

コースト州からの質問票への回答

ANSWERS TO THE QUESTIONS.

1. Confirmation of the contents of the requested projects: -

1-1 Background of the project.

(1) The reasons which made this project be requested in high priority from my country even though following projects have been implemented or planned in the requested areas are:-

(a) Rural water supply and sanitation Project (RWSSP) in Rufiji District (world Bank, on-going) requires new studies to establish potential water source which in most cases, preference is given to ground water sources. If such information gets available to speed of implementing to project will increase.

(b) RWSSP in additional 38 districts which will cover all of the requested districts (world Bank, under planning) have some of the water sources indicated in the previous studies no longer operating and /or not sufficient. This is due to weather changes (prolonged draught) in most areas which led to the sources drying up and in ollas areas population increase and therefore the sources not sufficient. There is a need to update the sources and even do the survey for new ones.

(c) Chalinze Water Project in Bagamoyo District (China, Completed) – Actually, this project is not fully completed. The constructed part mainly dealt with construction of a treatment plant and main pipe lines only. The present coverage of service level is about 30%. Eighteen (18) villages out of 62 are now getting water.

Tremendous work on expansion of this project is still needed. We hope this study project might come up with new ideas on how to provide water to the remaining villages.

(d) Installation and Management of Community Bovelole water supply systems in peri-urban area of Dar es Salaam. (Belgium under planning).

This study project is really very important and basic. The implementation of this project will provide the basis for this Peri-urban area of Dar es Salaam programme to take off successfully.

Drilling areas will specifically be earmarked.

(2) The effectiveness of the master plan formulated by CIDA in 1979 in some cases is there.

The reason is that, there has been a lot of weather vagaries in the region and the whole country at large. Precipitation received in the recent years is very little which resulted into water sources getting affected much, both quantitatively and qualitatively. Therefore the Chalinze water supply has been implemented basing on the water master plan because there was no other reliable water sources established during the detailed study before implementation in 1998 and 1999, apart from the CIDA, 1979 proposal of a big river which has relatively constantly much water throughout the year –The Wami river.

1-2 Outline of the Project:-

(i) Project area:

Rufiji district and Per-Urban area have been included in the requested project area because of the reasons mentioned under items a, b and d above. Also, there is a low coverage of clean and safe water services in those areas. Outbreak of epidemics such as cholera normally does hit areas without potable water supply services. This proposed project on its implementation will serve many people from such an attack.

Mafia Island was included in the study inspite of low population density due to the low water supply and sanitation services coverage.

The density of population is expected to rise tremendously on completion of the proposed ship dock in the island.

2. It is true that the 0/m of water supply systems of wells fitted with hand pumps are suitable and

And affordable in rural areas. Also, it is true that the Chalinze water project is a piped water scheme with water treatment plant and at Chalinze we have village people.

Now, the question as to whether these village people will be able to pay tariff enough to cover the 0/m cost is already taken care of .How! This burden on the 0/m cost might be a little bit less if the project expansion to cover 44 other village is done now.

Once this is done, almost all the villages can get water with no extra pumping and therefore the costs being reduced. This idea was established already. However, water being a commodity with no substitute, and the fact that the geological set up of the Chalinze area is very poor as regard to groundwater, there was no choice of technology to be used except the present.

(3) Target year:

Preferred to be this year –2004.

1-3 The on going exercise of restructuring of the MoWLD is mainly on change of roles and responsibilities of the Ministry. The current set up will continue to exist.

However, much emphasis is directed on strengthening the district councils to enable them manage water affairs their areas. The directorate of the rural water supply will continue to be responsible for the rural water supply in line with the new water policy of 2002.

After the restructuring and decentralization the Provincial level regarding rural water supply will be streamlined and it will be the representative of the MoWLD on matters pertaining to water sector in the respective region.

Item	Unit	Large Cities		Small Cities		Rural
		Urban	Peri-urban	Urban	Peri-urban	
Unprotected dug wells	Lit/Capita/day	25	25	25	25	25
Cased well with hand pump	Lit/Capita/day	25	25	25	25	25
Small piped water supply (communal tap)	Lit/Capita/day	25	25	25	25	25
Small piped water supply (house connection)	Lit/Capita/day	70	70	70	70	70
Urban water supply (communal tap)	Lit/Capita/day	25	25	25	25	25
Urban water supply (house connection)	Lit/Capita/day	70	70	70	70	70
Factories	% of domestic demand	Actual Water consumption depends on type of factory, business, public institutions and etc.				
Restaurants and hotels	% of domestic demand					
Small businesses	% of domestic demand					
Public institutions	% of domestic demand					
Hospitals and clinics	Lit/bed	100	100	100	100	100
Regional Hospital	Lit/bed	400	-	400	100	100
Schools (day)	Lit/Std./day	10 with pit latrines 25 with W.C. latrines				
Schools boarding (with W.C. latrines)	Lit/Std./day	70	70	70	70	70
Daily peak factor	Max./Average	1.5/1.3	1.5/1.4	1.8/1.5	1.5/1.4	1.0
Seasonal peak factor	Max./Average	2.5/2.0	2.5/2.0	2.5/2.0	2.5/2.0	2.5/2.0

BAGAMOYO DISTRICT

1-5 List of the requested villages

Please show the present water supply condition of the requested villages in following manner:

バガモヨ県の調査要請村落リスト

(1/5)

Division	District	Ward	Village/ Small Town	Population	Population served	Existing Water Supply Scheme					Remarks (Rehabilitation Recods, Others)	
						Type of the scheme (Piped, public Tap, Hand pump, shallow well, Others)	Water source	Water committee	Distance to water Point m.	Tariff TSHS		Water consumption Rate LPD
YOMBO	B'MOYO	YOMBO	CHASIMBA	2491	2392	PIPED	RIVER	AVAILABLE	800	0.4	20	CONSTRUCTION OF HAND PUMP AND REHABILITATION OF EXISTING WATER SUPPLY SYSTEM
			YOMBO	2155	2069	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			KONGO	1572	1509	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			MATIMBWA	1906	1830	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
		KIROMO	BUMA	1442	1385	PIPED	-''-	-''-	600	-''-	-''-	-''-
			MATAYA	1199	1152	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			KIROMO	3370	3236	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
		ZINGA	PANDE	1468	1410	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			MLINGOTINI	2299	2208	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			KONDO	1740	1671	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			ZINGA	2773	2663	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			KEREGE	2943	2826	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			MAPINGA	2788	2677	PIPED	-''-	-''-	-''-	-''-	-''-	-''-
			KWAMATUMBI		1191	PIPED	-''-	-''-	-''-	-''-	-''-	-''-

1-5 List of the requested villages

Please show the present water supply condition of the requested villages in following manner:

(2/5)

Division	District	Ward	Village/ Small Townn	Population	Population served	Existing Water Supply Scheme						Remarks (Rehabilitatio Recods, Others)
						Type of the scheme (Piped, public Tap, Hand pump, shallow well, Others)	Water source	Water committee	Distanc e to water Point	Tariff TSHS	Water consu ption Rate LPD	
MSATA	B'MOYO	KIWANGWA	MSINUNE	1828	6100	SHALLOW WELL/ DAM	SEASONAL SPRINGS	NONE	12MTRS		10	EXPENSI ON FROM CHALIZE
			KIWANGWA	5475	1000	SHALLOW WELL	-''-	AVAILABLE	1800		-''-	-''-
			MKENGE	1057	1057	SMALL DAM	-''-	NONE	1000		-''-	-''-
			KIDOMOLE	320	320	SMALL DAM	-''-	NONE	1200		-''-	-''-
			FUKAYOSI	2630	1200	PIPED	SPRINGS DAM	AVAILABLE	800	20/=	-''-	-''-
			MASUGURU	1808	1000	DAM	''-	NONE	800	-	-''-	-''-
KWAR UHOM BO		MBWEWE	P/KIONA	2914	500	SHALLOW WELL/ DAM	GROUND WATER	NONE	700	-	-''-	CONSTR UCTION OF S/ WELLS
			KWANG'ANDU	1790	1000	SHALLOW WELL/ DAM	-''-	NONE	1500	-	-''-	-''-
			KIFULETA	3352	1000	SHALLOW WELL/ DAM	-''-	NONE	1500	-	-''-	EXTENSI ON OF CHALIN ZE W/S
			KWARUHOMBO	2492	1500	PIPED	SPRING	AVAILABLE	1500	-	-''-	EXTENSI ON AND REVIVIN G
		KIBINDU	KWAMSANJA	935	935	SHALLOW WELL	GROUND WATER	NONE	1500	-	-''-	CONSTR UCTION

(3/5)

												ON PIPED SCHEME
			KWAMDUMA	2282	2000	SHALLOW WELL/ DAM	-''-	NONE	1000	-	-''-	HAND PUMP
			KIBINDU	4181	3000	SHALLOW WELL/ DAM	-''-	NONE	1000	-	-''-	CONSTR UCTION PIPED SCHEME
MSOG A		TALAWAND A	MALIVUNDO	1450	600	SHALLOW WELL/ DAM	-''-	AVAILABLE	1500	-	-''-	EXTENSI ON FROM CHALIN ZE
			MSIGI	1123	500	SHALLOW WELL/ DAM	-''-	AVAILABLE	1500	-	-''-	-''-
			TALAWANDA	3088	1000	SHALLOW WELL DAM	-''-	AVAILABLE	1500	-	-''-	-''-
			KISANGA	1103	500	SHALLOW WELL/ DAM	-''-	AVAILABLE	1500	-	-''-	-''-
			MINDUKENI	3068	1000	SHALLOW WELL/ DAM	-''-	AVAILABLE	1000	-	-''-	-''-
		UBENA	UBENA ZOMOZI	5061	500	SHALLOW WELL/ DAM	-''-	NONE	1500	-	-''-	-''-
			TUKAMISASA	2863	500	SHALLOW WELL/ DAM	-''-	NONE	1500	-	-''-	-''-
			MWIDU	2027	500	SHALLOW WELL/ DAM	-''-	NONE	1500	-	-''-	-''-
MSOG A	B'MOYO	UBENA	KALOLENI	2925	1000	SHALLOW WELL/ DAM	GROUND WATER	NONE	1500	-		EXTENSI ON OF CHALIN ZE
			VISAKAZI	2014	1000	-''-	-''-	NONE	800	50/=	10	-''-
			MATULI	2839	1500	PIPED	DAM	AVAILABLE	600	50/=	20	-''-
		CHALINZE	MDAULA	4188	2000	PIPED	DAM	AVAILABLE	1500	-	20	-''-
			MSOLWA	3880	1000	SHALLOW WELL/ DAM	GROUND WATER	AVAILABLE	1500	-	10	-''-
			CHAMAKWEZA	1620	800	SMALL DAM	DAM	AVAILABLE	800	-	-''-	-''-
										-	-''-	-''-
		VIGWAZA	RUVU DARAJANI	1931	500	PIPED	RIVER	AVAILABLE	800	-	-''-	-''-

(4/5)

			WISEZI	2299	1000	SHALLOW WELL	GROUND WATER	NONE	800	-	-''-	-''-
			VIGWAZA	6156	1000	SHALLOW WELL	-''-	NONE	800	-	-''-	-''-
			BUYUNI	2452	1000	DAM	DAM	AVAILABLE	800	-	-''-	-''-

NB: Most of Traditional wells and small earth Dams dry up during dry seasons

- Most of small Earth Dam turns to salinity particularly in dry seasons.
- During dry season all villages above are made available with water through purchasing from bowzer water selling water at an average of Tshs 200/= per bucket of 20 lts
- Normally water sources available is dam and ground water, dam are available through rain water harvesting
- LPD is equivalent to litres per capital per day.

5/5

M/MB AO		DUNDA	DUNDA	11890	11415	PIPED	-''-	-''-	400	-''-	30	-''-
			KAOLE	1229	1180	PIPED	-''-	-''-	-''-	-''-	30	-''-
		MAGOME NI	MAGOMENI	14771	14181	PIPED	-''-	-''-	-''-	-''-	30	-''-
			MAKURINGE	1243	1194	SHALOW WELL	GROUN D WATER	NONE	1500	-''-	30	-''-

NB:

1. With exception of Makurunge village, all villages from Mwambao and Yombo villages are getting water from Bagamoyo water supply project which is taped water from transmission main which is destined to Dar es salaam from lower Ruvu in take.
2. The project serves 60,000 people contrary to design requirement of 30,000 people

KIBAHA DISTRICT

1-5 List of the requested villages

Please show the present water supply conditions of the requested villages in following manner:

キバハ県の調査要請村落リスト ⅴ

Division	District	Ward	Village /Small Town	Population	Existing Water Supply Scheme						Remarks (Rehabilitation Records, others)				
					Population Served	Type of the Scheme (Piped, Public Tap, Hand Pump Well, Shallow Well, Others)	Water Source	Water Committee	Distance to Water Point	Tariff		Water Consumption Rate			
MLANDIZI	KIBAHA	MLANDIZI	1 ASONGOLA	1390	-	Shallow well	-	-	1000M	-	-	connect to DAWASA need			
			2 RUMUKWA	1081	-	2 shallow well	-	-	-	-	-	-	-		
			3 DOGA	-	-	well	-	-	500M	-	-	-	need to connect to DAWASA		
			4 KILANGAKISA	2310	-	-	-	-	-	-	-	-	-		
Ruvu	KIBAHA	RUVU	5 KUMU	2220	-	Station	-	-	-	-	-	-	Pumped from Ruvu river - need rehab/lat		
			6 MINDZI MUKINDA	1862	-	-	-	-	-	-	-	-	-		
			7 LUPUNGA	858	-	-	-	-	-	-	-	-	-		
			8 MUNDIBI	1948	-	-	-	-	-	-	-	-	-		
			9 KIKONGO	1255	-	-	-	-	-	-	-	-	-		
			10 GUMBA	2844	-	-	-	-	-	-	-	-	-	Required connection to WAMU PROJECT	
			11 KIKENGE	1070	-	-	-	-	-	-	-	-	-	-	
			12 MUGINDU	2639	-	-	-	-	-	-	-	-	-	-	
			13 GWATA	2555	-	-	-	-	-	-	-	-	-	-	
			14 MUMI	-	-	-	-	-	-	-	-	-	-	-	Pumped from Ruvu River
			15 MPUTI	1175	-	-	-	-	-	-	-	-	-	-	
			16 BOKOMNE MELA	1815	-	-	-	-	-	-	-	-	-	-	
			17 KIANGEGA	575	-	-	-	-	-	-	-	-	-	-	
18 MISUVINI	377	-	-	-	-	-	-	-	-	-	-				
Ruvu	KIBAHA	RUVU	ANGETA	-	-	-	-	-	-	-	-	-			
KIBAHA	KIBAHA	KIBAHA	19 MASANANI	2155	-	-	-	-	-	-	-	-	-		
			21 PANGANI	-	-	-	-	-	-	-	-	-	-	-	
			22 B/TIMIZA	1566	-	-	-	-	-	-	-	-	-	-	
			23 BOGOWALE	2400	-	-	-	-	-	-	-	-			

KISARAUW DISTRICT

1-5 List of the requested villages

Please show the present water supply conditions of the requested villages in following manner:

キサラウエ県の調査要請村落リスト

Division DISTRICT	District DIVISION	Ward	Village /Small Town	Population	Existing Water Supply Scheme						Remarks (Rehabilitation Records, others)		
					Population Served	Type of the Scheme (Piped, Public Tap, Hand Pump Well, Shallow Well, Others)	Water Source	Water Committee	Distance to Water Point	Tariff		Water Consumption Rate	
KISARAUW	SUNGWA	KISARAUW TOWN	Town	8000	6000	Piped scheme	2 Dams.	✓	0-0.1km	10sh/20l	7.5l/c/d	construction of Kimpoti dam	
			Villages	3844			Wells.	✓	< 1km	4sh/20l	4.5-6l/d		→ To change pump tech. to solar
				MSIMBU Villages	9,556		Deep wells (HP)	Wells	✓	< 0.5km	10sh/20l	2.5l/c/d	→ To change pump tech. to solar
				MASAKI Villages	5,909		Charcoal Dams & wells	Wells	✓	< 0.5km	20sh/20l	2.5l/c/d	- Need deep wells
				KIBWA Villages	9,484		Deep & shallow wells	Wells	✓	< 0.5km	"	2.5l/d	
				KILUVYA Villages	6,682		shallow wells.						
				M/MANGWA/MANGWA Villages	8,904		Piped scheme	1 Dam	✓	< 0.5km	20sh/20l	2.5l/c/d	Extension of piped scheme.
				MSANGWA Villages	5,234		Deep wells.	Wells	✓	< 0.5km	"	"	
				MARUMBE Villages	6,315		shallow wells.	Wells.	✓	< 0.5km	"	"	
				CITOLE CITOLE Villages	7,360		Deep wells.	Wells	✓	< 2km	20sh/20l	2.5l/c/d	- New project
				SAMVULA VIKUMBE Villages	3,451		Deep wells	Wells	✓	< 2km	50sh/20l	"	
				MANGUT Villages	3,999		Wells.	Wells.	✓	< 2km	100sh/20l	"	
		MZENGA MZENGA Villages	5,059		Deep wells.		✓	< 1.5km	20sh/20l	2.5l/c/d	- Rehabilitation of Mzenga water supply scheme.		
		MHINGO Villages	3,626		Deep wells		✓	< 9km	"	2.5l/c/d			
		KURUBU Villages	2,684		Wells.		✓	< 1km	"	2.5l/c/d	- mafizi construction of Charcoal dam.		
		MAREZI Villages	5,559		Wells.		✓	< 2km	"	2.5l/c/d			

1-5 List of the requested villages

Please show the present water supply conditions of the requested villages in following manner:

Mkuranga District

ムクランガ県の調査要請村落リスト

Division	District	Ward	Village /Small Town	Population	Existing Water Supply Scheme							Remarks (Rehabilitation Records, others)
					Population Served	Type of the Scheme (Piped, Public Tap, Hand Pump Well, Shallow Well, Others)	Water Source	Water Committee	Distance to Water Point	Tariff	Water Consumption Rate (l/c/d)	
Mkuranga	Mkuranga	Mkuranga	Tan village	26,551	9500	Shallow wells	wells	8	varies	1/lt	25-70 l/c/d	New scheme required
"	-do-	Vikindu	5 villages	15,200	1500	Shallow well & traditional	Wells	4	varies	not known	25-70	New scheme needed
Mkamba	-do-	Bupu	Bupu	1087	-	Traditional well	Well	✓	1 Km	-	25	New scheme proposed
Kisiji	-do-	Kisiji	Njopoka	3576	-	piped	River	✓	1 Km	-	25	Rehabilitation required
Kisiji	-do-	Kisiji	Kolola	1939	-	piped	Well/spring	✓	1/2-1 Km	-	25	Rehabilitation required
Mkamba	-do-	Mwalakali	Mwalakali	4586	-	Traditional wells	Wells	✓	1 Km	-	25	New scheme needed
Mkamba	-do-	Nyamato	Kilamba	1297	-	Traditional wells	Wells	✓	1 Km	-	25	- do -
Mkuranga	-do-	Tambani	7 Villages	14,740	-	Traditional wells	Wells	4	varies	-	25	New scheme required
Mkamba	-do-	Mkamba	5 villages	28,400	-	Traditional wells	Groundwater				25	Proposed piped group scheme
"	-do-	Kitambo	5 villages		-	Traditional wells	Groundwater				25	
-do-	-do-	Kinyamtu	3 villages		-	- do -	Groundwater				25	
-do-	-do-	Kimanzidani	2 villages		1500	Traditional wells	1 bore hole with hand pump	well	✓	0-400m	1/lt per liter	
Kisiji	-do-	Kisiji	2 villages	8500	-	Traditional wells	Groundwater	✓	varies	-	25	New scheme

コースト州全体の給水状況説明資料

(1/3)

2.0 Present Status of Water Supply in the Region

The government of Tanzania in collaboration with external agencies has managed to provide clean and safe water to about 60% of the people living in coast Region. There are three major ways through which people get services of water services, these includes:-

- (a) Piped water schemes
- (b) Shallow and deep bores
- (c) Dams (charcos) and rivers.

The people enjoying piped water schemes are estimated at about 40% of the total estimated regional population of 926,810 people. About 20% get water from shallow wells and boreholes and about 27.8% of the people have access to water sources in form of small earth dams and natural small lakes.

2.1 Water supply status per District

The breakdown of water supply status per district is summarised in the table below. Out of 64 piped water schemes, 30 schemes are operating.

TABLE 1. PRESENT STATUS OF WATER SUPPLY IN DISTRICTS COAST REGION.2004

S/N	DISTRICT	CENSUS POPOF 2002	PIPED SCHEMES				WATER WELL SHALLOW AND DEEP				DAMS				% AGE COVERAGI: PER DISTRIC
			Total	Working	Not wor king	%getting water	Total	Workin g	Not Wor king	% gettin g water	Total	Workin g	Not Wor king	% gettin g water	
1	Bagamoyo	230,164	11	5	6	125,410 (54.5%)	124	108	16	27,00 (11.73%)	56	53	3	13.25 0 5.8%	66.0
2	Kibaha	132,045	4	2	2	81,515 (61.73%)	63	55	8	13,750 (14.6%)	7	5	2	6.602 5%	77
3	Kisarawe	95,614	6	3	3	14,158 (14.8%)	144	100	44	33,274 (38.8%)	6	3	3	22.5	58
4	Mafia	40,801	5	3	2	16,115 (39.5%)	160	146	14	9,140 (22.4%)	4	3	1	12%	61.9
5	Mkuranga	187,420	7	4	3	22,490 (12%)	146	109	137	71,220 (38%)	8	8	-	13%	50
6	Rufiji	203,102	34	10	24	51,763 (25.5%)	201	165	36	48,416 (23.8%)	10	9	1	36%	49.3
	MKOA	889,154	67	30	37	311,451 (35%)	838	683	683	202,727 (22.8%)	91	81	10		60.3

The reasons that rendered more than half of the piped water schemes not operative includes:-

- (i) Worn-out water pumps and engines due to old age.
- (ii) In adequate funds for operation and maintenance of Water supply schemes.

- (iii) Traditional supply –driven approach in service provision beneficiaries were given water services free of charge.
- (iv) In adequate knowledge of beneficiaries to manage water supply schemes.
- (v) Non involvement of communities on planning of their water schemes and resulted into low sense of ownership.

2.2 Water committees and water funds.

In the Region there are 420 registered villages out of these 321 villages have water committees and there are 192 village water fund with more than 18 million Tshs.in the banks .

3.0 The New National Water Policy 2002

The national Water Policy 2002 was formulated so as to address the basic problem, which led to deterioration of Water supply services to the communities.

The review carried out on the 1991 National Water Policy identified the fore mentioned shortfalls and it led to revisiting the water supply National Policy.

The new Water Policy has defined roles which could be played by various stakeholders such as the communities, private sector and improvement on legal and institutional framework

3.1 objective

The broad rural water supply sub –sector policy objectives are to improve health and alleviate poverty of rural population through improved access to adequate and safe Water. The specific policy objectives includes:

- (i) To provide adequate affordable and sustainable water supply services to the rural population.
- (ii) To define roles and responsibilities of various stakeholders,
- (iii) To emphasize on communities paying for part of the capital costs and full cost recovery for operation and maintenance of services as opposed to the previous concept of cost sharing,
- (iv) To depart from the traditional supply-driven to demand – responsive approach in service provision.
- (v) To manage water supplies at the lowest appropriate level as opposed to the centralized command control approach.
- (vi) To promote participation of the private sector in the delivery of goods and services.
- (vii) To improve health through integration of water supply, sanitation and hygiene education.

3.2 Leading Principles

Social Principles:

Water is a basic need and right for all human beings thus consumption water for human shall be given first priority investment priority shall be given to water scarce areas.

Economic principles:

Water is an economic good which requires development investments and efficient, management of the resources and financed by water users themselves.

Environmental principles:

Water sources protection and conservation require proper environmental import assessment at the design and plan stages to ensure sustainability of the water supply and improvement of health through sanitation and hygiene education.

Sustainability principles:-

This requires clear definition of the roles and responsibilities of the various actors as well as those stakeholder groups.

Sustainability of rural water supply requires the following inputs.

- Adopting the principle of managing water schemes at the lowest appropriate level.
- The beneficiaries themselves establishing, owning and managing their water schemes.
- Ensuring full cost- recovery for operation and maintenance, and replacement.
- Facilitating availability of spare parts and know-how for timely repair and maintenance of the schemes through standardization of equipment and promotion of private sector involvement.
- Protection of water sources areas.
- Reconciling the choice of technology and the level of service with the economic capacity of the user groups.
- Recognizing women as being among the principle actors in the provision of rural water supply services.

4.0 Community participation

To achieve the intended goals, communities shall legally own water supply and sanitation services, this will ensure sustainability of water supply services. The community shall be allowed to make appropriate technology choices that suites them in terms of investment cost, operation and maintenance coast.

4.1 Participation of private sector

participation of private sector in service delivery will be enhanced so as to improve efficiency on service delivery. ~~To achieve~~. To achieve this an enabling environment for increased private sector involvement including incentives and legal recognition will be created.