and local population on the one hand and the programme staff on the other hand is crucial. This communication still often takes place in a traditional unilateral way, whereas a real *interactive process* between community and staff has to emerge to promote ownership.

Capacity building includes that communities will not be abandoned after conclusion of the project. Follow-up visits are essential; but also exchange visits between communities and/or caretakers; competitions between project committees (eg. related to tree nurseries); competition between schools for the same purpose; tree planting celebrations etc. This may be enhanced by adopting a cluster approach. Clusters could be identified in each district on the basis of the watsan Baseline Study carried out by the DWSDCs with the support of PMEU in 1996.

Another aspect of capacity building is related to O&M (WSC,pump caretakers, community resource persons) So far the experiences with pump maintenance at local level are encouraging but ongoing training and refreshing of their knowledge and motivation remains essential. However not much experience is yet gained with training of local fundis in pump repair. This point deserves full attention in the capacity building strategy.

4.6.3 Divisional and Sub divisional level

It has been noticed by the mission that the "*entrance*" of the programme at divisional and sub-divisional level may be somewhat deficient. Leadership is not always sufficiently inclined to understand the basic concepts of the programme vis-à-vis community participation and ownership. Measures will have to be taken to overcome this situation.
Training sessions (workshops) with the leadership, particularly in sub-divisions where the programme intends to cluster its activities, will have to be realised with the objective to involve them more actively and adequately in the preparation and selection process of communities. The development of training material for the (sub-)divisional level deserves special attention and will have to contain elements of leadership, community participation, gender sensitivity and watsan activities. Training sessions should not take place in the traditional, but in an interactive way. It has to be envisaged to organize these training sessions in close cooperation with the District Development Officer (DDO) and the (sub-)Divisional Development Committee.

Training of repair-shopkeepers at sub-divisional level, who are able to do major repairs deserves full attention. The economic component of this training, so that repair-shops consider their work from the *entrepreneurial perspective*, is essential. This training can be realised in close cooperation with ITGD (Intermediate Technology Development Group), KIC (Kisumu Innovative Centre) or Approtec Kisumu. Directly related is the availability of stocks of spare parts at sub-divisional level. Interesting shopkeepers for that purpose is an integrating aspect of capacity building. A clustering of activities in certain sub-divisions will increase the chance of result in this respect.

4.6.4 District level

DWSDC and DWSP are the bodies carrying the responsibility for capacity building of the programme at district level. The District Programme Manager -

in close cooperation with the District Water Engineer - carries the day-to-day responsibility for the implementation of the programme at district level. The implementation of the programme at community level is being realised under the responsibility of the Community Development Officer (CDO),coming from the Ministry of Culture and Social Services and by field teams which are basically composed of district staff belonging to the MoLRRWD (field supervisors), the Ministry of Health (Public health Extensionists) and district-staff belonging to the Ministry of Culture and Social Services (MoCSS) (Community Extensionists). So far involvement of MoLRRWD-staff and MoH-staff in the programme is experienced satisfactory by the PMEU and the DPMs. However as it has been observed before, the impact and effectiveness of staff belonging to the MoCSS is far below the expectations and the set targets.

The CDOs will have to be recruited in the open market, whereas MoCSS field staff will in most cases have to be replaced by Community Health Nurses, either from the MoH or to be recruited in the open market. Senior district staff is unanimously convinced that community health staff has the right background for community mobilization.

The *methodology* of the training applied by the CDOs and the Field Teams has to be reconsidered thoroughly. It is reported that after some time the field teams intend to repeat the mobilization sessions with the community in a rather mechanical way. A further introduction of the field staff in interactive and process oriented training methodology is prerequisite. Furthermore it is important that they will get from time to time new challenges and incentives. This should not only be refresher training in the traditional way but should also include exchange visits to other districts or even to other watsan-projects, eg. in the Western Province, which gives them the chance to widen their horizon.

Other District staff such as (Assistant) District Programme Managers may need to be upgraded in their managerial capacities and the usage of Management Information Systems (MIS). District Finance Officers (DFO) will regularly need to be upgraded in adaptations in the software systems, which the programme applies.

4.6.5 Provincial level/PMEU

The capacity building strategy might envisage to which extent a further capacitating of some staff of the PWE's Office might be functional for the realisation of some specific objectives of the programme, notably in the field of water quality and CWRM (Community Water Resources Management).

It has to be expected that when the third phase will start, a more consistent staff planning for the PMEU can be effectuated (see further section 6.2). This will imply that the risk of loosing qualified people due to very short term contracts will come to an end. Qualified, experienced and motivated staff will have to be offered contracts for the whole period of the third phase. This implies that the capacity strategy for the PMEU can be conceptualised and implemented. This strategy will notably have to be based on three pillars:

- regular technological revitalization;
- conceptual rethinking of the community mobilization approach including gender and environment;

- managerial and financial effectiveness and transparency;
- financial control.

PMEU staff will need to have the capacity to realize the further development of the programme is this perspective. Especially the rethinking of the mobilization methodology will necessitate an input which has to trickle down into all the aspects of the programme and all the corners of the Nyanza province so that all the programme staff and DWEs staff can participate in this rethinking process in an interactive way.

In the PMEU office support staff will have to be given the chance to improve their performance by supplementary training courses, if necessary. The same is true for support staff of areal and districts offices.

4.6.6 Privatization and NGOs

Privatization of the DWSPs mean the that the capacity building of the staff of DWSPs is a first priority.

According to the Formulation Mission it cannot be the task of the PMEU to fully capacitate NGOs or their staff on the methodology of the RDWSSP or on management development. That would bypass the programme's own capacity and hence restrict the possibility to involve NGOs. Management development of promising NGOs should be their own responsibility and can be contracted out to specialised consultants, but the conceptual introduction, ongoing monitoring and financial control of NGOs will remain the full responsibility of the programme.

Staff of NGOs who participate in the programme may join training sessions and other exposure events organized by the programme for its own staff, if this is deemed useful.

Private contractors may carry the responsibility for certain parts of the programme. In as far as private contractors (e.g. consultants firms) will be responsible for the mobilization of communities the same rules, regulations and agreements which are valid for privatized DWSPs and NGOs will be applicable to them. If consultants staff will participate in training sessions which are organized by the programme they will be charged the regular fees for the participation of their staff.

4.6.7 Summary

A Capacity Building Strategy will have to be worked out at the very beginning of phase III. The following capacity building matrix may form a starting point for the realisation of this strategy.

Table 4.6 CAPACITY BUILDING STRATEGY MATRIX

	Capacity needed/assessment of availability	analysis of lacking or deficient capacity;	Measures to improve situation
Community- level	community-leaders: mainly lack of understanding and insufficient motivation	lacking of understanding is structural	give more attention to individual contacts,especially at the level of the leadership;
	community groups: are available	these groups are insufficiently used so far	develop better adopted training modules for community leadership and community administration; use better motivated and trained field teams
	capable community members are available	capacity not structurally lacking but insufficiently used so far	organize regular exchange programmes between communities and exposures to other programmes
	local fundis are available	understanding of possible role still lacking	train fundis in cooperation with village committees
(Sub-)divisional level	sub divisional-leaders: mainly lack of understanding and insufficient motivation	lacking understanding is structural	give more attention to individual contacts at the level of the leadership;
	repair shops are available	knowledge and economic interest of repair shops is lacking	train local shop-keepers, technically and economically; involve specialised institutions like ITDG or KIC organize availability of spare parts
District level	MoLRRWD-staff available MoH-staff available and competent MoCSS-staff available recruiting in open market is possible;	MoLRRWD and MoH-staff are competent MoCSS staff are incompetent	give better structured training and more motivation by exposures, trips to other programmes, etc. integrate modules on the concept of privatization for DWEs and their staff. contract competent Health staff in the open market and give them adequate preparation and training
	programme managers available	managerial capacity to be enhanced-	organize regular leadership and managements (MIS) (re)training
Provincial level/PMEU	provincial staff available	no analysis made so far to what extent provincial staff can be used	make that analysis and capacitate those who are of use for the programme
	PMEU-staff available	capacity is sufficient but time reserved on structural rethinking of the programme is lacking	reserve time to rethink programme concept structurally; expose other staff to get new incentives
NGOs	very few NGOs available	few NGOs have competence; structural problem	select carefully; contract management development to specialised consultants; monitor their performance very closely; integrate NGO-staff in programme-staff training and exposures
Private sector	availability of private sector unclear	-	assess availability of private sector; select carefully; monitor their performance very closely, especially in the beginning; integrate private firms' staff in programme-staff training and exposure

4.7 Sustainability

4.7.1 Issues and the concept of long term sustainability of watsan facilities

Sustainability of watsan facilities is fundamentally dependent on the feeling of ownership and the organization of the beneficiary communities towards the management and maintenance of the facility. In this respect the level of commitment both materially and in kind will be significantly crucial. During implementation their contribution at the highest level they can afford towards construction costs is needed in developing a stronger sense of ownership of the watsan facilities. In case of the choice of technology the level of commitment will depend on how well the communities accept the technology adopted. This not withstanding the technical quality of the watsan facility, appropriateness and practice of proper operation and maintenance procedures. It is then proposed that this concept be strengthened by developing a more effective in depth involvement of communities at all stages of the implementation and project cycle of watsan facilities.

With respect to the technical quality of the watsan facilities, emphasis will be on high construction standards. This will provide the required guarantee towards technical sustainability and subsequent influences on operation and maintenance. In case of sanitation the programme currently is focused on the construction of latrines. In stable soil condition, the programme promotes a single pit while in unstable soil condition the programme promotes double pit technology. The concept of a double pit latrine is valid for areas where there is no room to dig a complete new pit, where only one superstructure can serve both the pits and for areas where it is acceptable that the contents of the dry pit are used as fertilizer. These conditions generally do not apply in the programme. The pits are shallow because of the high water table. But they are still quite large and it may take some years before they are full. At present the second pit is constructed by the project but left to wait for the first pit to become full. Meanwhile nothing is being done with it and the chance is that by the time it could be used, the blocks have already become attacked by adverse weather conditions, etc. The superstructure would still have to be rebuilt on the second latrine and most people told the mission that they would not even dream of using the contents as fertilizer. Thus the mission feels that there is no advantage of having two pits. The 'new' technology as being propagated by the project - that is the round pits and the lining - to prevent collapse should have proven itself during the lifetime of the first pit. Moulds for the blocks for lining and the san-plat can be left donated by the project to local fundis in a 'service' centre (combined with water technology fundis/service centre) to ensure that these items can still be made locally after the project has left the area. To ensure long term sustainability of the sanitation facilities, it is proposed that regular monitoring and evaluation exercises on the condition of the facilities after the projects completion be included in the programme's implementation structure.

The density of the watsan facilities in particular the water points determines how heavily they are used. Installations operating above their design capacity tend to wear sooner than later. It is thus desirable that sufficient numbers of watsan facilities are provided within a social map to attain an appropriate density.

In broad terms for the long term sustainability of the programme's realisation the following elements should be addressed:

- the concept of sense of ownership;
- village level operation and management of maintenance;
- availability and affordability of spare parts;
- appropriate technology;
- cost and size of the project;
- social/cultural acceptance;
- well planned phasing out strategy at the planning stage;
- gender equity/balance (roles should be defined);
- improvement of the social status of the community (income generating);
- health promotion;
- appropriate institutional framework;
- environmental conservation concerns;
- environmental health.

The table below proposed some of the long term sustainability constrains and proposed mitigation measures to be undertaken in the next phase.

Table 4.7 MAIN CONSTRAINTS TO SUSTAINABILITY AND PROPOSED MITIGATION STRATEGY

	Constraints	Mitigation strategy
1	Lack of integration of watsan projects to improve the social economic status of the community	The programme to encourage the IGAs by the communities
2	Inadequate involvement of the major stakeholders during the planning stages	Encourage participatory planning process
3	Inadequate training in financial management, leadership skills, social mobilization, process operation and maintenance at the community level.	Provide appropriate training at the community level
4	Inappropriate technology	Application of appropriate technology
5	Lack of adequate understanding of social cultural aspects of the projects	Undertake participatory social-cultural community diagnosis
6	Lack of availability of spare parts	Initiate stockist at sublocation level.
7	Inadequacy in linkage of institutional framework between the District level and community	Initiate and provide support to the Divisional and Locational level watsan committees
8	Inadequacy in phasing out strategy	Inclusion of sustainability plan during the planning stage
9	Lack of emphasis on health promotion issues	Integrate health education and more emphasis on health issues.

4.7.2 Capacity building for sustainability

In order to create the capacity of potential local entrepreneurs capable of effectively implementing watsan activities on private/commercial basis the DPMs and other relevant staff with relevant background qualification will be thoroughly orientated on private/commercial entrepreneur skills. At community level the programme will envisage integrated community based approach focusing on empowerment of target groups (women empowerment will be given special attention) and building management and implementation capacities for sustainability. For long term sustainability of watsan facilities the beneficiary communities should have sustainable growing bank accounts. Modalities of ensure this are outlined in section 4.2.

The current system of operation and maintenance of water points is based on the following key points: the water and sanitation committee finances and organizes maintenance and repairs of all installed facilities; preventive maintenance and simple repairs are carried out by the caretakers. The more complicated repair work the community refers to the DWSP technical assistance. If the programme is not there then the community comes back to square one. This negates the long term sustainability aspect of the whole programme. However, this can be solved by training (as has been suggested before by PMEU in one of their reports) 'Jua Kali' artisans/mechanics (e.g. bicycle menders and welders/panel beaters) on repair/maintenance/fabrication of parts of water pumps.

A pilot project on training of artisans had been started at Ahero and Katito areas of Kisumu district between October and November 1994. This training was however discontinued due to the radical changes during the inception of the Interim Phase of the programme. A number of constraints were experienced such as lack of equipment, no spare parts stockist in the vicinity, guidelines on specification for fabrication not available, and awareness or promotion created (it should be mentioned with appreciation here that these artisans, though partially trained, have undertaken several repair works to the satisfaction of their clients).

One major aspect that the training failed to address was that of commercializing these services. The artisans just like the caretakers/communities had in mind the programme as their solution in case of problems such as availability of spare parts and financial backing. This is a wrong concept because these artisans should operate such services as an income generating undertaking once they have been trained (and maybe provided with initial spare parts and/or specifications so that they can be able to fabricate more). Again, here the issue of entrepreneurs who are willing to stock their shops with pump spare parts arises. No entrepreneur has been identified who is willing to enter this market.

In phase III further training of local artisans (at location level) should be undertaken. However, the level of training should be varied from the village level and be progressively intensified up to the Divisional level (Technical Operations Officers).

The artisan at the village\sub-location level (VLOM-Village level Operation and Maintenance) should be able to cover at-least 10 kilometres radius as his operational area, and then the communities should be alerted (awareness and promotion) on the existence of such services.

The selection criteria of such artisans should be that they must be local and therefore chances of them disappearing or migrating to other distant areas are minimal. Furthermore they should be of mature age group (20-30 years) and responsible. The pricing list of spares parts and services to be guided by the DWSDC.

If a cluster approach would be agreed on, the resulting implementation pockets will create a local demand for spare parts and provide sufficient work for the programme trained fundis. For as long as this will not be fully in place, the DWSP alongside with the DWE's office, will continue stocking the necessary spares, monitor the efficiency and effectiveness of the fundis and carry out refresher training.

4.7.3 Institutional framework for sustainability

An approach for the phase III institutional framework for sustainable development for the RDWSSP is proposed to be put into a context around the following:

- intensified programme decentralization;
- enhanced role of the DWSDC;
- control of implementation roles;
- involvement of private firms and NGOs;
- sustainable water resources management.

Implementation of the programme will be put in context within the District Focus for Rural Development strategy (the bottom up decision making process). Structures below the district level, which are currently weak will be strengthened to enable them play their expected roles effectively. A strong efficient link between the communities and the district organs will be developed. The DWSDC will continue to be the focal point upon which the programme's bottom up decision making process is underpinned. In addition, during the programme period the institutional set-up at the district will be developed in such a way that it will facilitate the development of the support of the private sector and NGOs in the implementation of the programme.

In the third phase the programme will incorporate environmental concerns and water resources management perspectives into its institutional set-up. In this regard a institutional framework for sustainable water resources management will be developed (see chapter 5.2).

4.7.4 Rehabilitation Unit

It is suggested that alongside the implementation of any of the suggested strategic technology options the Programme should establish a Rehabilitation Unit which should inventorise the existing water supply facilities in the district, work out a pre-selection criteria for rehabilitation and thereby rescue some of Phase I and II of the facilities. Precondition for rehabilitation is that the community takes full responsibility for the new project, which has to be dealt with along the lines described in section 6.2.1. Monitoring of rehabilitated projects will be done in the way described in section 9.2. The rehabilitation should be considered along the following categories in order of priority:

- Projects requiring training only.
- Projects requiring minor repairs only.
- Projects requiring slightly major repairs.
- Projects requiring new pumping systems.
- Projects requiring major overhaul such as redrilling.

Each District should consider all the water supply technology options presented and based on resources availability, environmental concerns, socio-economic status, geographical location and other relevant factors select the most appropriate and acceptable technology options for that particular area.

4.7.5 Income generating initiatives

During Phase III the programme will not be involved directly with Income generating initiatives. However, where potential exist for successful income generating activities such as water point based tree nurseries, market gardens, brick making, moulding of sanplats for latrine construction this may be exploited to create sectoral integration and synergy and thus contribute positively towards community empowerment. Under the aegis of privatization from the bottom-up, more emphasis will have to be put on income generation, communities which are well organized and are able to collect the water fees can invest these funds in certain activities as mentioned above. PMEU and the DWSPs, will have to develop plans in close cooperation with active community committees. It will have to be envisaged that female members of the community, preferably widows who have no other source of income, can participate actively in the income generating activities in order to earn a living.

5. ENVIRONMENTAL STRATEGY AND LINKAGES

5.1 Environmental sanitation

The strategy for the third phase with respect to environment envisages an integrated approach in which latrine sanitation, environmental sanitation and sustainable water resources management form the components.

Hygiene, health and environmental education will form the basis of and the cement between these three components.

5.1.1 Sanitation

At present the construction of latrines is compulsory and a precondition for getting an improved water supply. Although the official policy of the programme ('92) was that upgrading is also possible, actual practice does not follow the policy. At present, the number of latrines to be constructed in the community averages 20-30 and is basically concurrent with the number of homesteads who are interested in getting an improved water supply. Failure to comply with this policy and its inclusion in the Community Action Plan, results in non-selection of the community.

The water and sanitation baseline survey of Nyanza mentions that the major difficulty in Nyanza with respect to latrines is the high water level in flood prone areas which not only causes the latrines to easily collapse, but also poses a health hazard as the contents of the latrines mix up with water used for drinking as a result of the floods. The situation, however, is entirely different in areas not subject to flooding, dry and not densely populated and in areas which are wet, densely populated and hilly. These different geographical areas can be found within one district.

The survey mentions latrine coverage above 90% for two districts (Kisii and Nyamira), three districts fall in the category with 50-90% coverage (Kuria, Kisumu and Siaya) and three districts are below this (Suba, Homa Bay and Migori). Of course, variations within the districts are found. Yet the present strategy is basically the same everywhere.

In phase III the strategy for sanitation will change and will be de-linked from water supply in the sense that it is an optional component before water supply can be improved and it will have to take the differences within and between the districts into account. Hence, different types of interventions may be possible:

No latrine:

If the homestead has no latrine, defecation will take place outside. In densely populated, wet areas this will be an environmental health hazard. Where the area is dry and sparsely populated, there is no health hazard. In this case, there is no direct need for project intervention and the usual health and hygiene education takes place. Criteria on what is a health hazard have to be established

but include the presence of faeces in the environment and the risk of faeces being washed into a water source.

Where a health hazard exists, special sessions on sanitation, health and hygiene, based on current beliefs and practices have to be carried out, the first question being why people in the community do not have a latrine and why people do have one. In addition, the project could construct a (demonstration) latrine either in a local institution (health post, school) or with a needy family, to ensure that people understand and see the (advantages of) the improved technology. For further steps see under section on strategy below.

Latrine present:

If the latrine is good and hygienic, the programme does not intervene. If the latrine is good but not kept hygienic, hygiene education should be given. If the latrine is not good, an assessment has to be made if it is worth improving. This only applies if there is still some years to go before the pit is full and if the latrine is structurally sound, that is stable.

If this is the case, upgrading is feasible. Upgrading can be done by improving the hygienic condition of the slab (cementing, improving the squat hole), reducing fly and smell nuisance (making a hole cover, adding a vent-pipe), adding a sanplat or improving the superstructure. The programme gives technical advice and materials, while the improvements have to be done by the owners themselves.

Latrine technology:

The technology for sanitation as developed in the project is good and can be continued in phase III with the understanding that at household level only sanplats are promoted. The condition of (old) VIP latrines showed that the VIPs are used as Sanplats - that is, doors are not kept closed and thus the whole essence of the VIP technology is forfeited.

The approach of double pit latrines will no longer be promoted as leaving the (second) pits empty and open even can constitute a safety risk. The people can construct a new latrine by themselves when the shallow pit is full.

In institutions and schools multiple VIP latrines can be constructed, but even here proper usage (keeping the doors closed at all times) may be a problem.

Strategy for sanitation and hygiene education:

During PRA an assessment of sanitation conditions should be done with all present. This assessment should include a focus discussion on the current beliefs and behaviour towards sanitation. An explanation should be given about possible sanitation interventions in the project.

- A VRP told the mission that in his community there are people who feel very uneasy in using a house (for them the latrine is a house) for defecation. You just don't do that inside. This feeling goes to such an extent that people are unable to perform their normal bodily function inside the latrine.

- People are also used to read their health condition from the substance of their faeces - when this disappears in a dark hole, it is impossible to see and check.

- Latrines smell and it is much nicer to sit outside in nature and have the sun warm your back when you are defecating.

- It is such feelings that should come out during the focus discussion and form the basis of the hygiene/health education and promotion. It will also include knowledge on water and sanitation related diseases and the link between behaviour and the diseases, water supply and sanitation. Promotion of latrine use by all members of the household will be carried out (including promotion of second latrines where tradition prevents all household members from using the same latrine).

- During the training of VRP the assessment made during the PRA is reviewed and together with the VRP a strategy for **that particular community** is made, both for hygiene education and for latrine construction.

After training of the VRPs, the hygiene education can start and people interested in getting a latrine through the project can register as well as those interested in upgrading. The project supplies the moulds and building materials and construction of latrines can start by the people themselves with help of the VRP. A rough estimate of quantity of building materials needed is necessary, with the understanding that at the most material for one new latrine per household/homestead is given. If people want more latrines, a strategy has to be developed with the VRPs.

5.1.2 Environmental sanitation at community level

The subject of environmental sanitation deals with waste water, storm water, solid waste and keeping the environment clean. There is basically no hardware input required from the project as drainage from the water point is taken care of through the construction of the improved water point. Thus, most of the input of the project will be in the form of environmental assessment during PRA and during training of the VRPs and if necessary incorporating in the messages discussed by the VRP when visiting the homesteads.

Solid waste at present does not seem to be an issue as most homesteads deal with it in one way or the other, such as burning of paper/polyethylene and non-biodegradable waste; digging a pit for biodegradable waste and when full left to compost or feeding biodegradable waste to the animals.

Hygiene education message: burn, bury, compost, keep clean.

Waste water and storm water can be a problem where natural drainage does not exist and rains are frequent. If necessary people can be mobilized to dig drainage channels.

Hygiene education message: no standing water as mosquitos breed in it.

Clean compound basically means sweeping, cutting of grass and removing animal waste.

Hygiene education message: keeping environment clean keeps disease transmission vectors and snakes out.

5.1.3 Additional Proposed Sanitation Interventions

Realising that the sanitation aspect was not very well addressed especially in some districts and the fact that sanitation will in Phase III be de-linked from being a condition for developing water supply points the mission proposes empowerment of the Community Water supply and Sanitation Committee through VRPs and VEPs to be able to undertake the following tasks:

- Demystify taboos related to the use of latrines through intensive and aggressive Social Mobilization.
- Adopt a systems approach in which the disposal of faecal matter is seen as part and parcel of environmental pollution, where the cultural beliefs of the people and their attitudes on health are all interlinked.
- Promote sanitation facilities where possible by themselves without necessarily being an appendage of water supply.
- Empower individual homesteads and communities through secondary income generating activities and through hygiene education to enable the demand and be able to construct latrines on their own.
- Involve the communities more in selection of latrine designs that are liked and wanted by them. This will create demand for the facilities.
- Use schools and school-children to spread the hygiene messages to the local communities.
- If all else fails especially in changing altitudes political/administration interventions should be encourage as a last resort.

At PMEU level the Methodology Adviser will be expected to work out a strategy to realise the above objectives.

5.2 Catchment Protection/afforestation

Indiscriminate destruction of natural forests either for agricultural activities; timber or wood-fuel has a great bearing on environmental changes of a particular region. Deforestation is one of the main causes of degradation of water resources. Severe deforestation may even lead to a complete loss of water sources. Deforestation of catchment areas has taken part in the past and is still taking place in most parts of the programme area. Therefore there is need for

re-afforestation to ensure long term sustainability of the water resources in the programme area.

The catchment areas of the water points need to be controlled, but at the same time, the water point source should be fully protected. This protection should take place in the inner and outer zone around the water point. There should be the physical protection of wells and springs, improvement of agricultural practices especially around the water point source and its immediate catchment. Re-afforestation/agro-forestation together with improved sanitation should be encouraged. The soil conservation measures to be put in place by the communities will include terracing, vegetating terrace lines and erosion control measures which include gabions. Farming practices that are not destructive such as fallowing, contour ploughing, crop rotation and mulching should be encouraged. For proper catchment protection replacement of exotic trees such as Eucalyptus, which are renowned for the drying up of water with indigenous trees should be considered. Indigenous trees such as "Ngoro", "Ogongo Chuma"," Omosabisabi", "Omogumo" and "Omosasa" are known to stabilize water catchment areas. These indigenous trees nurseries may be started by women's groups and at the local primary schools by encouraging pupils to collect seeds and seedlings and sell these at a reasonable price through the village environmental promoters.

During the PRA the community will be involved in assessing which environmental issues which need to be addressed in and by the community (for this new PRA activities may have to be introduced and others may have to be adapted).

The education for environmental sanitation and sustainable water resources management will have to be done by Village Environment Promoters (VEP). Thus they complement the efforts of the Village Resource Persons who deal with hygiene and health education connected to water and sanitation.

At the start of the Phase III training materials for the VEPs need to be developed probably in cooperation with departments/institutions who are already involved in training in this realm.

5.3 Community Water Resources Management (CWRM)

5.3.1 Introduction

Water resources management has become one of the most urgent issues of today's world. Rising human populations, growing economies and the threatened environment depend heavily upon supply of sufficient quantities of water of good quality. Meanwhile fresh water resources have proved to be limited. This situation asks for an integrated approach for sustainable management of the available water resources.

According to the terms of reference of the Formulation Mission the approach of the formulation for Phase III of RDWSSP is a bottom - up or participatory approach, and not a top-down approach, this means involvement of the communities at all levels of water resources management. In this regard the mission adopts the wording Community Water Resources Management (CWRM) to refer to water resources management activities at community level, in addition to Integrated Water Resources Management (IWRM) which it is felt covers too wide a scope for the project to deal with, not with standing the fact that IWRM is the major responsibility of the PWE'S office.

Water Resources Management should address the problems arising from multiple use of water resources at all levels. Careful planning can avoid problems due to over-exploitation of water resources, degradation of environmental quality and conflicts that result from multiple use of water resources and limitations in these resources that hamper economic development. The approach to the formulation of a community water resources management strategy should be based on a thorough analysis of all water functions, water users and demand on the one hand, and the available water resources, described in terms of quantities and qualities, on the other. This analysis should be based on an evaluation of the physical, economic and social factors which influence both sides of the water equation. Finding a sustainable balance between the two, within a realistic institutional and social framework and within logical hydrogeological and hydrological boundaries is the ultimate goal of this approach.

5.3.2 Justification for Community Water Resources Management

Although RDWSSP and other agencies working in Nyanza have in the past made a lot of effort in the provision of water and sanitation facilities to the communities, sufficient attention has not been paid to the management of water resources for sustainable development. At present little monitoring of quantity and quality of surface and groundwater resources is being done in Nyanza Province. Concern has arisen that it is not clear whether in some areas depletion of the water sources takes place, that in some other areas contamination takes place, and that the effects on the environment are unknown. Which factors play a role, whether land degradation, or deforestation is a dominant factor or whether over-abstraction plays a role is not quite clear. In this respect CWRM is necessary to enable well-funded policy decisions for protection of sources and catchments to be made at the community level, to provide a basis to the issuing of abstraction permits, to allow proper management and development of the water resources, and to ensure that negative effects on the environment are kept at a minimum. For that purpose an effective water resources management system is required, based on comprehensive monitoring information and data evaluation. The need is therefore felt to incorporate in the next phase an element of CWRM to ensure a more appropriate and sustainable development of water resources in the programme area.

The Concept for CWRM

The concept for the community-based Water Resources Management is meant to ensure development of *sustainable* water resources in Nyanza Province, as

well as the creation of a *sustainable* management structure. The emphasis is laid on involving the various stakeholders at all levels in the monitoring and data collection and evaluation to ensure sustainability. The fact that the CWRM is community-based means that the most important input will originate from the communities, who will play an important role in collecting data and implementing mitigating measures to protect the sources and minimise negative effects to the environment.

A second important aspect of the proposed CWRM is that it aims at becoming operational at District level, where all relevant information is stored in a GIS system. The information entered is not restricted to water resources only, but includes all water related factors, and will also include results from baseline surveys and participatory appraisals.

Thirdly, information collected and stored at District level will be directly channelled to a regional data base and data evaluation centre at the PWE/PMEU office for further evaluation, and region wide assessment of water resources conditions.

Types of Information Collected and Stored

The CWRM system as formulated in this report would include all water resources-relevant information, stored in a GIS management system on:

- water availability, i.e quantity and quality, hydrological and hydrogeological zones and boundaries;
- geographical distribution of the monitoring network for surface, groundwater and meterological stations;
- actual monitoring data from these stations;
- physical conditions which determine water resources availability and quality, i.e. catchment conditions, vegetation, erosional conditions, etc;- water users, i.e. their geographical distribution, present improved water supply coverage, present and future demand;
- results from the 1996 watsan baseline survey held in the whole of Nyanza Province;
- data collected a community level by means of participatory methods;
- economic and socio-cultural factors which determine demand for improved water supplies.

5.3.3 Proposed Strategy

The CWRM strategy to be developed should become operational at three levels: community, district and provincial. At each level the emphasis will be on the creation of awareness among all the actors, on the processes involved, their links with water resources conservation and protection. The main thrust here is to prepare the three levels to take action when any adverse processes are noticed and reverse the trend. Hence a strong monitoring system will have to be put in place.

In each district a monitoring network will be selected, based on the following criteria:

- willingness and interest of the local community to participate;
- problem areas, identified as being at risk for water contamination and/or depletion;
- spatial distribution across the district to provide good coverage.

a. Community level

A simple monitoring system will be set up, initially with a limited number of communities, to engage local beneficiaries in water resources management and create awareness for the sustainability of the resource and the environmental impact of water development and water conservation. Data collected will not only be limited to water levels in hand-dug wells and boreholes, but include other water-related and environmental-relevant information as far as feasible to be collected at this level.

b. District level

The main actors at this level will be the DWE's office and DWSDC. A technical assistant at the DWE's office (i.e. Groundwater Inspector or Assistant Hydrologist) will be required to continuously interact with the communities, preferably on a monthly basis, to verify grassroot data on the spot.

A monitoring system will be set up to collect and store relevant data in a district water resources data base. The data base and GIS software will allow the DWSDC to easily retrieve relevant information and check trends in water quality and availability of groundwater. It is envisaged that ultimately an average of 50 water points per district will be monitored. This will be mainly groundwater as surface water and rainfall data are regularly collected by the Water Department and Meterological Department respectively. The latter data can be transferred into the system from their respective data-bases. However, it is reported that some of the monitoring stations need rehabilitation and/or re-activation. Data collected will be levels of groundwater and quantity of surface water, while also EC readings are taken as indicative for water quality. Basic water testing facilities will be provided at District level, allowing monitoring of key parameters. Water samples for full chemical and bacteriological analysis should be taken twice-yearly and sent for analysis to a GoK approved water testing laboratory.

c. Regional (Provincial/PMEU) level

At this level, data will be centrally collected and stored. Direct communication with the District data centres will be ensured through a Local Area Network (LAN) system, using E-mail connections. At the Provincial level a more sophisticated system, using a comprehensive GIS software package, will be installed, which allows interactive water resources management. Feedback from this level to the district will be ensured to enable the district's active

management of the water resources. An operational linkage needs to be established with the National Water Resources Data Base (NAWARD) of the MLRRWD.

d. National level

At national level an operational linkage will also need to be established with the National Water Resources Data Base (NAWARD) which is supported by the Dutch funded Water Resources Assessment and Planning (WRAP) programme of the MLRRWD. However, it should be pinpointed out that WRAP does not presently undertake nationwide water resources assessment activities; according to its project documents it has not earmarked districts in Nyanza for water resources assessment studies, and does not have sufficient capacity to provide a substantial input in the proposed CWRM. It can however, provide specialised manpower to assist in setting up the system and provide backstopping at provincial and district level.

5.3.4 Organization of CWRM in Nyanza

At community level the local water committees need to be sensitised on the issue of water resources management (water conservation, catchment protection, potential contamination risks). An additional input is required during participatory community extension activities to create awareness for the need for CWRM and active participation in monitoring of the local water sources. Education and sensitisation of the community will be done through village resource persons (VRP's). It is envisaged to prepare an information package for this level.

- At District level a technical assistant (groundwater inspector) is required whose task is to collect data (on a monthly or bi-monthly basis) from the communities, verify these on the spot, take samples when required for chemical and bacteriological analysis, and assist the local observer if problems arise. He should enter data himself into the district data base. The programme will allow verification and plotting of data at the district office, to observe trends in water levels and quality. In addition the District Monitoring Assistant will collect and enter data from surface water gauging stations, and meteorological stations situated in the district.
- At Provincial level a network linkage will be established with the districts and data centrally stored in the Provincial data base. At this level data can be analysed using a more comprehensive GIS program, to observe regional patterns and trends and allow policy decisions on protection and water abstraction permits. Additional information will be obtained by linkage with the National Water Resources Data Base (NAWARD) and other national data bases. Data storage and analysis will be undertaken by professionals trained in the application of GIS. A direct feed-back would be given by the Provincial unit to the districts in the form of analysed data plots to guide the DWE's on policy matters, as well as on existing water rights.

Institutional and Legal Framework

The CWRM should become operational under the DWE and PWE respectively, the Ministry having the mandate to manage and supervise the development of the water resources in Kenya, as stipulated under the 'Water Act'. Access to the data and results of data evaluation is restricted in the sense that users other than the GoK organizations are required to pay a fee for data and results made available, similar to the mode of operation of NAWARD

5.3.5 Anticipated outputs of CWRM

At local level data is collected by the water committee (most likely the operator and VEP); a simple system of 'chalk and board' can be used to inform members of changes in the situation. An adequate back-up system (provided by the districts) will be required to ensure continuing interest of the community in their monitoring system, and to direct protective measures which can be taken at the local level. An information and training package needs to be prepared to ensure adequate knowledge at this level.

The districts will be building up a District Water Resources Data Base, providing information and print-outs adequate for this level. Again, feedback is required from the Provincial level to provide more detailed information as a result of data evaluation. Additional basic data can be obtained from the NAWARD data base, which should provide the districts with long-term records on surface water discharges, meteorological data, borehole records and water quality data. In addition, from the NAWARD system also data on permits (water rights) can be retrieved. In addition, data from participatory methods and regional watsan surveys carried out under RDWSSP can be entered and utilised. The software also allows the setting up of a Management Information System (MIS), which will be very helpful for the coordination and management of activities of the Programme in the districts.

At Provincial level outputs will be in the form of GIS products, e.g. maps showing trends of changes in water levels, water quality, etc. Gradually when the system develops, more information on population density, land use, land degradation, contaminant sources can be entered and provide policy makers with adequate tools.

Additional Benefits

The installed GIS system at District and Provincial levels will allow not only direct storage and retrieval in easy presentable format of the above listed parameters, but also data from PRAs can be stored and linked to the other information, providing a much wider scope to management at local level.

At the same time the system allows the set-up of a Management Information System (MIS) for every DWSP and the PMEU.

5.3.6 Training

At all levels training of assigned personnel will be required:

a. Extension officers working on participatory extension methods need to be trained on CWRM issues, to provide the necessary input at community level; VEPs need to be trained. Appropriate documentation needs to be developed.
b. Water Technicians assigned to be monitoring assistants need to be trained in data collection, verification and computer data storage and basic data evaluation.
c. Training at Provincial level in GIS skills or hiring of competent personnel.

5.3.7 Phased Approach

Initially a limited number of pilot schemes should be selected to ensure a proper take-off of the CWRM. During this period training can be provided and the number of monitored areas be increased. In addition the possibility of giving out short-term consultancies to assist in the entrenchment of the concept of CWRM as it positively impacts on the environment should be considered.

5.4 Linkages to other Sectors (agriculture, industry)

Water and environment are considered to be the two most critical elements in any sustainable rural development, the two are interrelated and interdependent. In the next phase RDWSSP needs therefore be conceived in this context. Agricultural runoff laden with silt, residual fertilizers and other agro-chemicals, industrial effluent and indeterminate range of pollutants from urban areas undoubtedly pose an environmental concern related to water activities. Water balance will be disturbed because of deforestation of the catchment areas, pressure on land use due to increase in population, change/uncontrolled agricultural practices and general land degradation. These activities and concerns can be considered both at the water point (community) level, district or regional level and be addressed through their respective sectors.

5.4.1 Agriculture

The increase in population has resulted in a comparative increase in agricultural activities and the use of organic and inorganic fertilizers for increased productivity has been adopted. Pesticides have also been used to control pests and weeds. The properties of such chemicals, in most cases, are not environmentally friendly, especially when they find their way into the aquatic environment. This will definitely lead into contamination of water resources. Though the use of fertilizers should be promoted, guidelines on the safe dosage, and the use of less toxic fertilizers needs to be encouraged. In this respect the programme, by utilizing the services of the officers from the ministry of agriculture, should sensitize the communities on the dangers of not following these guidelines. Such sensitisation could be simplified in languages that the community understand and therefore the whole task can be performed through the VEP's. Poor agricultural practices which have led to land degradation,

encroachment on the catchment areas, prevalent mainly due to increase in population, should be checked.

5.4.2 Industry

The various industrial activities that occur along the river banks give rise to potential pollutants especially the sugar and coffee industries in the region. Mining activities which include the soap stone industry, though not extensive in the project area, could, after some years of digging deep to the earth, lead into a change of the water regime. Mining of gold in some of the catchment areas and in parts of the programme area involves the use of mercury, which is toxic and can easily find it's way into the water resources. Abandoned open pits after mining activities are also likely areas for industrial and other waste disposal. When this happens, then with time groundwater will be polluted. The programme will therefore liaise with the Ministry of Environment and Natural Resources to monitor the activities of industries, especially in the disposal of industrial waste, if this is prevalent where the programme is active. For those industries outside the programme area but within the Lake Basin Catchment Area the above issues will be addressed by the LVEMP at PSC level. A pollution control officer from MLRRWD and the licensing officer from the Ministry of Industry could liaise during issuance of the necessary permits to conduct industrial business.

5.4.3 Urbanisation

Urbanisation has enhanced the rate of generation of solid and semi-solid waste disposal, some of which are decomposable organic matter. Lack of a proper system of collection and safe disposal of such waste in the programme area has resulted in indiscriminate disposal. This not only poses a danger to the environment but also to the human health. Pollution of surface water during rains is almost inevitable while infiltration of such polluted water also deteriorates the quality of shallow groundwater. This also includes bacteriological contamination because of improper drainage systems. Where applicable a council staff in the relevant field could be incorporated as a member of the DWSDC for matters related to urban water and environmental sanitation activities.

5.5 Linkages with Lake Victoria Environmental Management Programme (LVEMP)

The overall objective of the Lake Victoria Environmental Management Programme is:

The sustainable management of Lake Victoria with particular reference to the effective management and control of activities within its immediate physical environment that are likely to affect this water resource of international importance. Such activities will include land use and land tenure practices, agricultural practices, industrial activities, water use and water development activities afforestation and deforestation programmes among others.

Since all human and developmental activities have either positive or negative effects on both the social/human and physical environment the likely impacts of all these activities especially those of the RDWSSP need to be examined and the possible likely impacts on the LVEMP established and vice-versa. In this connection therefore, the linkages between the two programmes should be strengthened and where they do not exist be established. Table 5.4 relates the proposed activities, the possible impacts on the environment and the possible linkages between the two programmes. It is proposed that LVEMP becomes a member of PSC.

Table 5.5 LINKAGES BETWEEN LVEMP AND RDWSSP

No.	Proposed Watsan Activity in RDWSSP	Effect on LVEMP or RDWSSP likely effect on Environment	Proposed Linkages and Action
1.	Groundwater sources development	Changes in water table, water balance and recharge patterns	LVEMP should know from RDWSSP how many wells are planned for exploitation
2.	Surface water abstraction from rivers	Changes in water balance Reduced flows	LVEMP to be given data and initiate EIAs studies.
3.	Protection of springs	Changes in riverine and natural flow regimes and wetlands biodiversity	LVEMP to have an inventory and carry out EIA studies
4.	Discharged faecal matter and solid wastes into water bodies	Pollution of water bodies	LVEMP to advise on mitigation measures.
5.	Empowerment of small rural communities	Possible effects on water sources through increased activities	LVEMP has an interest.
6.	Provision of water supplies by RDWSSP	As IN 1,2,AND 3 ABOVE	LVEMP programme has targeted small rural fishing communities. Co-ordination is vital so that they can supplement each other.
7.	Community mobilization	Positive disposition toward environment	Both programmes can plan jointly and use same officers
8.	Pit latrines construction	Seepage can contaminate ground and surface water	LVEMP to know how many pit latrines dug.
9.	Privatization of implementation of services	Poor technical capacity can compromise quality and environmental concerns.	Which NGOs and actors. LVEMP to be informed of possible implications on quality of services delivered
10.	Environmental education and information	Positive environmental effect	Both programmes to coordinate
11.	Data generation	Useful in setting up database	Both programmes to avail each other databases
12.	Water quality monitoring and testing	Both programmes to collaborate	A full project to be implemented by LVEMP. RDWSSP to benefit from their project.
13.	CWRM	Positive effect on environmental management	Both programmes to collaborate
14.	Institutional framework	Strong effective institutional framework has a positive effect on overall environmental management as it improves linkages	Both programmes to create strong institutional frameworks.
15.	Sustainability of Watsan activities.	Good for environmental protection	LVEMP to benefit from sustainable activities.

5.6 Proposed Mitigation Measures

The DWSDC and the Community Water and Sanitation Committee should be empowered through the services of the Technical Assistant (in charge of Community Water Resources Management at District level) and the Village Environmental Promoter (VEP) to execute the proposed measures as a matter of priority:

- Intensify water quality monitoring of all sources used as sources of domestic water supply. In this regard both bacteriological and physico-chemical testing should be done.
- Establish safe siting of wells with respect to homestead's sanitation facilities.
- Keep track of the seasonal water table fluctuations visa-vis the depths of the wells and the latrines.
- Establish the safe distance between wells and latrines based on the geology and soil type of the area.
- Encourage the conservation and preservation of the catchment areas for springs, streams and rivers. Restrict farming on catchment areas.
- Adopt good farming methods and animal husbandry.
- Avoid cultivation close to springs and river courses, respecting the river reserves.
- Prepare cut-off trenches to divert storm water from directly contaminating springs.
- Encourage re-afforestation and agro-forestry. In this connection close liaison with the relevant ministries is recommended.
- Inventorise all possible water polluting activities and practices within the catchment areas.
- Establish close liaison with the water quality and pollution control officers with the DWE's offices as well as those of ministry of Environment and Natural Resources on issues pertaining to water and environmental pollution.

6. INSTITUTIONAL/ORGANIZATIONAL STRUCTURE OF RDWSSP PHASE III

6.1 Introduction

One of the tasks the Formulation Mission was given, is to design a sustainable institutional structure of the project for Phase III. This issue was discussed at length with different stakeholders during interviews and field visits and it also played an important role during the interactive workshop, which was part of the formulation process. A different interpretation emerged from a few participants during the workshop on how the institutional structure of phase III should look like. The Formulation Mission made its conclusion and is consequently proposing the following institutional and organizational structure of the programme. The RDWSSP-programme is implemented under the joint responsibility of the Ministry of Land Reclamation Rural and Water Development (MLRRWD) of the Government of Kenya (GOK) and the Government of the Netherlands, represented by the Royal Netherlands Embassy (RNE).

The institutional framework of the programme was sofar based on the principle of decentralisation at the district level and emphasised on the focus of privatization. This framework was developed during Phase II and the Interim Phase. District Water and Sanitation Development Committees (DWSDCs), functioning as sub-committees of the District Development Committees and chaired by the District Water Engineers in all the districts of the Nyanza Province were planning and coordinating the implementation of the programme. The DWSDC was overseeing the District Water and Sanitation Programme (DWSP) which was responsible for the day to day implementation of the activities. The DWSP's offices, staffed by a District Programme Manager, a District Programme Accountant and staff, mainly seconded by various Ministries, were implementing the Programme.

A consultant was appointed with the specific role to oversee the implementation, ensure targets are met and general programme direction maintained. The consultant is responsible for its activities to the Government of Kenya (MLRRWD) and the Government of the Netherlands (RNE).

The Formulation Mission has observed that the institutional structure which has been applied in its present form since the interim phase was generally effective and transparent. An important indicator for effectiveness was the physical output, i.e. the number of community drinking water projects that could be realised which has increased substantially during the interim phase compared to phase II. Further the mission observed that the interaction between the various stakeholders was developing satisfactorily during the interim phase. For this reason the Formulation Mission has come to the conclusion that the institutional structure which was developed during the interim phase could be taken as the basis for the institutional structure of phase III, but that it has to be adapted, taking into consideration the emphasis on privatization. This means that the repositioning and the changing roles of the different stakeholders have to be reflected in some further detail.

Three issues are essential in this respect:

- the *local communities* will increasingly become the responsible bodies for the realisation of their own projects and need consequently to be strengthened to fulfil that role;

- *DWSPs* which were so far the most important implementing bodies at the districts level will stepwise be privatized;

- The implementing role of *NGOs* which did already play their part during the interim phase will be strengthened.

In chapter 4, section 4.5 the general strategy with respect to privatization has been outlined. The *translation* of these new elements in the institutional and organizational structure for phase III is subject of the following sections.

6.2 Institutional Structure

6.2.1 Community level

At the community level local communities will become the responsible bodies for the realisation of watsan activities. Strong local *water and sanitation committees* will have to be constituted, composed of men and women, which represent, from the very beginning, even prior to the implementation, *the ownership* of the communities and which embody the interests of the community in a fair and gender balanced way.

The committees should be able to carry the responsibilities of the community projects effectively and take adequate decisions. As the situation will not be similar in each of the communities, the time of preparation in the different communities may vary. Furthermore existing local structures, such as church related groups, women's groups, etc. can form the starting points for the water and sanitation committees. This *flexible approach* at community level implies that the time between the initiative to start a project and its realisation cannot be fixed in advance but can vary from some months to more than one year. This time will be used to *mobilize* the community, including an adequate financial participation of the community. If - even after a sufficient long period of mobilization activities, eg. about one year - the community proves not really interested or able to set up an active and responsible water and sanitation committee the mobilization activities in that community will be discontinued.

There will be the need for a sound interaction and joint planning of the institution in charge of the mobilization and training of the community (may it be the privatized DWSP or an NGO). At the moment that the implementation of the project takes off, the institutional setting at community level needs to sufficiently clear and mature. Bylaws for the committee will be formulated with the assistance of the consultant. Furthermore the community should have

collected a sustainable *starting capital* as a contribution to the project.[2]

Responsibilities of the Community Water and Sanitation Committees

- Decide on the siting of a shallow well/ borehole, etc.
- Carry the responsibility for the mobilization of the community.
- Carry the responsibility for the realisation of project, both organizationally and financially.
- Carry the responsibility for Operation & Maintenance of the project.

The Community will *conclude a tripartite contract* for the realisation of the water and sanitation project with the organization which gives technical and institutional support (DWSP, NGO or other) and with the PMEU. In this contract the rights and obligations of the three parties will be spelled out in detail.

After the accomplishment of mobilization and the achievement of the physical structures, the Community Water and Sanitation Committee will continue to carry the responsibility for Operation & Maintenance. Therefore the good functioning of the Committee is essential. A *monitoring model* which has to be based on the *monitoring indicators* which are presented in section 9.2 will be the starting point for that.

Regular collection of financial contributions in the community will form an essential yardstick for the sound development of the Community Water and Sanitation Committee. It will be envisaged to invest the collected contributions in *income generating activities* in order to contribute in that way to the sustainability of the watsan activities. The consultant is charged to develop feasible plans in this respect together with the communities and to advise during the implementation if required.

6.2.2 District level

The role of the DWSDC

At the district level, the **District Water and Sanitation Development Committee (DWSDC),** is a sub-committee of the DDC and is composed of representatives all actors in the watsan sector, both GOK and NGO. The Committee is chaired by the District Water Engineer (DWE). Other members (organizations) of the DWSDC are: the District Development Officer (DDO), District Public Health Officer (PHO;MoH). In districts where NGOs are active in the watsan sector they are also represented in the committee. Finally the (Assistant) District Programme Manager of the DWSP is member and secretary of the Committee. She/he calls the meetings is in charge to set the agenda in

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[2] Measures will have to be taken in order to ensure that the contribution to the starting capital, as well as to the activities of the community, will be gender balanced in that sense that male members will not leave the contribution to the starting capital as well as the work to be done in an unequal and unjustified share to female members.

close cooperation with the chairman (DWE) and is responsible for making the minutes of the meetings. The committee usually meets once a month.

The Formulation Mission has observed that so far only a few women are members of the DWSDCs which is due to the fact that there are only very female Heads of Departments in the districts. However in some cases NGOs have sent female staff to the DWSDC. The mission urges the PMEU and the DWSDCs to promote more intensive female participation.

The DWSDC is the policy, planning and coordination structure for all watsan matters in the district. The responsibilities of the DWSDC in the Programme affairs will broadly involve:

- Formulation of the District's water supply and sanitation implementation policy.
- Allocating areas (zoning) of implementation to the DWSP.
- Monitoring and evaluating the progress of implementation by the DWSP regularly, to ascertain that it accords with the programme's policy guidelines.
- Supporting the institutional framework for the Programme's projects to easily obtain spare parts for their O&M needs to ensure long term sustainability of installed facilities.

The role of the District Water Engineer

The DWE's tasks with respect to the programme are the following:

- To ensure that projects are being implemented to the required technical standards.
- Chair the district programme Tender Committee.
- Monitor and evaluate progress of the implementation process.
- Certify financial statements and completion of projects.
- Ensure that water quality tests are being executed on a regular basis.
- Collection and analysis of data of the watsan sector of the district.

6.2.3 The role of the DWSP

The DWSPs are so far the main implementing body of the RDWSSP at the district's level. The management of the DWSPs was during the interim phase provided by the PMEU, whereas the implementing staff was seconded by the MLRRWD, the MoH and the MCSS. The DWSP has the following tasks:

- Plan the day to day implementation of the activities in close cooperation with the DWSDC and the DWE.
- Make workplans and budgets.
- Select communities.
  Assist the communities in selecting sites.
- Plans and realises the PRA together with the community.

- Assists the community committees in the realisation of the technical works.
- Disburse funds in accordance with the budget.
- Monitor the progress of the activities.
- Account for the funds and send financial reports to the PMEU.

Privatization of the DWSPs

During phase III the DWSPs will be stepwise privatized. It is planned that the privatization of two DWSPs (Homa Bay and Kisii) will be realised within two years after the start of phase III. Details on the strategy and modalities of this privatization are discussed in section 4.2., chapter 7 and in annex 2. Existing DWSPs will also cover recently created districts, if relevant.

A new financial monitoring and control system will be developed for the privatized DWSPS, as well as for other stakeholders, participating in the programme. This new control system is discussed in section 8.3.

The initial experience gained with the privatization of the first DWSPs will form subject of an evaluation which is planned after two years and will contribute to the planning of the privatization of the remaining DWSPs.

6.2.3 Provincial Level

The Role of the Programme Steering Committee (PSC)

At Provincial level the Provincial Steering Committee is the policy body of the RDWSSP. The PSC is composed of representatives of the MoH, the Provincial Environmental Officer, and LBDA. The PWE is the chairman of the committee whereas the PMEU - Team Leader acts as its secretary.

The tasks of the PSC are the following:

- Policy of monitoring the activities of the programme.
- Policy related to water quality monitoring.
- Policy of the staff requirements of the DWSP's and determining strategies to meet shortfalls.
- Policy of performance appraisals of attached staff in the Programme.
- Policy on general staff issues of the attached cadres in the DWSP's.

The Formulation Mission has observed that during the interim phase the PSC has not functioned satisfactorily. For this reason the mission urges all the stakeholders involved to put more emphasis on the realisation of the objectives of the PSC, i.e. an adequate functioning of the programme and an effective coordination of all the provincial services involved. A quarterly frequency of meetings seems adequate, provided that the secretary sets an attractive agenda. Further it could be envisaged that members of the PSC occasionally visit the

programme at community level and interact with the programme committees in order to obtain a better insight in the realisations of the programme.

The Formulation Mission has noticed that there are no female members of the PSC and therefore urges the PMEU to make all possible efforts to promote female participation in the committee.

The Role of the Provincial Water Engineer

The ministerial function of the PWE is primarily monitoring and quality control of water activities in the province. With regard to RDWSSP, the PWE's role is focused on:

- Carrying out the monitoring of projects undertaken by the programme, jointly with the PMEU.
- Providing water quality testing facility for the implemented projects, if this is lacking at the district level.
- Maintaining a data base and monitoring system for Community Water Resources Management, (CWRM).

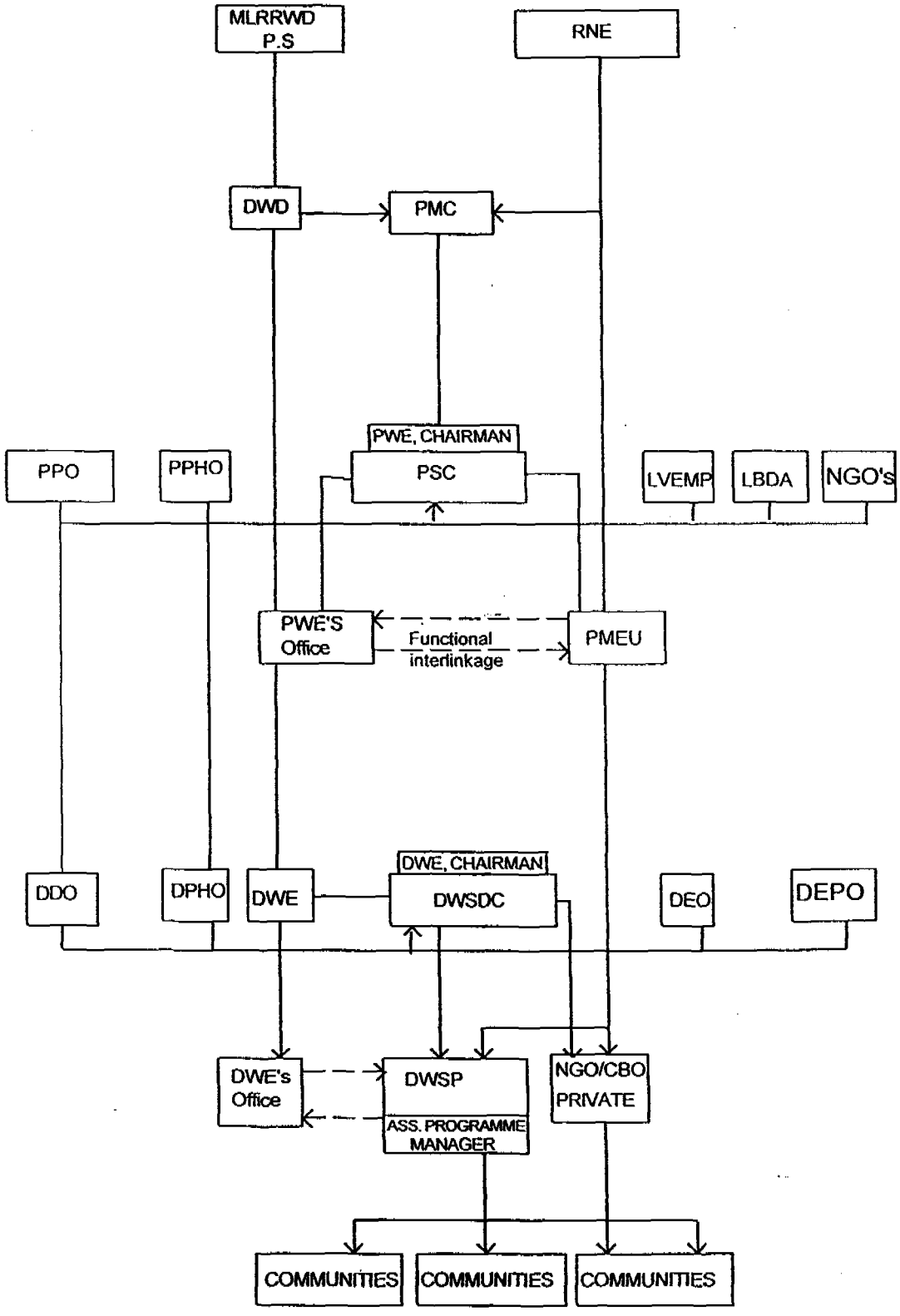
The Role of the Programme Monitoring and Evaluation Unit (PMEU)

In close consultation with the PWE's Office the PMEU will continue as the Consultant on behalf of the MLRRWD and the RNE in order to ensure proper programme execution during the third phase. The responsibilities of the PMEU are the following:

- Development of implementation methodologies and approaches.
- Providing the requisite management, and administrative and some implementation staff to the DWSP's.
- Promote and plan the privatization of the DWSPs.
- Entering into contracts with NGO's and private sector firms contracted by the programme to render services in consultation with the Ministry.
- Disbursement and administration of Donor funds to the programme, in accordance with the approved work plans and budgets.
- Staff training.
- Monitoring and evaluation of programme operations in close cooperation with the PWE.
- Ensuring that quality control in all operations is maintained in close cooperation with the PWEs.
- Provide secretariat to the Programme Steering Committee.
- In conjunction with the PWEs office, develop and implement a sustainable Water Resources Management System.
- To carry out, in consultation with the relevant district heads and DWSP management regular staff performance appraisals.

Figure 1

INSTITUTIONAL FRAMEWORK RDWSSP PHASE III



Functional interlinkages between the PWE's office and the PMEU

Since 1½ years the PMEU is located in the PWE's office. The intention of doing so was to develop mutual functional linkages between both offices. However so far the linkage is restricted to an informal and good contact between the persons in charge i.e the PWE and the Team Leader. The Formulation Mission is of the opinion that further functional linkages will have to be developed at staff level from the perspective that such interlinkages can be constructive for both parties. Water quality monitoring is an adequate issue to begin with. Establishing and maintaining a database is another important issue. There is no need to formalise these interlinkages. However they deserve full attention from the PWE and the Team Leader PMEU.

6.2.4 National Level

The two bilateral partners in the Programme, GOK and GON represented by the MLRRWD and the RNE constitute the ***Programme Management Committee.*** This committee is in charge of setting the general policy outlines of the programme. The committee generally functions in a rather informal way and there is no need to change this situation. As the Health component is becoming of more importance during phase III, incidental consultation with the MoH looks appropriate.

6.3 Internal organization of the PMEU

6.3.1 The mandate of the PMEU in implementation

PMEU is the main contractor charged by the RNE/GoK with the overall implementation of the programme in its current phase and is essentially an operational and coordinating office of the programme at provincial level in close consultation with the PWE. In its role as the donor's representative, PMEU is mandated to ensure proper execution of the programme activities, including financial management, monitoring and evaluation of all the operations.

This mandate puts the PMEU in a unique positions viz a viz the programme and its implementation. PMEU is a key stakeholder in its own right as the overall implementing contractor and as the representative of the donor. As a contractor, PMEU coordinates well with the GoK set up for the implementation of the programme both at the district and provincial levels. At the district level, the PMEU provides technical and management staff for the execution of the programme. At the national level PMEU reports to the RNE on the disbursement of funds and to both RNE and GoK on programme achievement.

In executing the programme, PMEU has delegated authority to DWSPs which are managed by the DPMs in terms of technical and operational outputs. The privatization of the DWSPs will change the relation between the PMEU and the DWSPs fundamentally. Today, staff which is seconded by the PMEU has a sub-ordinated relationship to the PMEU. After privatization of the PMEU, they will

become contract partners. The consequences of this will have to be worked out in further detail by the *Task Force on Privatization.*

6.3.2 General remarks on present internal organization of the PMEU [3]

The PMEU is functioning quite well; however the internal organizational structure of the PMEU can be improved substantially. To start with, the functional relationships are not clearly defined. As it is now, one finds it very difficult to understand how different positions are related to one another in terms of authority and accountability. The team leader, for example, has all the positions below him answering directly to him. He is expected to provide both managerial and technical backstopping to all these positions. This arrangement can be too strenuous on the top position to the extent of causing possible bottle neck in the system and general management process. The fact that so far that the staff of the PMEU has managed so well under these circumstances should not be the measure to go by. Therefore, the present arrangement requires a substantial adjustment.

The roles of the positions below the team leader also appear not clearly defined, or if they are, there exist certain obvious overlap in some cases. For example, financial accounting and control at the programme implementation level is the responsibility of officers operating at two levels viz. the DPMs and the two District Advisors. This is resulting from a situation where there are two operating bank accounts at the district levels. The inter-linkages in terms of accountability between the Financial Controller and the District Programme Managers on the one hand and between the District Advisor and the DPMs on the other are not clear. Where the role and function of implementation has been delegated to the DPMs, that authority should be backed up by full and direct accountability for the funds.

Further, the roles of the institutional development expert during the interim phase and that of the training advisor are not clearly spelt out to the extent that to an outsider there is apparent overlap.

Because of the short term arrangement for funding the programme during the interim period, most of the local technical experts are on short term contracts. This contributes to a situation of uncertainty both to the staff concerned and to the programme. The mission noted that several good staff left the programme when no clear decision was taken on the future of the programme. The programme should offer terms which are attractive enough to facilitate retention of qualified experts. As a general policy line, when attracting new staff , priority should be given to contract female staff given equal qualifications and comparable experience.

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[3] The figures *Institutional Framework RDWSSP* (p.64) and *Organisational Structure Programme Monitoring and Evaluation Unit* (p.71) might give the impression of a top-down approach. However as is clear from the text, starting point for the programme during phase III is the local community and the programme is conceptualised from that perspective.

6.3.3 Proposal for changes in the internal organization at PMEU

These proposals have been discussed at length with some of the current staff both at PMEU and at DPMs level and reflect thinking at those levels.

a. **Reorganization of the establishment**

aa. **New positions**

Institutional/Privatization Officer

The Institutional/Privatization Officer will be in charge of all issues related to the institutional aspects of the programme. The function includes contract supervision and general backstopping of the DWSPs besides being responsible for general public relations. The Institutional/Privatization Officer will maintain institutional linkages with DWSDCs. Furthermore he is responsible for promoting the privatization process within the RDWSSP. He is a member of *Privatization Task Force*. The Institutional/Privatization Officer acts as Deputy Team Leader, replacing the Team Leader during his absence.

Methodology Adviser

The mission feels that the programme needs to establish an advisory position for the duration of two years in order to reflect basically and to promote the conceptual evolution of the water supply and sanitation methodology and to contribute to the methodological renewal and improvement of the programme-concept, necessary for its further development and sustainability. One of the reasons to propose this position is that the mission has observed that the mobilization of the community on the basis of the existing PRA methodology has not led to the broad community mobilization that could have been expected. This advisory position will be filled during the second and the third year of phase III. A broad experience in mobilization methodology and methodologies for the transfer and communication of experience in an interactive way as well as a thorough knowledge of the international developments in the watsan sector are basic conditions for an effective realisation of this position. A more detailed job description is annexed to this report.

Senior Secretary

This position can be filled in by any one of the existing secretaries and the functions will include those currently performed by the Office Manager such as ensuring that the office runs smoothly.

Assistant Programme Manager

The position is created to relieve the Programme Manager of some of his functions of supervision and control of the programme implementation. The position can be filled by persons who are not holding necessarily engineering background. This officer will be responsible for community mobilization and water point management among others. Her/his jurisdiction will be confined to only one district and she/he will account to the Programme Manager for her/his functions.

Technical Advisor

Once the District Advisors will have been phased out, the programme will need a Technical Advisor (TA), by preference a Water Engineer with experience in rural water supply and sanitation and understanding of new technology options and further progress in this field.

ab. **Redefined positions**

Programme Managers

With the emergence of 3 new districts in the programme area (Suba, Kuria and Rachwonyo) a need has arisen for the programme to start activities there. This of course will entail greater scope of geographical coverage by the programme. To address this issue, it is proposed to create a new position of Programme Manager in the organizational structure, whose role will include supervision of his DWSP in more than one district. The Programme Manager will be a Water Engineer by profession. The following areas of supervision are suggested:

Kisumu Area:	Kisumu and Siaya districts
Homa Bay Area:	Homa Bay, Suba and Rachwonyo districts
Migori Area:	Migori and Kuria districts
Kisii Area:	Kisii and Nyamira districts

The main role of the upgraded Programme Manager will be to verify and certify the contracts, backstop the APMs on technical matters during implementation and to handle difficult political issues which may arise during implementation. The Programme Managers will also supervise the finances at the district level. Programme Managers may become the managers of the privatized DWSPs.

Administrative Assistant

The mission proposes that the present position of Office Manager be upgraded to that of Administrative Assistant, with redefined roles to include management of staff matters (salaries, leaves, offs, management of

transport fleet including schedules of maintenance and repairs and end year appraisals and welfare issues). The position will also give support in contracts management, following up tender and contract awarding processes at the district level to appraise the contracts in all implementation districts.

District Advisor (next two years)

These positions will be phased out within the next two years as the positions of Programme Managers will have been consolidated.

Training/Gender Officer

The current positions of training adviser and gender expert can be combined under one officer who is responsible for gender sensitivity, community mobilization and training expertise.

ac. **Management Team**

The establishment of the management team is indispensable. This team will under the guidance of the Team Leader set out the general guideline for the management and planning of the programme and monitor its realisation. The roles and responsibilities of the management team have to be worked out in further details.

The management team will include the team leader, the institutional/ privatization officer, the training/gender officer and the monitoring and evaluation officer.

b. **Staffing of the DWSPs**

The planned privatization of the DWSPs will have consequences for their staffing. The privatized bodies replacing the 'old' DWSPs will no longer automatically be staffed by government agencies. In principle the staffing of the 'new' DWSPs will be through the open market, although *secondment contracts* with government agencies may be closed if opportune.

The three government agencies involved so far in the supply of staff to the DWSPs may continue to do so during phase III of the programme on the basis of secondment contracts, in accordance with the following:

- **MLRRWD** will second Hydro-geologists, Ground Water Inspectors, Technical Operations Officers and the Field Supervisors;

- **Ministry of Health** will second the Health Promotion Officers, Public Health Extensionists and Community Health Nurses; however this staff may also be recruited in the open market;

- **Ministry of Culture and Social Services** has in the past been required to supply Community Development Officers, Community Operations Officers and Community Extensionists. This arrangement did not work very satisfactorily, reason why the mission proposes that these staff be obtained by preference from the open labour market.

It is expected that *privatized* DWSPs will increasingly recruit their staff in the open market. Furthermore the managerial and financial staff both of the 'old' and of the 'new' DWSPs will be recruited in the open market in direct cooperation with the PMEU.

Terms of employment

Terms of employment for PMEU will be realised in accordance with the uniform rules as laid down by the RNE. Within this context, the following suggestions might be useful. As it is, the staff on local contracts feel disadvantaged as they claim not to be covered sufficiently for medical and accident insurance and other benefits such as retirement packages.

The mission suggests to synchronise the contract terms between the local and overseas experts as much as possible during phase III and to include education, health and terminal dues. In the case of medical and accident cover, the mission proposes that a group personal accident cover be obtained from a reputable insurance firm to provide out patient medical cover, hospitalization and compensation in case of loss of limb or life. In case of service contracts for local staff, there should be automatic contract renewal during the tenure of the programme.

Furthermore the mission underlines the necessity to formulate and apply such terms of contract, which facilitate effectively the attraction of female staff, especially related to working conditions in the field (mobility, long working hours etc.). In general when for a certain position a woman applies, having the same qualifications and comparable experience as male applicants, priority should be given to the female applicant.

Figure 2

Organisational structure Programme Monitoring and Evaluation Unit

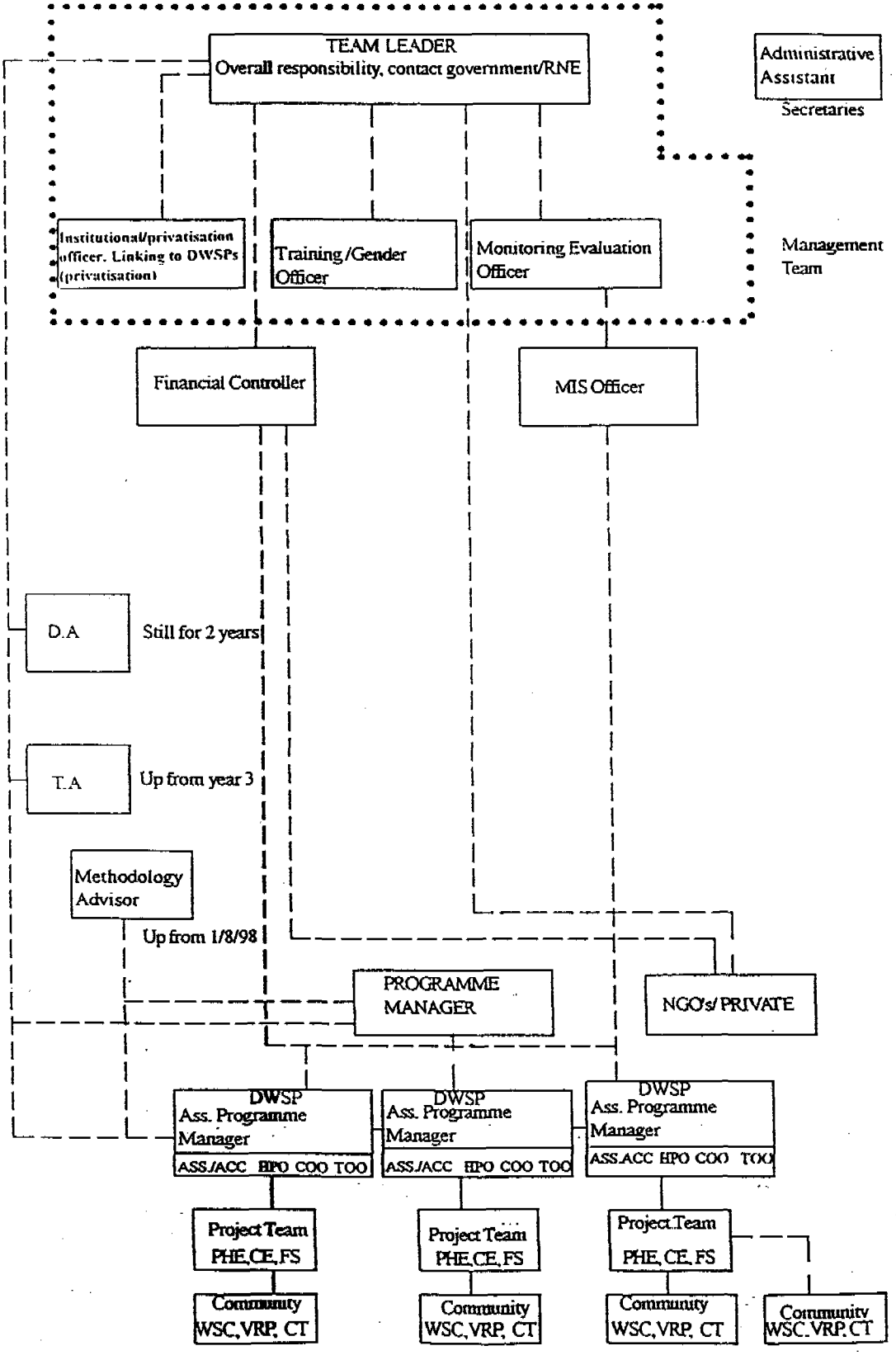
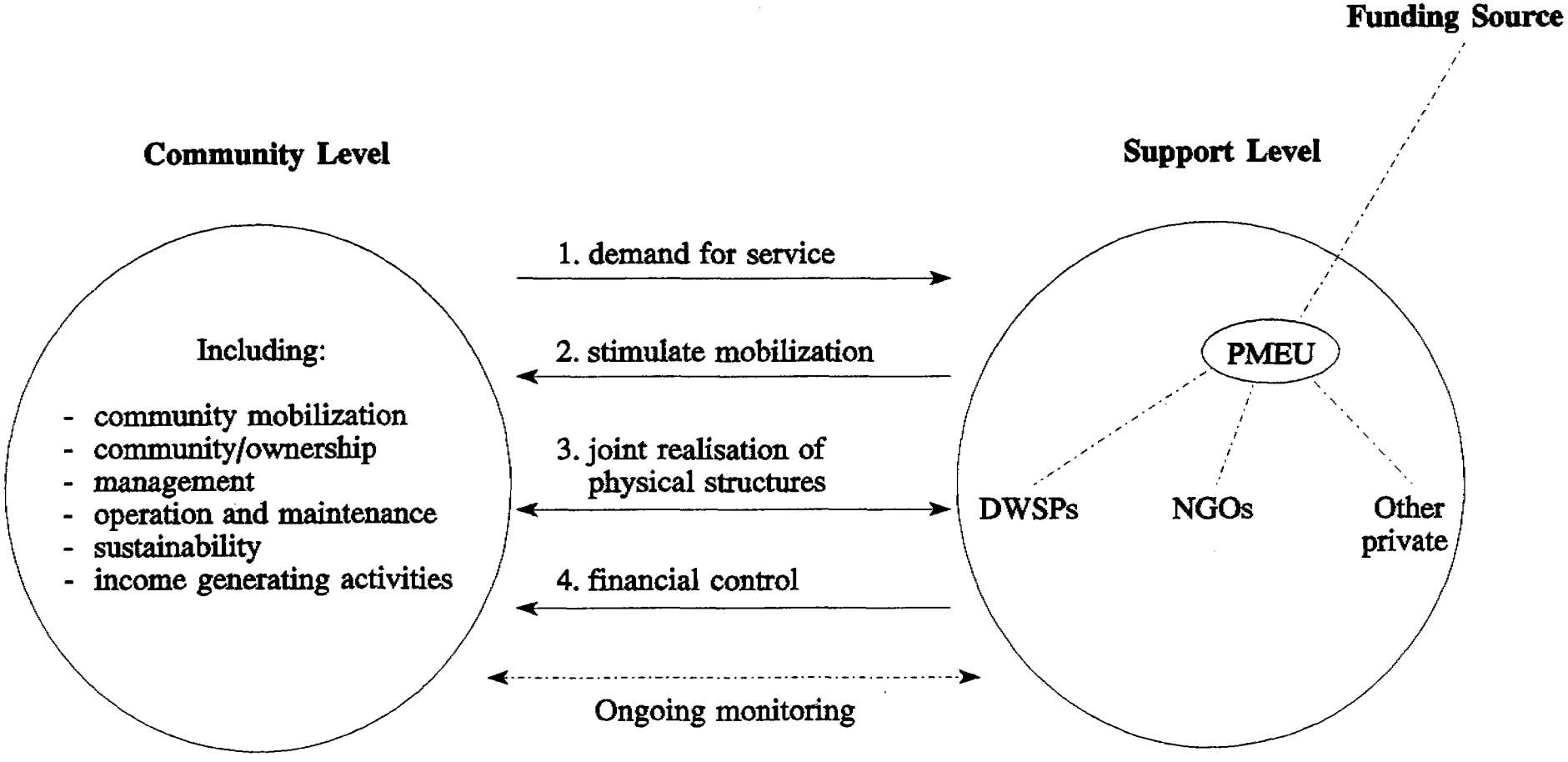


Figure 3

Interaction between Communities and Institutional Set-Up of RDWSSP programme Phase III



7. PLANNED ACTIVITIES, OUTPUT, BUDGET

7.1 Introduction

The *translation* of the strategy laid down in the previous chapters, into an operational plan for the coming 5 years is to some extent a hazardous enterprise.

First of all a period of 5 years to plan ahead is a long one. It is not that easy to envisage what may happen during the coming years, economically, politically, climatologically, etc. and to which extent those events and developments might influence the programme's prospect for realisation.

Secondly the interactive approach which has been chosen by the Formulation Mission, implied that the expectations for possible realisations during phase III in the districts were generally higher than what will be possible to be realised both form organizational and managements perspective as from that of availability of funds.

Thirdly for reasons explained in detail in section 4.5 one of the basic orientations of phase III will be *privatization at community and district level,* the implications of which have been highlighted in section 4.5 and chapter 6. Transferring the responsibility for the realization of the projects in principle to the *community level* is a process which may - during a certain period - rather reduce than increase the output, which complicates the planning process. The share of the planned output which is taken care of by privatized DWSPs will gradually increase. Furthermore it is realistically estimated that NGOs will take a share of at a maximum of 45 % of the total targeted output.

Fourthly it was very clear from the start of the formulation process, that the available funds for phase III would not be structurally higher than the funds that were on an annual base available during phase II or the interim phase. When the formulation process went on, it became clear that the budget had even to go down to a level of about Nfl. 25 million over a period of 5 years, which implies a considerable budget cut compared to the interim phase.

On the basis of these assumptions a small working group during the interactive workshop has calculated which could be feasible targets for the physical output during phase III, differentiated for the various technology options and the districts, which means would have to be necessary, and what activities to be undertaken to reach this output. This group has notably compared the different technology options (section 4.4) and made differentiated but realistic cost calculations for these technology options. The outcome of those calculations constituted a firm basis for the mission to estimate targets for phase III and to make adequate cost calculations for that phase. On this basis it was possible to plan the necessary activities to realise this output.

The strategy in this formulation report abandons the compulsory linkage between water supply and sanitation. This new strategy could not yet be fully integrated into the estimates and calculations, as there are no parameters yet available to do so in a justified way. However a cost-reduction for latrines construction of 30% has been applied.

In section 7.2. the targets for the physical output are represented as the activities. The planned necessary staff is dealt with in section 3, whereas staff training is justified in 7.4. The overall budget is given in section 5. For the logical framework and details on the budget is referred to the annexes.

7.2 Output targets for phase III

Table 7.2.1 represents the targets for water points over a period of 5 years. The targets are based on realistic data obtained during the interim phase, strategic agendas prepared by the districts and result of a working group during the interactive workshop. An average of 100 water points in each district is planned as an upper limit.

According to the strategic agendas prepared by the district teams demand is much higher than that. The achievable targets basically also depend on the effectiveness of the mobilization process in the local communities.

The total targeted output is put at 900 water points of which about 500 will be implemented under the responsibilities of the (privatized) DWSPs or other private companies and a little less than 400 under the responsibility of NGOs. It is significant that the number of planned boreholes is the highest, viz. 260 or about 30 % of the total.

Table 7.2.1.a. TARGETS FOR WATER POINTS CONSTRUCTION

Implementer	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Percentage
DWSPs	100	100	90	30	-	320	35%
Pri. DWSPs/ Pri. Sector	-	-	50	50	87	187	21%
NGOs	20	60	65	120	128	393	44%
Total	120	160	205	200	215	900	100%

Table 7.2.1.b. SANITATION COMPLETION TARGET SCHEDULE

	Year 1	Year 2	Year 3	Year 4	Year 5	
DWSP	1520	1302	1487	508	-	4817
Pri. DWSP/Pri. Sector	-	-	826	847	422	2095
NGOs	304	782	1074	2032	621	4813
Total	1824	2084	3387	3387	1043	11725

Table 7.2.2 **Annual targeted output** is based on the same physical output, viz. 900.In year 1 190 new projects are planned to be taken up against 250, respectively 226 and 234 in the years 2, 3 and 4. In year 5 no new projects are more taken up. Furthermore this table links the targeted physical output with community empowerment, viz. capacity building and training at community level.

Table 7.2.3 **Activities phase III** links the targeted output to the planned activities. As it was observed before, line 7 *Sanitation development* is based on the assumption that the construction of toilets is optional, which implies that the effective number of latrines to be realised might be somewhat lower.

Table 7.2.2 **ANNUAL TARGETED OUTPUT**

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Programme Dev. 1. Quarterly Workshops 2. Annual Plan of Action 3. C.D. package dev.	C.D. manual	-	-	-	-
4. Pilot Projects	Documented lessons learned	Documented lessons learned	-	-	-
5. New & ongoing projects	190 projects taken up	250 projects taken up	226 projects taken up	234 projects taken up	-
Community Empowerment 1. WSC training**	140 WSCs trained	200 WSCs trained	260 WSCs trained	260 WSCs trained	40 WSCs trained
2. VRP/VEP training	1,120 VRPs/VEPs trained	1,600 VRPs/VEPs trained	2,080 VRP/VEPs trained	1,300 VRP/VEPs trained	200 VRP/VEPs trained
3. CT training	700 CTs trained	1,000 CTs trained	1,300 CTs trained	1,300 CTs trained	200 CTs trained
4. Community based monitoring training	1,120 community members trained on monitoring	1,600 community members trained on monitoring	2,080 community members trained on monitoring	2,080 community members trained on monitoring	320 community members trained on monitoring
5. Artisan training	-	20 local artisans (fundis) trained	20 local artisans (fundis) trained	20 local artisans (fundis) trained	21 local artisans trained

** All training will be gender focused

Table 7.2.3

ACTIVITIES PHASE III

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
1. Leaders orientation	14 leaders meeting organized	14 leaders meeting organized	14 leaders meeting organized	14 leaders meeting organized	-
2. Site Pre-selection	280 pre-selection visits done	280 pre-selection visits done	280 pre-selection visits done	280 pre-selection visits done	-
3. Technical surveys	265 technical surveys	265 technical surveys	265 technical surveys	265 technical surveys	-
4. Community mobilization	190 community mobilized	250 communities mobilized	226 communities mobilized	234 communities mobilized	-
5. Health promotion training	50 PHTs/CEs trained as TOT	-	50 PHEs/CEs refresher training received	-	-
6. Water point development	140 communities participate in wp development and 120 wps are completed	200 communities participate in wp development and 160 are completed	260 communities participate in wp development and 205 are completed	260 communities participate in wp development and 200 are completed	40 communities participate in wp development and 215 are completed
7. Sanitation development	1,824 latrines completed	2,084 latrines completed	3,387 latrines completed	3,387 latrines completed	1,043 latrines completed
8. Water quality monitoring	300 tests conducted	60 tests conducted	60 tests conducted	60 tests conducted	60 tests conducted

7.3 Staff planning

Based on output and activities the following staff planning has to be envisaged:
There is envisaged an increase in field staff in the districts in the years 2 and 3. After year 3 the field staff will remain stable. This increase is justified by the increase of the targets in the years 2 and 3. It will not yet be possible to have this increase adequately been implemented by NGOs or private contractors.

A detailed overview over the staff of the PMEU-office, including short term consultants, is represented in the following table.

Table 7.3.2 STAFF PLANNING FOR PMEU

ESTIMATED MANPOWER INPUTS FOR PMEU (TA Budget) PHASE III	
Item	***Man-months***
OVERSEAS PERSONNEL	
Time Netherlands	
Home support	2.0
Project Director	2.5
Subtotal	4.5
Long-term Kenya[4]	
Team Leader	60
Methodology Advisor	24
District Advisor I	24
District Advisor II	24
Subtotal	142
Short-term Kenya	
Project Director	3
GIS expert	2
Subtotal	5
Subtotal Overseas staff	142
LOCAL CONSULTANTS	
Health Education Expert	8
Water Resources Consultant	7
Environmental Sanitation Expert	5
Subtotal	20
LOCAL PERMANENT STAFF	
Institutional/Privatization Officer	60
Technical Advisor	48
Gender Training Officer	60
Monitoring & Evaluation Officer	60

[4]. The expatriate staff of PMEU will be reduced from three at the beginning of phase III to two after the third year.

ESTIMATED MANPOWER INPUTS FOR PMEU (TA Budget) PHASE III	
Item	***Man-months***
Financial Controller	60
Subtotal	288
OFFICE SUPPORT STAFF	
Senior Secretary	60
Accountant	60
Secretaries (2)	120
Other support staff (10)	600
Subtotal	840

A justification for this staff planning for phase III has been given n section 6.3 of the present report.

The planning of the Human Resource Development for the planning period is represented in table 7.3.3 **Human Resource Development.** This table makes clear that much emphasis will be put on the training of the teams of the DWSPs. Even after the privatization of DWSPs their staff (teams) will continue in the human resource development and capacity building in accordance with the capacity building strategy with has been outlined in section 4.6.

Table 7.3.3 **HUMAN RESOURCE DEVELOPMENT**

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
DWSP					
1. Staff recruitment	Qualified staff on post	-	-	-	-
2. Staff training	110 staff trained	-	-	-	-
3. Refresher training	-	-	110 staff trained	-	-
4. Professional staff training	18 staff trained	18 staff trained	18 staff trained	18 staff trained	18 staff trained
5. Entrepreneur training	DPMs, ADPMs, DWEs	15 managers, DWEs trained	15 managers, DWEs follow-up sessions	15 managers, DWEs follow-up sessions	15 managers, DWEs follow-up sessions
MONITORING & EVALUATION					
1. Monthly financial returns	5 PAMs produced	5 PAMs produced	5 PAMs produced	5 PAMs produced	5 PAMs produced
2. Quarterly progress reports	4 reports produced	4 reports produced	4 reports produced	4 reports produced	4 reports produced
3. Annual operation review	Annual review report produced	Annual review report produced	Annual review reports produced	Annual review reports produced	Annual review reports produced
4. Ongoing evaluation	Constraints/problems identified and correction action taken	Constraints/problems identified and correction action taken	Constraints/problems identified and correction action taken	Constraints/problems identified and correction action taken	Constraints/problems identified and correction action taken
5. Special studies and research	-	Methodology improvement	-	Methodology improvement	-
6. Mid-term review mission	-	-	Mid-term review report	-	-
7. Summational evaluation	-	-	-	-	Report on lessons learnt

Apart from the staff which will be contracted on long term (maximum the contract period), there will contracted some short term consultants for specific tasks.

These consultants tasks are:

Health Education Expert

As it has been highlighted in this formulation report, entering in the third phase, the programme will expand its scope into the field of health promotion, rather than merely sanitation training of the previous phases. During the start of the five year period of phase III, essential refocusing in that regard will be done. This will involve capacitating and training of facilitators at the district level and teaching of trainers (ToT) at the Provincial Level. A high level, well experienced Health Consultant will be required whose input will last over a period of 8 months, spread over the programme period.

Environmental Sanitation Expert

During the second interim period of the programme, a policy was developed for the inclusion of washing slabs in the community watsan projects. During the third phase further development, both of washing slabs and other environmental sanitation components will be undertaken. The environmental sanitation expert will continue to be required to provide input for one month a year.

GIS expert (expatriate)

The planned input for this consultant has been justified in section 5.3 .

Water Resources consultant

The planned input for this consultant has been justified in section 5.3 .

7.4 Professional training

As the water sector in Kenya is now being exposed to the process of privatization, it is planned that the managerial staff of the DWSPs will receive further training, thus capacitating them to continue their active involvement in the watsan activities from the privatized DWSPs. This training will include programme management, financial management and administration.

As an integral part of the proposed capacity building strategy for the programme, it is further envisaged that certain cadres in the DWSP are facilitated to improve their professional skills. This professional training will

encompass the various operational disciplines of the programme and additional technical training.

Training of the programme staff will by preference be conducted at relevant and highly renowned training institutions in Kenya or other Eastern or Southern African countries. Only in very exceptional cases training overseas can be considered. A budget allocation has been made for the planned staff training.

7.5 Overall budget

The estimated cost of water point construction is represented in:

Table 7.5.1 ESTIMATED COST OF WATER POINT CONSTRUCTION (without overheads)

	Type of construction	*Unit cost (KShs)*
1	Spring protection	86,000
2	Hand dug wells	176,000
3	Hand drilled (tube) wells	157,000
4	Machine drilled boreholes (20-50m depth)	493,000
5	Machine drilled boreholes (50-100m depth)	743,000
6	GFS based on protected spring (per CWP)	74,000
7	GFS based on solar pumped borehole (ditto)	360,000
8	Pans or small earth dams	191,000

The total costs per district (construction and overhead) are represented in the following table.

Table 7.5.2 TOTAL COSTS PER DISTRICT

	DISTRICT	*Constr.cost*	*Overhead*	*Total*
		('000 KShs)		
1	Siaya	32,745	40,000	72,745
2	Kisumu	44,810	50,000	94,810
3	Rachwonyo	27,670	20,000	47,670
4	Homa Bay	25,830	35,000	60,830
5	Suba	48,025	20,000	68,025
6	Kisii	15,830	35,000	50,830
7	Nyamira	15,830	25,000	40,830
8	Migori	44,850	35,000	79,850
9	Kuria	20,255	25,000	45,255
	Totals	**275,845**	**285,000**	**560,845**

Equivalent in Dutch Fl. x 1,000 (rate Dfl. 1 = KShs 32/-) Dfl. **17,526**

The budget estimate for 5 years for all DWSP's follows in the following table.

Table 7.5.3 BUDGET ESTIMATE FOR ALL DWSP's (overheads)

Item	Budget IP (Interim Period)	Actual expenditure 1995-96	Budget estim. 1st year	Budget estim. total 5 yrs
Local staff	31,469	37,821	25,000	125,000
Institutional support	2,237	2,309	2,500	10,000
Construction equipment	4,332	5,284	5,000	20,000
Vehicles (purchase)	9,285	5,900	15,000	25,000
Running costs ditto	12,647	14,774	10,000	60,000
Maintenance buildings	1,514	1,035	1,000	5,000
Maintenance equipment	196	420	400	3,000
Office operation	2,539	6,143	4,000	20,000
Office equipment (purchase)			3,000	5,000
Local training and meetings	6,938	3,051	3,000	12,000
Subtotal	71,157	76,737	68,900	285,000
Infrastructure (constr. of WPs)	112,796	65,232	60,000	275,845
Subtotal	183,953	141,969	128,900	560,845

Notes

1. Vehicles purchase:
   2 double cab 4WD vehicles for each district
   3 motorbikes for ditto
2. Office equipment:
   1 computer + printer for each district (database SWRM)
   1 computer + printer for each DWSP
   1 telefax for DWSP
   1 small photocopier for each DWSP
3. No allowance for contingencies has been included.

Integrating these budgets with the TA-budget and the cost for the Privatization Task Force leads to the **Programme Budget RDWSSP, phase III (1997 - 2002)**.

Table 7.5.4 TOTAL ESTIMATED BUDGET FOR PHASE III OF RDWSSP

Item	KShs	Dfl
TA (PMEU) budget		8,033,000
Water points construction	275,845,000	8,620,156
DWSP budget	285,000,000	8,906,250
Privatization Task Force	1,955,525	61,110
Total		25,620,516

This budget makes clear that the total contribution for phase III submitted to the Netherlands Government is about NFL. 25,5 million. The Kenyan contribution to phase III is not included in this budget, but mainly consist of government staff made available to the programme and the contribution of the communities in the construction and the Operation & Maintenance of the facilities.

For details on the budget, including the district budgets, see annex 3.

8. FINANCIAL REGULATIONS

8.1 Introduction

The purpose of this chapter is to give a brief overview of the existing financial regulations of the programme and the adaptations that will be necessary due to some changes in the management structure of the programme.

8.2 Brief overview of the present financial regulations

Financial regulations of the programme are geared to ensure timely procurement of funds from the donor (GON) and application of those funds in a manner that guarantees maximum output from each unit of funds input, protection of the programme assets, valid accurate financial information and adherence to Programme Management policies.

In response to the aforesaid objectives, yearly/quarterly/monthly realistic budgets, monthly variance analyses and weekly/monthly accounting reports are prepared by the District Water and Sanitation Programmes (DWSPs)/NGOs for submission to Programme Monitoring and Evaluation unit which finally submits them for further scrutiny to BKH (Netherlands), DGIS/RNE and MLRRWD. Besides the said measures, independent financial checks at the DWSPs/NGOs are performed by the PMEU based Financial Controller, District Advisors and the annual external audit effected by GON in addition to full computerization of the accounting system for timeliness of financial data processing and accuracy.

GON releases funds to BKH/PMEU on the basis of submitted monthly actual expenditure returns and PMEU releases funds to DWSPs and NGOs on the basis of monthly budgets- DWSPs/NGOs incur expenditure strictly in compliance with the budget, provisions, financial regulation and accounting principles. Expenditure vouchers are verified by the Financial controller and monthly accounts of the DWSPs reviewed by the District Advisors and DWEs before submission to PMEU that submits them to GON/MLRRWD.

There are two bank accounts at the DWSP operated by the District advisor and one by the District Programme Manager and District Programme Accountant. The District Advisors transfer funds to the other account on request based on monthly cash budgets. The arrangement is aimed at having little funds at any given time on the DPM/DPA operated account which imply a maximum of checks and balances and an effective control system.

8.3 Changes in the financial regulations during phase III

The financial regulations the programme applies so far appear to be effective and have contributed to a transparent internal system of financial management and control. However some adaptations are proposed for the institutional and management structure of the programme during phase III of which the most important are:

- DWSPs will gradually become privatized
- there will not be created new DWSPs for the newly formed districts
- a new position is being created of programme manager; a programme manager is planned to oversee 2 or 3 assistant programme managers; (see 6.3);
- the position of district advisor (DA) in its present form, including a substantial part of the financial management and control at the district, level is being phased out by 1 September 1999. At the same date the system of the *double bank account* for the districts will come to an end.

These changes imply the need for some adaptations of the financial management and control system which will be valid during the coming 2 years.

The basic elements of this new system could be:

- the programme manager submits his area workplan and budget, based on the inputs from the districts in his area; the workplans and budgets need the approval of the Team Leader;

- an *area account* is opened for the jurisdiction of the programme manager; the *area budget* will gradually be transferred to the area account after approval;

- amounts will be transferred on request to the District Account; bank transfers and cheques will carry the signature of the Programme Manager and the District Advisor;

- the programme manager and the assistant programme manager are signatories of the district's account;

- the financial controller will execute his financial control in accordance with the rules set above.

As the DWSPs will step by step be privatized and the position of District Advisor will be discontinued per 1 September 1999, the programme should prior to that date ask advice by preference from its external auditor or another reliable and competent financial advisor in order to set up a responsible and transparent internal financial management and financial control system in accordance with the adapted managerial structure of the programme. This

advice has to be obtained not later than April 1998. It should describe the financial management of the programme as a whole including the financial authorization and responsibilities of the various officers, the financial and control system for the newly privatized DWSPs as well as the modalities and frequency of internal and external control and audit.

The advice should also indicate modalities to start experiments with an adaptation of the financial management and authorization system at area and district level, prior to the formal privatization of the DWSPs especially in areas or districts where the PMEU Team Leader estimates that such experiments could be a useful learning experience. In first instance these experiments should be restricted in time. The evaluation of those experiments will constitute an input to set up definite financial regulations in close cooperation with the external auditor.

9. MONITORING AND EVALUATION

9.1 General

During phase III monitoring will have to be defined and realised at its most essential level, viz. making available relevant information on the progress of the activities and being a tool that facilitates strategic management decisions at the various levels of the activities.

Monitoring will find its base at the level of the Community Groups. Performance Indicators (PIs) have been developed in this perspective in section 9.2 which are both *qualitative* and *quantitative* and constitute a sound basis for *implementation* and *impact monitoring*. However it is essential for the monitoring process at community level that these indicators will not be *prescribed* by the programme staff, but that they are developed together with the community. It is further important that the community is motivated to participate actively in this monitoring process and that the monitoring is not left to the committee and the caretakers as described in further detail in section 9.2.

It has to be envisaged during phase III that completed water projects continue to send a monitoring report to the DWSP for at least 2 years.
The information collected in this way will be an important tool for the DWSPs not only to collect information on the *implementation* of ongoing projects, but also on the *impact* of an accomplished watsan projects.

This information will form a basis for the DWSP to develop a suitable monitoring system at district basis and will constitute the basis for quarterly reports of the DWSPs to DWSDCs and to the PMEU. The quarterly reports of the districts will in turn constitute an important input in the monitoring system for the programme as a whole and be an important input for the MIS and for planning purposes.

In this way monitoring will become a strategic tool which is indispensable both for the districts and the programme as a whole, especially when the districts and the PMEU are starting their quarterly or annual planning, or have to adjust their planning objectives or budgets in between due to unforseen circumstances. The logical framework annexed to this report will constitute an important starting point and guideline for the monitoring exercise. The monitoring reports from the districts form an important input for the quarterly progress reporting of the programme as a whole.

The Monitoring and Evaluation Unit of the PMEU has already gone a long way in developing an adequate monitoring system in the way indicated above and will have to continue in this way. However the unit will have to put more emphasis on motivating and capacitating the community and the district staff for this purpose.

Furthermore the so-called *double monitoring system*, one by the Monitoring Unit and one by the districts advisors will have to come to an end. The Team Leader will have to take measures in this respect.

9.2 Monitoring at Community Level

At present the following monitoring forms are developed:
WSC:

- monthly water rates;
- daily water rates;
- summary of meetings;
- monthly bank balances;
- cash book;
- progress on well digging.

Records have to be kept of: minutes of meetings of WSC; records of work done by community and time taken; records on sanitation progress; records on water development progress.

Caretakers:

- preventive maintenance;
- pump maintenance (breakdown/repair);
- time taken to fill 20 litre container (seasonally);
- water quality.

VRP:

- record of homestead hygiene training;
- monitoring of effect of training (10 messages) .

If women and men of the community can share in data gathering and analysis, they will be motivated to suggest improvements and work towards more effective results.

As indicated above monitoring will have to be an ongoing activity, even after the project has formally ended, and gathers information on progress and on effects and sustainability. To get the right information, indicators have to be developed based on the project objectives and derived from the baseline survey. Possible indicators are:

1) *Technical performance of the water supply (CT)*

- sufficient water available/not available; at what times;
- general operation (opening and closing, appropriate fencing and drainage around water point, appropriate distribution) and cleanliness of water point

and surroundings;
- type and frequency of breakdowns;
- repairs: by whom and how much time after breakdown;
- record of preventive maintenance.

2) *Managerial performance of WSC*

- record of meetings (including attendance);
- record of water rates;
- bank record;
- record of supervisory activities carried out;
- record of community meetings on watsan project.

3) *Health and hygiene (VRP)*

- record of latrine construction;
- hygiene condition of latrines;
- usage of latrines;
- usage of leaky tin and ash for hand washing;
- knowledge on hygiene/health messages;
- environmental sanitation of the compound;
- selected and measurable hygiene risk decrease (use of unprotected sources for drinking water, covering water container, cleaning of water container before drawing of water, no (children) faeces in compound).

4) *Water resources management*

- increase/decrease of eucalyptus trees;
- increase/decrease of indigenous trees;
- pollution sources;
- water levels;
- water quality;
- environmental conservation.

5) *Gender aspects*

- women in community have regular contact with (female) committee members;
- female committee members take active part in meetings;
- breakdown of tasks of village volunteers by gender.

6) *Continuous involvement of the community*

- water charges or contributions towards O&M are being paid regularly;
- the community volunteers still perform their task regularly;
- general satisfaction with improvements and their functioning;
- general satisfaction with work of volunteers.

7) *Monitoring of performance of project teams*

- number of visits of member of project team;
- contacts of the project team member in the community;
- activities initiated and supported by team member;
- evaluation of training of community volunteers.

As an extra incentive for the community volunteers, it may be useful if volunteers from one community go to another community for monitoring once or twice a year. This also introduces an element of competition.

For the project staff it is important to monitor that action is being taken on the results of the monitoring at community level. Similarly, the performance of the staff involved in community monitoring also has to be monitored.

The capacity of the assistant chiefs to keep simple but essential data on ongoing watsan and other activities which can be linked to the programme by the various agencies has to be strengthened.

Schools located in the catchment area of the water point could be involved in monitoring of environmental sanitation and water resource management.

9.3 Progress reporting

The monitoring and evaluation reporting format for the districts is well developed and reports of some of the districts are encouraging of quality. These reports constitute one of the inputs for the quarterly reports which the programme submits in a regular sequence. The quarterly reports give a good overview on the quantitative performances of the programme and on institutional aspects. So far the quarterly reports are in line with the reporting formats which are prescribed by the donor, i.e. the GON. However so far less emphasis is put on qualitative aspects. Impact monitoring - as indicated above - if well developed - could be a good basis for that.In addition regular reports on water points and the quality of water abstracted will substantially contribute to the qualitative aspects of monitoring. This area needs strengthening both at districts and provincial level by providing standards, equipment and reporting format.

Monitoring and progress reports will form adequate instruments for policy development of the programme and will also constitute a suitable input for future review missions.

9.4 Mid-term review

It is expected that phase III of the programme may start September 1997. In 1998 and 1999 some modifications of the staffing of the PMEU and of financial reporting and internal control systems are anticipated (see chapter 9). This implies that the first half of the year 2000 appears the most suitable timing for a mid-term review. This timing makes it possible to assess those modifications and to recommend adaptations if necessary. Furthermore in 2000 it might be possible to assess the impact of the approach which is laid down in this report, especially the integration of the health component and the privatization process and to consider their viability. The outcome of the mid-term review will constitute an important parameter in the considerations whether, and if so in which form the programme might continue after the year 2002.

The review mission will have to consider to which extent the step by step realisation of the privatization has so far been effective. The mission will notably assess the activities and the final results of the *Privatization Task Force* and on the basis of that assessment make recommendations for the continuation and the modalities of the step by step privatization of the programme.

Furthermore the mid term review mission will assess whether the targets for sustainability of the water project at community level are achieved and if not what could be the root cause of that. The development of the communal system of O&M and of an adequate *'jua kali'* repair system and its viability in the future will have to be important indicators in this respect for the mid-term review.

ANNEX 1

TERMS OF REFERENCE

Draft Terms of Reference Formulation RDWSSP III

The background information concerning the formulation of the third phase can mostly be found in the Paldim report- Review of the Institutional Framework of the RDWSSP II which forms a basis for discussions with the concerned parties; the main conclusions have been agreed on, while details need further discussion.

BACKGROUND

HISTORY

The Rural Domestic Water Supply and Sanitation Programme (RDWSSP) is now in its second interim period following the second phase. In 1982 it began as a shallow wells pilot project of the LBDA supported by the Government of the Netherlands. This developed into RDWSSP Phase I for the period 1985 - 1988, funded under a bilateral arrangement between the Kenyan and the Netherlands governments. After an interim period 1989 - 1991 this then resulted into RDWSSP Phase II for the period 1991 - 1995, which is currently in an interim period in preparation of phase III.

The basic objectives of RDWSSP Phase II and the interim phase are similar to those of phase I, namely to provide safe water for drinking, cooking, personal hygiene and where possible upkeep of small livestock; to reduce the burden for women and children through a reduction of the travel distances for drawing water; to establish an organizational framework for enhancing organizational capacity and competence of the local communities and to ensure decentralization of the programme to the districts.

The institutional framework of RDWSSP phase II was based on the principle of decentralization of the programme to the district level. The implementation was contracted out to LBDA with the Programma Advisory Team in a certifying and advisory role. At the end of phase II District Water and Sanitation Programmes (DWSPs) and District Water Supply and Sanitation Committees (DWDCs), the latter functioning effectively as committees of the District Development Committees (DDC), had been established in all the six districts.

An interim phase started in August 1995 with the aim to enhance the delegation of responsibilities to the District Authorities. The role of LBDA was phased out at the end of phase II. Within the district focus set up the managers of the district programmes and of the selected NGOs and private consultants started implementation on behalf of the Chairman of the DWSDC, the District Water Engineer (MoLRRWD). The intention of the interim phase is to have a continuation of activities at community level, and to put arrangements in place for the new structure of phase III. The advisory role in implementation of PAT has been phased out and emphasis is now placed on the monitoring and certifying role. The newly established unit PMEU (Programme Monitoring and Evaluation Unit) has decentralised activities and works closely with the MoLRRWD at the Provincial Level.

The consultant/PMEU during this interim phase is acting as the implementing agency and has contracted district managers and accountants for the 6 district management teams. The consultant/PMEU is responsible for the implementation of the works to the Government of the Netherlands (RNE/DGIS) and the Government of Kenya (MoLRRWD). Procedures followed are: quarterly reporting on financial and physical implementation; monthly budgets,

targets and expenditure certification are approved by the District Water Engineer. PMEU's Financial Controller is responsible for overall certification and prepares quarterly summaries for the RNE/DGIS and MoLRRWD.

The current implementing non-governmental organisations (NGOs) in the region, AMREF, CARE and KWAHO were to prepare proposals to continue with existing programmes to complement the implementation efforts of the DWSPs. All these agencies submitted proposals to the DWSDC. After the DWSDCs approval, PMEU signed contracts with the agencies for the period of the interim phase.

Basically, the programme aimed to achieve implementation with full cooperation between all implementing agencies under coordination of the District Water Engineer. This cooperation was needed in order to make optimum use of the available knowledge and resources, with NGOs, consultants etc. The cooperation included preparation of joint policies on spare part distribution, maintenance, technology choice, harmonization of the implementation approach etc. The MoLRRWD represented by the DWE through the DWSDC is the responsible agency for the water sector and its efficient utilization of funds.

During the interim period the DWSDCs continued to streamline procedures for community selection procedures, community mobilization and management activities, arrangements for operation and maintenance and tendering of civil works in anticipation of the new management structure.

Implementation of RDWSSP Phase III is to come under a new organizational structure in which policy and implementation roles are to be separated. The role of the government will be focused on their prime task of policy development, planning and coordination, which will be effected through the District Water Supply and Sanitation Development Committees. NGOs and professional consulting firms will be utilized in the process of community mobilisation and construction of community water supplies.

Of Particular interest are concerns with the environment and gender:

Environment:
The 1994 Mid-Term review of RDWSSP concluded that environmental aspects (including sustainability) were insufficiently dealt with and recommended some activities. One of those recommendations was an environmental study, which led to the report "The Longterm Protection of Groundwater Resources in Nyanza Province, Kenya", produced by the project in collaboration with other partners.

The environmental study mentions acute problems (e.i. bacteriological contamination of shallow wells as a result of, among other things, poor sanitation practices) and potential problems (e.i. lowering of groundwater tables and industrial pollution). The report concludes that potential problems have already become acute in some localities and have affected some of the wells and some of the wells that the programme has supported in earlier phases. In the future these problems may adversely affect the sustainability of groundwater exploitation (hence the sustainability of RDWSSP activities) in the whole Province. With an eye on the future, the programme needs to be able to provide communities with a more sustainable supply of safe, good quality water.

Gender

Women are traditionally responsible for domestic water supply and sanitation facilities and are therefore major beneficiaries A number of gender constraints hamper their full participation These include heavy workload, lack of control over land for water facilities and resources for making optimal use and sustaining the facilities, lack of decision making power at all levels. In 1994 the programme review mission concluded that there was a need for the development of a clear policy statement, guidelines and strategies on gender issues In 1995 a gender strategy paper and action plan was developed. These aimed at widening the scope of the programme to gender sensitisation at all levels, enhancing women's organisational capabilities and enhancing their control over facilities and benefits thereof. Enhancing the number of female staff in general and at management and supervisory level in particular was proposed In the interim phase one female District Programme Manager and one Accountant were contracted at management level leaving still a clearly felt need to devise ways to increase the number of female staff at supervisory and implementation level. Further development of gender tools (i.e. task distribution by gender, water use by source chart) and indicators, which were the outcome of various workshops held with implementation and supervisory staff, will have to take place -and their systematization and application- as the programme progresses. In the second half of the interim phase a gender capacity study was held in two districts. The conclusions and recommendations of this study will be used for the refinement of a gender strategy for the third phase.

FORMULATION

The mission will formulate RDWSSP Phase III, taking into account concepts, strategies, roles, implementation capacity and coverage as described.

Concepts and strategies

The Government's role will be that of planning, coordination, certification and monitoring, while implementation will be contracted out to NGOs and the private sector.

The Programme will be implemented at district level under the supervision of the District Water Supply and Sanitation Development Committees and coordinated at regional level by a Programme Monitoring and Evaluation Unit. Communities will submit their proposals through the structure of the district focus system for rural development to the DWSDCs.

The Programme will provide technical assistance at regional level and financial technical assistance at district level.

Roles

(i) The communities and the DWSDCs:

- Proposals for water points will be generated at the community level and channelled through the district focus institutions and approved by the DWSDCs against a number of agreed criteria. These criteria should take the needs of the poorest part of the population, especially women, into account and thus ensure that the programme will not exclude them from benefitting.

(ii) NGOs, consultants and contractors:

- Community mobilization will be carried out by NGOs or private consultants, construction work will be implemented by private contractors with participation of

the community coordinated by the NGOs and/or consultants.

(iii) The main consultant:

- The main consultant on behalf of the Royal Netherlands Embassy will be responsible for administering the Netherlands contribution, support to the DWSDCs together with other donors and possibly the GoK, monitoring and evaluation and certification/inspection of civil works.

Private Sector and Non-governmental Organization Capacity

The capacity for implementation by NGOs and the private sector in the region has to be re-assessed; for the new management structure to be successful a certain core of implementors has to be present from the start; a component for strengthening NGO and private capacities might have to be included in the RDWSSP. It is expected that the size of such a core will be too small to provide a sufficient number of suitable implementation agents required to effectively tender at district level. Preparing the OPMs and DPAs through a series of trainings for a future role as independent, district based entrepreneurs should be seriously considered at the start of the third phase.

In order to ensure NGOs of guaranteed funding for a number of years, tender arrangements with those NGOs who have a proven capacity for successful implementation may cover periods concurrent with the plan of operations.

Project Coverage

The time framework for the formulation is for a project phase III of a duration of five years maintaining the current level of funding, adjusted on the basis of past experience and/or the technology choice for the third phase (i.e. increase in machine drilling).

The RDWSSP will continue to cover at least the same area; concentration on certain administrative districts or divisions does not seem necessary under the new arrangements, but may be taken up by the mission in the case of those districts where long distances between sites may hamper efficiency in implementation.

General Objective

The mission is to formulate the Third Phase of the Rural Domestic Water Supply and Sanitation Programme based on the experience gained during the Interim Phase (DWSPs monitored by PMEU, NGOs and private sector)

Expected Output

The mission is to:

(Institutional)

- indicate specifically how to further strengthen the institutional frame work of the DWSDC and, in general, to work out a set up for the overall gender responsive

institutional framework of the programme

- indicate where, when and how the government (in particular the participating line ministries) is to be involved in the programme and which government level at which administrative level (district, provincial and national levels).

- indicate the role and responsibilities PMEU, MoLRRWD, the Line Ministries and RNE and how its role will be in the course of the third phase (planning, tendering, implementation, monitoring, certification)

- indicate who the major players will be, and what their responsibilities, in the integrated water resources management (IWRM) approach and which sectors will be involved in its coordination (taking activities like agriculture, rural and urban planning, industrialization etc. into account)

- formulate workable institutional arrangements for long term spare part

(Monitoring, control and certification)

- indicate how the IWRM system for Nyanza province as a whole can be strengthened/further set up and how the existing water resource studies can be given a follow up

- briefly evaluate the community based monitoring and provide ideas on how to add an environmental sanitation / health component to it to allow for close cooperation in future with the DHMTs. A decision should also be taken on whether to include already off-loaded sites of earlier phases as well
- indicate what roles the DWSDCs, the MoLRRWD (at provincial and district level), the DFIs, PMEU and the implementing agents will have to play regarding monitoring, control and certification

(Technology)

- look into the technologies to be used and set the targets for the next phase taking the technology choice as well as the areas where the programme is/will be zoned in into account

(Sanitation and health)

- look into the efficacy of the health/hygiene messages and on how to link them up with the DHMTs in such a way that maximum coverage (area and subject wise) is realised

- work out the link between sanitation and health and to suggest on how to operationalize such a link

- evaluate the sanitation design/approach and to ensure that the policies to be followed (e.g. siting of latrines) do not allow for water source pollution

- indicate whether the latrine cost sharing ratio is to change and what the expected sanitation output should be

(Gender)

- ensure that gender concerns are taken into account in the entire design and institutional frame work of the programme
- formulate the programme gender strategy for phase III
- indicate how to enhance gender capacity of all parties involved and women's effective participation in decision making at relevant levels (e.g. DWSDC)
- indicate how to ensure further development and sustained application of methodologies for women's full and equal participation and benefits, gender tools and indicators for the specific and related sectors (e.g. health) at community and higher levels
- indicate approaches to ensure women's sufficient access to and control over resources to enable them to make optimal use and (help) sustain the facilities created through the programme
- set targets for the third phase to ensure gender balance in project staffing and elaborate on possible conditions and consequences (e.g. hiring of female staff from the open market, support to female staff to enable them to combine the job with household responsibilities)
- look into the need and possibilities to use WSC money for income generating activities

(Environment)

- to look into activities that aim specifically at improving the sanitation situation in order to avoid (or reduce) the bacteriological contamination of wells and other sources of drinking water: improved extension, improved design of pit latrines and wells, better planning of positioning latrines and wells etc...
- to formulate an activity to support the monitoring of water resources in Nyanza Province. This may require collaboration with the Provincial and District offices of the Ministry of Land Reclamation, Regional and Water Development (MLRRWD). Monitoring should relate to quantitative and qualitative aspects of water resource exploitation.
- to give suggestions for several studies, in addition to monitoring, to address trends and uncertainties in future exploitation of water resources, that may affect sustainability of project activities: assess pollution levels, effects of changing land use patterns, effects of lowering of groundwater tables etc... Although precise Terms of References for these studies can be prepared in Phase III, the mission should suggest an approach and frame work (including budget allocation) for the implementation of such studies by the project. Implications for composition of project staff need to be considered: long-term vs short-term, local vs expatriate.
- Since the exploitation of water resources in influenced by trends and activities in other sectors (agriculture, industrial development, urbanisation, population growth), the mission should suggest ways of collaboration between RDWSSP and district authorities to link up with sectoral- and overall district planning. Such collaboration would open the way towards a more integrated approach for water resources management.
- The mission should familiarize itself with the planned activities of the Lake Victoria

Environmental Management Programme (LVEMO), relevant to the management of water resources in Nyanza Province. If deemed necessary, the mission should suggest ways of collaboration.

- to look into the following specific activities:
  - the incorporation of environmental impact assessment activities in community water supply and sanitation,
  - strengthening of the DWSDC (District Water and Sanitation Development Committee) with respect to environmental issues
  - raising public awareness about environmental and water management issues at various levels: district, communities, schools

(Role of the Advisor and financial procedures to be followed)

- advise on the financial and administrative set up of the programme and what roles the advisor, representatives of the MoLRRWD (DWE, PWE) and implementing agents will have to play.

(Mission Report)

- the mission is expected to produce a report in the form of a project document following the outline of Annex I. Use will be made of a logical framework, which is attached to annex I.

Time Schedule

Week 1: Familiarization with project documentation and the programmes actors at Nyanza level.

Week 2&3: Various discussions to be held and field visits. Start to be made with the report writing.

Week 4: Workshop to be held with parties concerned and first draft of report to be presented at Nyanza and Nairobi (RNE, MoLRRWD)

Upon their arrival, the mission members will be presented with various theme documents to be used as reference material.

The formulation Team

The formulation team will include expertise in:

- construction and management of rural community water supplies
- institutional aspects at central government, district and community level
- aspects of NGOs and private sector project implementation
- DGIS project procedures.
- Environment (hydrology/sanitation)
- Gender

ANNEX 2

DRAFT TERMS OF REFERENCE

FOR PRIVATIZATION TASK FORCE

ANNEX 2

Draft terms of reference for privatization task force

1. Composition

It is proposed that the privatization task force comprises a team of experts in the following disciplines:

- Institutional and organizational development;
- Community development and mobilization;
- Water and sanitation engineering;
- International laws of contract.

The individuals selected to fill the positions must have proven experience in matters related to development and/or management of water and sanitation projects in Kenya in addition to being conversant with the current trends towards structural adjustment and divestiture by the government from direct implementation of services. If it is useful, specific names may be proposed at this stage.

2. General tasks

The privatization task force will prepare modus operandi for privatizing the implementation of RDWSSP services in such a manner that the target communities will be ultimately responsible for all the activities related to the provision of those services. In doing this, the task force will address the privatization process involving the following stakeholders:

- the target communities;
- the private sector including the existing DWSPs.

The task force will also assess and document the extent to which NGOs can be incorporated in the implementation process.

3. Specific tasks

More specifically, the task force will address the following aspects of privatization:

3.a. The target communities

- assess attitudes of the communities towards ownership and commitment of the facilities in terms of taking responsibilities for operation and maintenance and long term sustainability;
- assess and critique the existing methodology applied and materials used in community sensitisation and mobilisation;
- assess and determine the level at which the communities can be involved meaningfully in the implementation process;

- establish the ability and willingness of the communities to contribute materially, financially and in physical labour towards implementation of the programme;
- prepare revised materials to be used in community mobilisation in conformity with the privatization thrust;
- develop revised and appropriate methodology for community sensitisation and mobilisation in light of privatization;
- assess proposals by the PMEU of the tripartite contracts as mentioned under 6.2.1, on its internal consistency and effectiveness for community ownership;
- carry out pilot testing in some selected but representative communities of the materials and methodology to ensure suitability effectiveness;
- produce an operations manual detailing the tested materials and methodology to serve as reference document;
- train the community animators in the effective use of the operations manual.

3.b. **The private sector including the DWSPs**

- assess the current level of performance of the DWSPs to determine the extent to which they are ready for executing the programme on private account. This assessment will include determination of the future property of physical assets of the programme and the possibility for their capitalization;
- assess the level of technical knowhow currently resident in the DWSPs and determine their experience in operating as independent entities;
- determine the requirements for transforming the suitable DWSPs into private firms prepare a modus operandi for achieving this;
- study the legal implication of the transfer of the DWSPs to private companies including their ownership;
- assess the proposal by the external auditor of the financial management and internal and external control of the privatized DWSPs;
- facilitate the transformation and ultimate registration of the DWSPs into private firms for privatized implementation of RDWSSP;
- assess the preparation of requisite training material and the training of the management of the DWSPs for the planned repositioning. This training will include inter alia, aspects of business management of commercial concerns, accounting for donor funding and preparation of capability statements and contract proposals. Other areas of training will be determined during the assessment;
- assess and establish the existence of other firms within the project area which may be considered for inclusion in the privatization process;
- refine the selection criteria for inclusion and bidding/tendering procedures;
- prepare manual on monitoring and reporting procedure to ensure that quality of work is not compromised and to capture the level of service provision.

3.c. The NGO involvement

The NGOs will not fall strictly under the privatization concept since they operate under entirely different principles which are not compatible to commercial consideration. But their potential contribution to implementation of RDWSSP has been recognised. Therefore, it is proposed that the task force looks into the details of how best and in what effective way can the NGOs be incorporated in the programme implementation. The following specific tasks are foreseen:

- carry out an inventory of the existing NGOs in the programme area to determine the extent of their involvement in similar areas of activities;
- determine the funding sources and if possible the magnitude of such funds which the NGOs have access to in any specific period;
- determine the compatibility of the approaches to community sensitisation and mobilisation with RDWSSP approach and highlight the differences;
- determine availability of other services offered by the NGOs which will support and improve the efficiency of the programme delivery. These may include services such as training, community mobilisation etc;
- prepare guideline for determining which NGO to incorporate, the mechanisms for collaboration and definition of jurisdiction.

3.d. Interrelations of the various aspects of privatization

Produce a final report in which the different aspects of privatization are clearly underlined. This report may form the basic document for a workshop in which the MLRRWD, the RNE and other interested parties will participate. Furthermore the concept of privatization and policy guidelines on privatization can be discussed in that workshop.

4. The time frame

The activities of the task force will cover a period of 1½ years. After composition of the task force, the institutional consultant who will chair the task force and the PMEU institutional/privatization officer will work out a detailed time frame.

ANNEX 3

BUDGET DETAILS

TARGETS FOR WATER POINTS CONSTRUCTION
Period 1997-2002

District	Teams	S/P	H/dug	H/dr	B'holes	GFS	Pans	Total
Siaya	DWSP*		10		10	15	25	60
	NGO		20		20			40
Kisumu	DWSP*	2	10		50	10	5	77
	NGO	3	15	15		10		43
Rachuonyo	DWSP*				20	10	5	35
	NGO		25			15	5	45
Homa Bay	DWSP*				20	15	5	40
	NGO		35				5	40
Suba	DWSP*				35	25	10	70
	NGO		15		20	15		50
Kisii	DWSP*	30			10	20		60
	NGO	30	10					40
Nyamira	DWSP*	30			10	20		60
	NGO	30	10					40
Migori	DWSP*				25	10	25	60
	NGO		20		20	20		60
Kuria	DWSP*	10			20	10	5	45
	NGO	25	10					35
Subtotals	DWSP's*	72	20	0	200	135	80	507
	NGO's	88	160	15	60	60	10	393
Totals		160	180	15	260	195	90	900

Note:
* includes old DWSP's, new privatised DWSP's and private contractors.

ANNEX 3.1 - UNIT COSTS PER TYPE OF WATER POINT CONSTRUCTION

	HAND DUG WELL (average depth 15m)	Cost (KShs)
1	Digging average 15m @ 1000/- per metre	15,000
2	Well lining 15 culverts @ 3,000	45,000
3	Dewatering, installation, geosurvey, water quality test	5,000
4	Superstructure construction (apron and slab)	20,000
5	Hand pump (Afridev)	40,000
6	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	30,000
	TOTAL	**155,000**
	SANITATION	
	Single Pit latrines, 15 nos. Sanplat @ 1,400	21,000
	Complete project Hand dug well with 15 single pit latrines	**176,000**

	HAND DRILLED / TUBE WELL (average depth 20m)	Cost (KShs)
1	Geosurvey	2,000
2	Drilling 20m @ 750/- per metre	15,000
3	PVC casing & gravel pack	15,000
4	Test pumping	2,000
5	Water quality test	2,000
6	Superstructure construction (apron and slab)	20,000
7	Hand pump (Afridev)	50,000
8	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	30,000
	TOTAL	**136,000**
	SANITATION	
	Single Pit latrines, 15 nos. Sanplat @ 1,400	21,000
	Complete project Hand drilled well with 15 single pit latrines	**157,000**

	MACHINE DRILLED WELL (average cost for depth 20-50m)	Cost (KShs)
1	Geosurvey	40,000
2	Drilling, casing screen, testing	300,000
3	Drilling supervision	30,000
3	Water quality test	2,000
4	Superstructure construction (apron and slab)	20,000
5	Hand pump (Afridev)	50,000
6	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	30,000
	TOTAL	**472,000**
	SANITATION	
	Single Pit latrines, 15 nos. Sanplat @ 1,400	21,000
	Complete project machine drilled well with 15 single pit latrines	**493,000**

	MACHINE DRILLED WELL (average cost for depth 50-100m)	Cost (KShs)
1	Geosurvey	40,000
2	Drilling, casing screen, testing	500,000
3	Drilling supervision	50,000
3	Water quality test	2,000
4	Superstructure construction (apron and slab)	20,000
5	Hand pump (Afridev) - deep well pump	80,000
6	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	30,000
	TOTAL	**722,000**
	SANITATION	
	Single Pit latrines, 15 nos. Sanplat @ 1,400	21,000
	Complete project machine drilled well with 15 **single** pit latrines	**743,000**

	SPRING PROTECTION	Cost (KShs)
1	Survey	2,000
2	Sand, 4 tons + transport to site	10,000
3	Ballast, 7 tons + transport	7,500
4	Cement 15 bags	7,500
5	Weld mesh, water proof cement, polythene, pipes	10,000
6	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	30,000
7	Labour	5,000
	TOTAL	**72,000**
	SANITATION	
	Single Pit latrines, 10 nos. Sanplat @ 1,400	14,000
	Complete S/P project with 10 **single** pit latrines	**86,000**

	GRAVITY FED SYSTEM (BASED ON PROTECTED SPRING)	Cost (KShs)
1	Survey	10,000
2	Spring protection (as above)	35,000
3	Storage tank (capacity 10m3)	50,000
4	Pipelines (uPVC) 3/4" to 1" , total 3000m	60,000
5	Communal water points (average 5 per scheme) @ 10,000	50,000
6	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	75,000
7	Labour	20,000
	TOTAL	**300,000**
	SANITATION	
	Single Pit latrines, 50 nos. Sanplat @ 1,400	70,000
	Complete GFS project with 50 **single** pit latrines	**370,000**
	Per communal water point with 10 single pit latrines each	**74,000**

	GRAVITY FED SYSTEM (BASED ON PUMPED BOREHOLE)	Cost (KShs)
1	Survey	10,000
2	Existing high yielding borehole	-
3	Solar pumping system (preliminary estimate)	500,000
4	Installation pump and solar system	200,000
5	Elevated storage tank (capacity 20m3)	500,000
6	Installation of storage tank by contractor	200,000
7	Pipelines (uPVC) 1" , total 3000m	60,000
8	Communal water points (average 5 per scheme) @ 20,000	100,000
9	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	75,000
10	Labour	50,000
	TOTAL	**1,695,000**
	SANITATION	
	Single Pit latrines, 75 nos. Sanplat @ 1,400	105,000
	Complete pumped borehole project with 75 **single** pit latrines	**1,800,000**
	Per communal water point with 15 single pit latrines each	**360,000**

	WATER PAN (or Small Earth Dam) CONSTRUCTION	Cost (KShs)
1	Survey	30,000
2	Tools for removal of soils and construction of embankment	25,000
3	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	25,000
4	Filterbox, drain pipe and CWP	30,000
5	Alternatively, construction of shallow well on downstream side	30,000
6	Community mobilisation (PRA, WSC, VRP, VEP, CT,etc)	30,000
	TOTAL	**170,000**
	SANITATION	
	Single Pit latrines, 15 nos. Sanplat @ 1,400	21,000
	Complete S/P project with 15 **single** pit latrines	**191,000**

SUMMARY OF COST FOR DIFFERENT TYPES OF WATER POINTS

	Type of construction	*Unit cost (KShs)*
1	Spring protection	86,000
2	Hand dug wells	176,000
3	Hand drilled (tube) wells	157,000
4	Machine drilled boreholes (20-50m depth)	493,000
5	Machine drilled boreholes (50-100m depth)	743,000
6	GFS based on protected spring (per CWP)	74,000
7	GFS based on solar pumped borehole (per CWP)	360,000
8	Pans or small earth dams	191,000

ANNEX 3.2 - COST OF CONSTRUCTION PER DISTRICT

SIAYA DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection		86,000	-
2	Hand dug wells	30	176,000	5,280
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)	20	493,000	9,860
5	Machine drilled boreholes (50-100m depth)	10	743,000	7,430
6	GFS based on protected spring (per CWP)		74,000	-
7	GFS based on solar pumped borehole (ditto)	15	360,000	5,400
8	Pans or small earth dams	25	191,000	4,775
	Total	100		32,745

KISUMU DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection	5	86,000	430
2	Hand dug wells	25	176,000	4,400
3	Hand drilled (tube) wells	15	157,000	2,355
4	Machine drilled boreholes (20-50m depth)	25	493,000	12,325
5	Machine drilled boreholes (50-100m depth)	25	743,000	18,575
6	GFS based on protected spring (per CWP)	5	74,000	370
7	GFS based on solar pumped borehole (ditto)	15	360,000	5,400
8	Pans or small earth dams	5	191,000	955
	Total	120		44,810

RACHUONYO DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection		86,000	-
2	Hand dug wells	25	176,000	4,400
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)	10	493,000	4,930
5	Machine drilled boreholes (50-100m depth)	10	743,000	7,430
6	GFS based on protected spring (per CWP)		74,000	-
7	GFS based on solar pumped borehole (ditto)	25	360,000	9,000
8	Pans or small earth dams	10	191,000	1,910
	Total	80		27,670

HOMA BAY DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection		86,000	-
2	Hand dug wells	35	176,000	6,160
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)	10	493,000	4,930
5	Machine drilled boreholes (50-100m depth)	10	743,000	7,430
6	GFS based on protected spring (per CWP)		74,000	-
7	GFS based on solar pumped borehole (ditto)	15	360,000	5,400
8	Pans or small earth dams	10	191,000	1,910
	Total	80		25,830

SUBA DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection		86,000	-
2	Hand dug wells	15	176,000	2,640
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)	30	493,000	14,790
5	Machine drilled boreholes (50-100m depth)	25	743,000	18,575
6	GFS based on protected spring (per CWP)	15	74,000	1,110
7	GFS based on solar pumped borehole (ditto)	25	360,000	9,000
8	Pans or small earth dams	10	191,000	1,910
	Total	120		48,025

KISII DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection	60	86,000	5,160
2	Hand dug wells	10	176,000	1,760
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)		493,000	-
5	Machine drilled boreholes (50-100m depth)	10	743,000	7,430
6	GFS based on protected spring (per CWP)	20	74,000	1,480
7	GFS based on solar pumped borehole (ditto)		360,000	-
8	Pans or small earth dams		191,000	-
	Total	100		15,830

NYAMIRA DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection	60	86,000	5,160
2	Hand dug wells	10	176,000	1,760
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)		493,000	-
5	Machine drilled boreholes (50-100m depth)	10	743,000	7,430
6	GFS based on protected spring (per CWP)	20	74,000	1,480
7	GFS based on solar pumped borehole (ditto)		360,000	-
8	Pans or small earth dams		191,000	-
	Total	100		15,830

MIGORI DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection		86,000	-
2	Hand dug wells	20	176,000	3,520
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)	25	493,000	12,325
5	Machine drilled boreholes (50-100m depth)	20	743,000	14,860
6	GFS based on protected spring (per CWP)	5	74,000	370
7	GFS based on solar pumped borehole (ditto)	25	360,000	9,000
8	Pans or small earth dams	25	191,000	4,775
	Total	120		44,850

KURIA DISTRICT

	Type of construction	*No. of WP*	*Unit cost*	*Total cost ('000 KShs)*
1	Spring protection	35	86,000	3,010
2	Hand dug wells	10	176,000	1,760
3	Hand drilled (tube) wells		157,000	-
4	Machine drilled boreholes (20-50m depth)	10	493,000	4,930
5	Machine drilled boreholes (50-100m depth)	10	743,000	7,430
6	GFS based on protected spring (per CWP)	5	74,000	370
7	GFS based on solar pumped borehole (ditto)	5	360,000	1,800
8	Pans or small earth dams	5	191,000	955
	Total	80		20,255

	TOTAL COSTS PER DISTRICT	Constr.cost	Overhead	Total
		('000 KShs)		
1	Siaya	32,745	40,000	72,745
2	Kisumu	44,810	50,000	94,810
3	Rachuonyo	27,670	20,000	47,670
4	Homa Bay	25,830	35,000	60,830
5	Suba	48,025	20,000	68,025
6	Kisii	15,830	35,000	50,830
7	Nyamira	15,830	25,000	40,830
8	Migori	44,850	35,000	79,850
9	Kuria	20,255	25,000	45,255
	Totals	**275,845**	**285,000**	**560,845**

Equivalent in Dutch Fl.x 1,000 (rate Dfl. 1 = KShs 32/-) Dfl. **17,526**

BUDGET ESTIMATES FOR PMEU (TA Budget) PHASE III			
Item	*Manmonths*	*Rate (Dfl)*	*Budget 1997-2002 (Dfl)*
OVERSEAS PERSONNEL			
Time Netherlands			
Home support	2.0	26,000	52,000
Project Director	2.5	34,000	85,000
Subtotal	4.5		137,000
Long-term Kenya			
Team Leader	52	20,000	1,040,000
Methodology Advisor	21	20,000	420,000
District Advisor I	21	20,000	420,000
District Advisor II	21	20,000	420,000
Subtotal	115		2,300,000
Short-term Kenya			
Project Director	3	34,000	102,000
GIS expert	2	20,000	40,000
Subtotal	5		142,000
Subtotal Overseas staff			2,579,000
LOCAL CONSULTANTS			
Health Education Expert	8	6,000	48,000
Water Resources Consultant	7	15,000	105,000
Environmental Sanitation Expert	5	6,000	30,000
Subtotal	20		183,000
LOCAL PERMANENT STAFF			
Institutional & Privatization Officer	60	6,000	360,000
Technical Advisor	48	5,000	240,000
Gender Training Officer	60	5,000	300,000
Monitoring & Evaluation Officer	60	5,000	300,000
Financial Controller	60	5,000	300,000
Subtotal	288		1,500,000
OFFICE SUPPORT STAFF			
Senior Secretary	60	2,500	150,000
Accountant	60	2,200	132,000
Secretaries (2)	120	1,300	156,000
Other support staff (10)	600	600	360,000
Subtotal	840		798,000
VARIOUS COSTS			
Travel costs S-T			50,000
Travel costs L-T			120,000
DSA			80,000
Houserent	132	1,500	198,000
Allowances			250,000
Travel costs/housing/field all.			180,000
Allowances local staff			200,000
School fees			120,000
Subtotal			1,198,000

ESTIMATED MANPOWER INPUTS FOR PMEU (TA Budget)
PHASE III

Item	*Manmonths*
OVERSEAS PERSONNEL	
Time Netherlands	
Home support	2.0
Project Director	2.5
Subtotal	4.5
Long-term Kenya	
Team Leader	60
Methodology Advisor	24
District Advisor I	24
District Advisor II	24
Subtotal	132
Short-term Kenya	
Project Director	3
GIS expert	2
Subtotal	5
Subtotal Overseas staff	142
LOCAL CONSULTANTS	
Health Education Expert	8
Water Resources Consultant	7
Environmental Sanitation Expert	5
Subtotal	20
LOCAL PERMANENT STAFF	
Deputy Team Leader	60
Technical Advisor	48
Gender Training Officer	60
Monitoring & Evaluation Officer	60
Financial Controller	60
Subtotal	288
OFFICE SUPPORT STAFF	
Senior Secretary	60
Accountant	60
Secretaries (2)	120
Other support staff (10)	600
Subtotal	840

BUDGET ESTIMATES FOR PMEU (TA Budget) PHASE III			
Item	*Manmonths*	*Rate (Dfl)*	*Budget 1997-2002 (Dfl)*
OVERSEAS PERSONNEL			
Time Netherlands			
Home support	2.0	26,000	52.000
Project Director	2.5	34,000	85.000
Subtotal	4.5		137.000
Long-term Kenya			
Team Leader	52	20,000	1,040.000
Methodology Advisor	21	20,000	420.000
District Advisor I	21	20,000	420.000
District Advisor II	21	20,000	420.000
Subtotal	115		2,300.000
Short-term Kenya			
Project Director	3	34,000	102.000
GIS expert	2	20,000	40.000
Subtotal	5		142.000
Subtotal Overseas staff			2,579.000
LOCAL CONSULTANTS			
Health Education Expert	8	6,000	48.000
Water Resources Consultant	7	15,000	105.000
Environmental Sanitation Expert	5	6,000	30.000
Subtotal	20		183.000
LOCAL PERMANENT STAFF			
Institutional & Privatization Officer	60	6,000	360,000
Technical Advisor	48	5,000	240,000
Gender Training Officer	60	5,000	300.000
Monitoring & Evaluation Officer	60	5,000	300,000
Financial Controller	60	5,000	300,000
Subtotal	288		1,500,000
OFFICE SUPPORT STAFF			
Senior Secretary	60	2,500	150,000
Accountant	60	2,200	132,000
Secretaries (2)	120	1,300	156,000
Other support staff (10)	600	600	360,000
Subtotal	840		798,000
VARIOUS COSTS			
Travel costs S-T			50,000
Travel costs L-T			120,000
DSA			80.000
Houserent	132	1,500	198,000
Allowances			250,000
Travel costs/housing/field all.			180,000
Allowances local staff			200,000
School fees			120,000
Subtotal			1,198,000

REPORTING			70,000
COMMUNICATION			
Telephone/fax			300,000
Miscellaneous			10,000
Subtotal			310,000
INVESTMENTS			
Computers/printers/software			25,000
Vehicles (5 vehicles)			250,000
Other office equipment			50,000
Subtotal			325,000
OPERATIONAL COSTS			
Office rent	60	pm	
Maintenance office			30,000
Running costs transport	60	10,000	600,000
Office supplies	60	3,000	180,000
Banking costs	60	500	30,000
Miscellaneous			50,000
Subtotal			890,000
TRAINING COURSES			
Studies/courses			30,000
Workshops			150,000
Subtotal			180,000
GRAND TOTAL			**8,033,000**

PRIVATIZATION TASK FORCE

	days	*rate*	*total (Dfl)*
Consultant professional fee	50	700	35,000
Legal consultant fee	25	400	10,000
DSA consultants	65	100	6,500
Travel costs			2,000
Workshop 8 partic. x 25 days	200	40	8,000
TOTAL			61,500

ANNEX 4

LOGICAL FRAMEWORK

THE LOGICAL FRAME FOR THE RDWSSP PHASE.III

Development Objectives	Impact Indicators	Means of Verification	Assumptions and Risks
• To provide safe water, easily accessible in quantities adequate for drinking, food preparation, personal hygiene at a cost in keeping with the economy at community level and easily operated, maintained and sustained by them;	• Reduction of cases of morbidity and mortality resulting from poor water quality The communities own, operate and maintain the water facilities	1. Annual Reports 2. Medical records 3. National economic reports 4. Central Bureau of Statistics records 5. Sustainable water points 6. Vital demographic data 7. Community records	1. Role and responsibility of the MoLRRWD is reviewed to reflect the current realities and policies 2. Conducive political atmosphere continues to prevail in Kenya 3. No third party interference in the programme implementation
• To promote health seeking behaviour with emphasis on safe disposal of human wastes through low cost, easily maintained sanitation facilities;	• The state of hygiene in the project area has improved in terms of safe disposal of faecal matter. Reduction of water related diseases	1. District health and environment reports 2. Facility based health data 3. Survey & studies 4. Vital demographic statistics 5. Community records	1. The new hygienic technologies adapted 2. Positive social change with respect to sanitation usage
• To ensure the continued participation and responsibility for the project by involving the communities in identification, planning, construction, M&E and O&M;	• The communities are fully responsible for O&M of the facilities and do identify and own them. Communities have created sustainable functional institution for watsan activities	1. Water and sanitation committee records and bank balances 2. Quarterly progress reports 3. Annual reports	1. The communities are ready to cooperate in The O&M 2. The conditions of cooperation are acceptable 3. Communities create enabling environment and demands services
• To ensure that gender concerns and expectations are taken into account during implementation process;	• Gender concerns, equity and balance addressed at all levels of the programme. Improved participation of both men and women in project planning, implementation and management	1. Programme/project document 2. Gender composition of the project team and SC	1. Community receptive to gender issues
• To enhance the institutional capacity of all stakeholders in the water and sanitation sector;	• Both the private sector and the NGOs are involved in sufficient numbers in programme implementation	1. DWSDC annual reports on implementation 2. DWSDC minutes 3. Stakeholder zoning	1. Policy and administrative procedures remain the same over the implementation phase
• To reduce the burden of carrying water over long distances which will save time and energy and thus release resources for alternative production;	• Distances to water points to at most two kilometres from homestead. Enhance socio-economic well being of the communities	1. Field visits and reports 2. Studies and surveys	1. Facilities acceptable and cooperation of communities obtained 2. Communities able to engage in gainful activities
• To create awareness for catchment protection to ensure sustainable use and conservation of water resources	• Communities actively involved in environment conservation at water points and homestead levels	As above	

Operational Objectives	Effect Indicators	Means of Verification	Assumptions and Risks
• Construct and complete 1,350 water points for provision of safe water to about 25 to 30 homesteads each;	• 1,350 water points operational and 25 to 30 homesteads per water point committed to the O&M of the facilities	• Formulation document and plans of operation. Progress reports and field monitoring reports	• No major change in government policy towards community water supply • Political environment remains conducive • Facilities are acceptable to the communities
• Support communities in the construction or upgrading of 33,750 hygienic latrines at the coverage of 10 persons per latrine;	• 33,750 hygienic latrines either upgraded or newly constructed and at least 10 persons are recorded to use them;	• Field visits and reports, minutes of DWSDC meetings. Progress reports and field monitoring reports	
• Introduce health education promotion aiming at attitudinal and behavioural change of about 65% users (337,500 and 405,000 people);	• Between 337,500 and 405,000 homesteads are covered under the hygiene education and 65% of the residents have attitude change;	• Reports of PRAs and other mobilisation methodologies applied. KAP survey report	
• Strengthen capacity of partner implementing agencies in the public, private and NGO sectors with the aim to achieve long term sustainability;	• 28,800 leaders of CBOs trained and 9,000 new community front line workers (animators) trained. All districts programme/DWSDC staff trained;	• Reports on mobilisation and minutes of DWSDC meetings. Skills assessment and comparative studies • Field visits and records of private companies used	• No change in the government policies
• Prepare stakeholders for effective and systematic privatisation of the programme implementation.	• 45 programme/DWE management staff trained in entrepreneurial skills. The implementation of programme is approximately 30% privatised.	• Training reports. Staff appraisals and DWSDC reports Progress reports. Survey and studies Evaluations reports	
	• Privatisation modalities piloted and compared	• report on privatisation process	• Availability of competent companies and funds to hire them for implementation; • Programme managers are sensitive to M&E reports and utilize these for corrective decision making
• Improve management of programme/projects and supporting activities to ensure optimum use of resources and application of lessons learnt and to improve on methodology;	• Number of monitoring visits • Constraints/problems identified and acted upon • Planned activities against targets	• Quarterly progress reports • Bi-annual evaluation reports • Annual report • Monthly financial returns and DWSDC reports	

Planned Outputs	Output Indicators	Means of Verification	Assumptions and Risks
a. Water Points Types — Numbers S/P — 266 H/dug — 382 H/dril — 25 B/hole — 477 GFS(19) — 95 Pans — 105 Total of — 1,350	a(i) Output levels achieved as planned on annual basis a(ii) Water quality acceptable to users a(iii) Reduced rate of water borne diseases in the project area	a(i) Completion certificates signed and filed a(ii) Water quality monitoring records maintained at DWE and PWE Offices a(iii) Local medical records	a(i) Adapted technology is maintained a(ii) Monitoring procedures, systems and facilities put in place a(iii) Accuracy of the records kept
b. Latrines Sanplat/ [illegible]	b(i) Latrines completed as planned b(ii) The communities are actually using the facilities and demand for technology increased b(iii) Reduction of cases of illnesses resulting from poor hygiene practices	b(i) Physical checks b(ii) Flies population around the facility, smell and path leading to the facility a(iii) Medical records	b(i) People overcome old customs regarding faecal matter disposal and adapt to the use of latrines
c. Community mobilisation efforts Types — Numbers watsan com — 1,350 VRP trai. — 14,400 CT trai. — 9,000 CBO mon. trai. — 14,400 Artisan trai. — 81	c(i) Communities and their functionaries and animators are sufficiently mobilised		

Planned Activities	Progress Indicators	Means of Verification	Assumptions and Risks
1. Programme Development			
1.1 Annual Plans of Action	1.1 APA Developed and used to implement	1.1 Reports on implementation	1.1 Implementing agencies have capacity to achieve targets
1.2 Quarterly workplans			
1.3 Commu. Dev. packages	1.2 Quarterly w/plans developed	1.2 Quarterly Reports on implementation	1.2 Communities effectively performing their roles
1.4 Pilot projects	1.3 Community development manual	1.3 The Manual and PRA/PPME Reports	1.3 No major delays in awarding of contracts and prompt and continuous adequate financing
1.5 New & ongoing projects	1.4 Documented lessons learnt	1.4 Reports on progress	
	1.5 1,350 water points	1.5 Progress report, data base, field inspection (FI) and completion certificates (CC)	
2. Community Empowerment			
2.1 Watsan comm. training	2.1 1,350 water points	2.1 Progress reports, data base, field inspections and completion certificates	2.1 30-50 pumps cluster per artisans to ensure self reliance
2.2 VRP training	2.2 14,400 trainees	2.2 Proceedings of training,	2.2 Trained personnel are retained in the communities
2.3 CT training	2.3 9,000 trainees	2.3 Inspection of certificates	
2.4 Comm. based moni. training	2.4 14,400 target trained	2.4 and progress reports(KAP Survey)	2.3 Community response and adherence to the programme agreements
2.5 Artisan training	2.5 81 artisans trained	2.5 Field training and inspection of products	
3. Project Implementation			2.3 Programme policies and procedures remain unchanged
3.1 Leaders training	3.1 95 leaders trained	3.1 Proceedings of training and interviews	
3.2 Site pre-selection	3.2 2,100 sites pre-selected	3.2 Progress reports and FIs	
3.3 Technical survey	3.3 2,000 surveys done	3.3 Reports and FIs	
3.4 Community mobilisation	3.4 1,350 communities	3.4	
3.5 Health promotion training	3.5 10 promotions done	3.5 Reports, FIs, CCs and data	
3.6 Water point development	3.6 1,450 to 1,750 points	3.6 base	
3.7 Sanitation development	3.7 33,750 sanplats opened	3.7	
3.8 Water quality monitoring	3.8 810 point monitored	3.8 Reports, data base	
4. Institutional capacity building			
4.1 DWSDC Level		4.1	
a. Training project development.	4.1.a 2 x training reports		
b. Bi-annual review	4.1.b 2 x DWSDC reports	Reports, interviews and staff performance and appraisal records	4.1 Suitable and adequate personnel which are trainable are available
c. M&E training	4.1.c 2 x training reports		
4.2 DWE Level	4.2.a 90 x staff trained	4.2	4.2 Retention of trained personnel in their stations
a. Staff training for supervision, monitoring & control of implementation agencies			
4.3 PWE Level		4.3	
a. Training for M&E and data management	4.3.a 5 x staff trained		

5.	Procurement of goods & services	**Progress Indicators**		**Means of Verification**		**Assumptions and Risks**	
5.1	Tender procurement development	5.1	Tender procedure guideline document developed	5.1	Monitoring and evaluation reports and the tender documents	5.	The extent to which the tender board will be allowed operational autonomy without third party interference
5.2	Pre-qualification of contractors, consultants and suppliers	5.2	Shortlist of contractors	5.2	The quality of work produced by the contractors, consultants and suppliers		
5.3	Contract implementation, management and supervision	5.3	List of contractors reports on monitoring	5.3	Evaluation and performance appraisal reports		
6.	Human resources development						
6.1	DWSP Level						
	a. Staff recruitment	6.1.a	Qualified staff employed				
	b. Staff training	6.1.b	110 staff trained	6.1	Certificates and CVs	6.	Proper selection criteria adopted for training excluding third party interference
	c. Refresher training	6.1.c	110 staff trained				
	d. Professional training	6.1.d	90 staff trained				
	e. Enterpreneural training	6.1.e	60 staff trained 15 overseas 45 local follow ups		Reports, staff performance review and appraisal		
7.	Monitoring and Evaluation						
7.1	Monthly financial returns	7.1	540 PAM prepared	7.1	Audit reports	7.	Capacity of the programme/GoK staff to effectively carry out the M&E exercise is adequate
7.2	Quarterly progress reports	7.2	4 x 5 reports	7.2			
7.3	Annual operations review	7.3	5 annual reviews	7.3			
7.4	Ongoing evaluation	7.4	Evaluation reports				
7.5	Special studies and research	7.5	Number of studies/surveys completed	7.5	Survey and study reports		
7.6	Mid term review mission	7.6	Mid term review in 1999	7.6	Review and Evaluation reports		
7.7	Ex-post evaluation	7.7	End term review in 2001	7.7			

ANNEX 5

JOB DESCRIPTIONS FOR ADVISERS

ANNEX 5

A. Job description for the Methodology Adviser

1. Justification for the position

The programme needs to establish an advisory position of a *Methodology Adviser* for the duration of two years in order to reflect fundamentally and to promote the conceptual advancement of the water supply and sanitation methodology and to contribute to the methodological renewal and improvement of the programme concept that is required for its further development and sustainability. One of the reasons to propose this post is that the formulation mission of RDWSSP-III has observed that the mobilization of the community on the basis of the existing PRA methodology has not led to the broad community participation and community *ownership* of the water supply and sanitation projects at community level, that could have been expected.

2. Responsible to:

The Adviser will be responsible to the Team Leader of the PMEU, who oversees implementation. In this way, the Adviser will channel all the ideas and models generated and developed through the Team Leader who, by virtue of the contractual arrangement, is accountable and responsible for supervising implementation processes.

3. General tasks

The Methodology Adviser will be in charge of concept, test and introduction of more suitable mobilization methodologies. For this purpose she/he will develop and prepare conceptualised models and modus operandi for possible improvement and diversification of:

a. general programme concept and renewal of implementation approaches;
b. appropriate community sensitization and mobilization methodology and techniques in the light of general socio-economic and socio-cultural development trends and changing applied technology.

4. Specific tasks

4.1 General programme concept

a. Analyze the current programme implementation concept to determine its strengths and weaknesses.
b. Document the weaknesses of the programme concept and prepare suggestions for improvement - trouble shooting function- which will form the basis for periodic internal performance review and evaluation.
c. Incorporate experiences and lessons learnt through the internal corrective mechanism (4.1.b. above) in future implementation plans.

4.2 Appropriate community approaches

a. Investigate the reasons for weak community mobilization and application of PRA and propose new methodologies in this field.
b. Review the techniques and methodology and advise on repositioning in order to ensure meaningful interaction and commitment to community participation and sustainability.
c. Study community approaches in the watsan sector inside and outside Kenya and search for modalities to adapt successful approaches for possible application in the RDWSSP-programme.
d. Constantly assess the impact and relevance of community sensitization and applied mobilisation techniques and methodology, from the perspective of the development of more appropriate approaches in this field.
e. Prepare and produce manuals and guidelines for effective community sensitization and mobilization.
f. Test new approaches in a restricted number of carefully selected communities; monitor these test-communities closely and work out an adapted general communication and mobilization methodology for the programme on the basis of the outcome of these tests.
g. Contribute to the improvement and adaptation of the training programmes for the staff teams of DWSPs, NGOs and other programme implementors.

5. **Qualification and experience**

The suitable candidate for this position will hold a university degree in Social Communication or Social Anthropology. A broad experience in mobilization methodology and methodologies for the transfer and communication of experience in an interactive way in the watsan sector of at least 10 years, inside or outside Kenya, as well as a thorough knowledge of the international developments in the sector, are basic conditions for an effective realization of this position. The position can be filled by either a Kenyan or international adviser. Given the crucial role of women with respect to community mobilization related to water supply and sanitation, the Methodology Adviser will by preference be a woman.

B. Job description for the Technical Adviser

1. **Justification for the position**

Two years after the start of phase III of the programme, the positions of District Advisers will be discontinued. A new position will be created e.a. a *Technical Adviser* for the RDWSSP-programme, who will be responsible for the upholding of the technical quality of the hardware of the programme and for technical renewal. The position will be created for a period of 37 months, beginning at least one month before the planned departure of the Districts Advisers on 1 September 1999.

2. **Responsible to:**

The Technical Adviser will be responsible to the Team Leader of the PMEU, who oversees implementation. In this way, the Adviser will channel all the ideas and models generated and developed through the Team Leader who, by virtue of the contractual arrangement, is accountable and responsible for supervising implementation processes.

3. **General tasks**

a. Safeguard the technical quality of the realization of the hardware installations in close cooperation with the districts programme managers of DWSPs, NGOs or other private programme implementors;
b. In charge of a permanent orientation with respect to the new developments in technology, applied in watsan service implementation, especially in view of rapidly changing applied technology in this field.

4. Specific tasks

4.1 Quality control

a. Advise the programme managers, NGOs or other implementors - on their request or on his own initiative - on issues related to the quality of the realization of the hardware of the programme;
b. Monitor the technical quality and technical sustainability of the hardware realizations in the various districts and communities and report on this monitoring to the Team leader;
c. Propose measures for improvement in case of observed quality deficiency in the hardware realizations.

4.2 Diversification of technology

a. Prepare different modules of appropriate and low cost technology based on the most up-to-date state of the art in watsan implementation.
b. Test the modules prepared on pilot basis, but outside the programme area to avoid mix up in approaches and technology choice, and document the outcome of the tests.
c. Produce a carefully documented report on the proposed new technology, its cost aspects and the results of the pilot tests. The report will form the basis for a workshop attended by technical experts who will critique, modify and adapt the proposals as they are found suitable for implementation within the programme area.
d. Supervise the initial stages of implementation of the adapted technology with the aim for further modification and perfection and improvement.

5. Qualification and experience

A suitable candidate for this position will be a qualified water engineer or a hydrologist with proven experience in the field of water engineering. A broad experience in the field of water engineering, technology development and low cost solutions related to water engineering in the sector of rural domestic water

supply of at least 10 years are basic conditions for an effective realization of this position. The position will be filled by a Kenyan adviser.

C. General indication of the tasks of the Health Education Expert

A Health Education expert will be contracted for a period of 8 months spread over the programme period. During the start of the five-year period of phase III, essential refocusing will be effectuated. The main tasks of this consultant will be the following:

- Take care of linking the water supply and sanitation components of RDWSSP to the general concepts of basic health care and health education and environmental sanitation;
- Develop modules for the integration of these health education components into the community mobilization;
- Test these modules in some carefully selected communities;
- Integrate these modules into the general community mobilization methodology in close cooperation with the Methodology Adviser.

D. General indication of the tasks of the Water Resources Consultant

The Water Resources Consultant will be in charge to develop and realize the system of community water resources management as described in section 5.3. (p.51-53).

ANNEX 6

LIST OF REFERENCES

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7. Implementation of Water Facilities - Background Document; by Programme Advisory Team; June 1993.

8. Recommendation on Piped Scheme Management based on a visit to Small Scale Piped Water Supply Schemes; Programme Advisory Team; June 1993

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10. Review Mission report RDWSSP II, May 24 - June 17 1994.

11. Evaluation CARE Health Education and Sanitation Project. September 1994.

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19. Report on the capacity of existing Water and Sanitation agencies in Nyanza Province.

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25. The Long Term Protection of Groundwater resources in Nyanza Province, Kenya, BKH, April 1996.

26. Institutional Gender Capacity Study, (Draft). - Interim Phase - RDWSSP, May 1996

27. Proposal for extension of the Water Resources Assessment and Planning (WRAP) Project into Phase V, IHE, Delft June 1996

28. Ndhiwa Health Education, Water and Sanitation Project- Ndhewas - CARE International in Kenya, October 1996.

29. Water Resources Assessment and Planning Project (WRAP) Phase V: Annual Plan, 1997 WRAP, 1996

ANNEX 7

ACRONYMS

ANNEX 7

ACRONYMS - RDWSSP

ADPM	Assistant District Programme Manager
AMREF	Africa Medical Research and Education Foundation
APM	Assistant Project Manager
BKH	BKH Consulting Engineers
CARE	Cooperative for Assistance and Relief Everywhere
CBOs	Community Based Organisations
CDO	Communicty Development Officer
CE	Community Extensionist
CHN	Community Health Nurse
CT	Community Technician
COO	Community Operations Officer
CWP	Community Water Point
DAO	District Agricultural Officer
DDO	District Development Officer
DEO	District Environment Officer
DEPO	District Environment Protection
DSDO	District Social Development Officer
DPHO	District Public Health Officer
DPM	District Programme Manager
DWD	Director of Water Development
DWE	District Water Engineer
DWSDC	District Water and Sanitation Development Committee
DWSP	District Water and Sanitation Programme
FS	Field Supervisor
GAD	Gender and Development
GFS	Gravity Fed System
GIS	Geographic Information System
GWI	Ground Water Inspector
ICA	Institute of Cultural Affairs
IDE	Institutional Development Expert
IFAD	International Fund for Agricultural Development
IRDP	Integrated Rural Development Programme
KWAHO	Kenya Water for Health Organisation
LVEMP	Lake Victoria Environmental Management Programme
MD	Managing Director
M&E	Monitoring and Evaluation
MoCSS	Ministry of Culture and Social Services
MoH	Ministry of Health
MoLRRWD	Ministry of Land Reclamation, Regional and Water Development

NES	National Environment Secretariat
NGO	Non-Governmental Organisation
O&M	Operation and Maintenance
OIAs	Other Implementing Agencies
PAM	Project Accounts Manager
PAT	Programme Advisory Team
PHE	Public Health Extensionist
PHT	Public Health Technician
PHO	Public Health Officer
PM	Project Manager
PMC	Programme Monitoring Committee
PMEU	Programme Monitoring and Evaluation Unit
PoO	Plan of Operations
PRA	Participatory Rural Appraisal
PS	Permanent Secretary
PSC	Programme Steering Committee
PPHO	Provincial Public Health Officer
PPO	Provincial Planning Officer
PWE	Provincial Water Engineer
PCO	Pollution Control Officers
RDWSSP	Rural Domestic Water Supply and Sanitation Programme
RNE	Royal Netherlands Embassy
SDA	Social Development Assistant
TA	Technical Assistant
TOO	Technical Operations Officer
TOT	Training of Teachers
VEP	Village Environment Promoter
VHP	Village Health Promoters
VRP	Village Resource Person
watsan	Water and Sanitatiom
WID	Women in Development
WIF	Worldview International Foundation
WP	Water Points
WOAs	Water Operation Attendants
WSC	Water and Sanitation Committee