

School Health Coordination Committee Training Program

TARGET TRAINEE: 12 members from different stakeholders (students, teachers, RDC, PTA, parents, church, community school teacher)

DURATION: 3 DAYS (This was not enough, at least 7days training duration is necessary)

DAY 1

Activity/Topic	Method	Time
Registration		20 mins
Introduction		20 mins
Norms	Participatory	10 mins
Expectation	Participatory	20 mins
Training objectives	Lecture	20 mins
BREAK		15 mins
Brief explanation of theme, School Health Concept and Situation analysis	Lecture Flow diagram	30 mins 40 mins
End of day 1 summary	Discussion	10 mins

DAY 2

Activity/Topic	Method	Time
RECAP		10 MINS
Basic WASHE needs	Discussion	
Safe water chain	VIPP	40 MINS
Sanitation	Discussion	40 mins
BREAK		
Personal hygiene	VIPP	40 mins
Food hygiene	VIPP	40 mins
End of day 2	Discussion	10 mins

DAY 3

Activity/Topic	Method	Time
Recap		10 mins
Domestic animal hygiene	Discussion	40 mins
General environmental hygiene	Discussion	40 mins
BREAK		10 30HRS
Action planning	Discussion	60 mins
Evaluation	Test	40 mins

A Sample Monitoring Sheet (Daily Register Book)

Register book gives simple information (such as name, plot number, family members, environmental health situation) about each household visit.

It is helpful for volunteer workers to keep track of the households being reached by members.

Zone_____ Date____/____/2001 Name of CHW_____

Plot number _____ the number of family members_____

Name of household members who receive household visit

Mr._____, Mrs._____

Topics	Observation
Personal hygiene	1) The children are not well looked after although the place looks clean. 2) Water containers are kept dirty
Boiling water	1) The two families are living together and those two families do boil their drinking water and it is stored in small containers.

A Sample Monitoring Sheet (Monthly Activity Reporting Form)

Monthly Activity Reporting Form gives summary of information collected every month and also describes total number of people covered by door-to-door health education session.

Catchment area Zone 8 Name of CHW Mr. Cosmas Mwanza

Name of supervisor_____ Month/ Year Jan.2001 Date Jan/31/2001

Date	Topic	# of sessions	# of people	Target group	Remarks
2/1/2001	Lack of latrine	1	4	Women	
8/1/2001	Keeping environment clean	1	6	Women Children	
12/1/2001					
Total		4	18		

Income Generation Project in Bauleni Monitoring Sheet

Monitoring Month: **2000** Name of Group:

1. Financial Management and Sustainability (Quantitative in NGO and Group Level)

NGO Performance	i. Sustainability Index (SI) : % ii. Break-even Interest rate (Click one of followings) Affordable and sustainable Affordable and not sustainable Not affordable but sustainable Neither affordable nor sustainable		
	iii. Administrative Accountability and Financial Transparency (Check following items) Monthly Report Financial Records with receipt Evaluation Reports (July and November only)		
Financial institution (Groups) Performance	i. Repayment rates: % iv. Saving behaviour Timing of deposits () Timing of withdrawals ()	ii. Arrears rate: % Saving size ()	iii. Default rate: %

2. Impact Assessment (Quantitative and Qualitative in Individual and Household level)

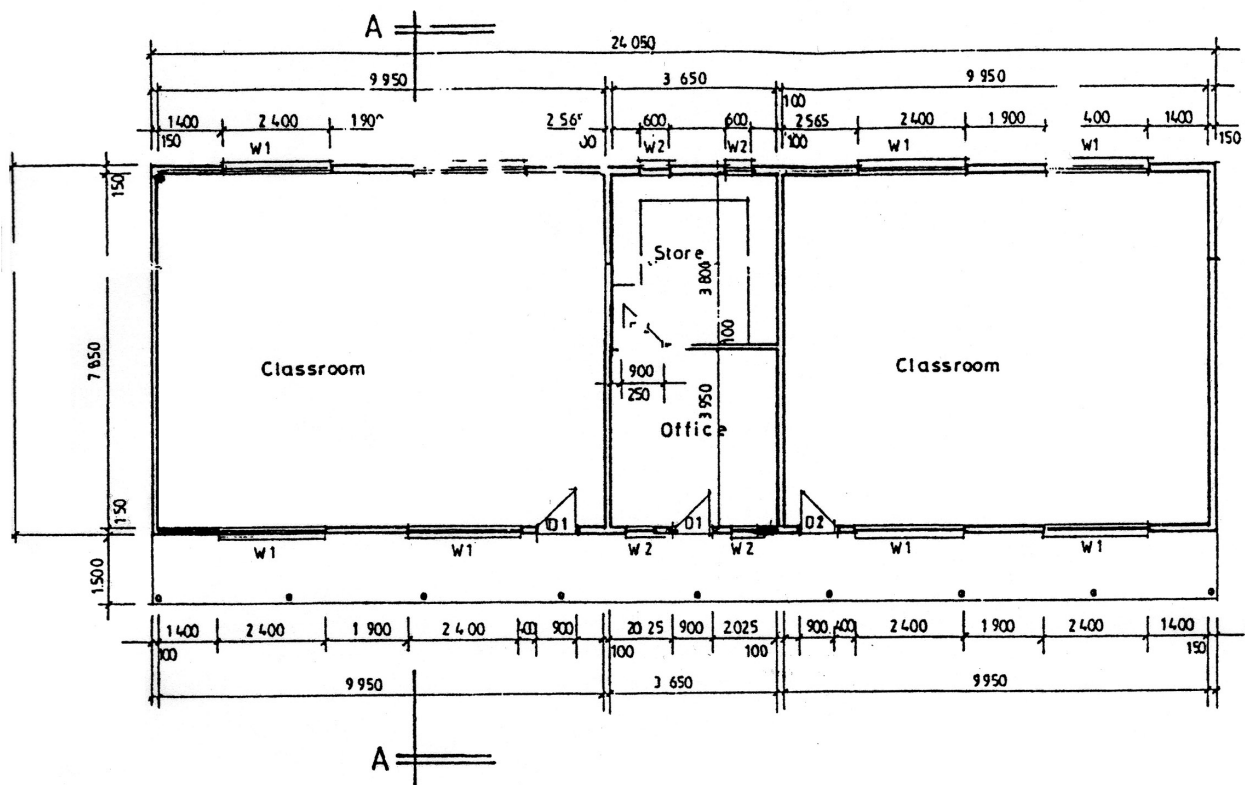
Business Progress & Sustainability	i. Business expansion and production increase (Note activities which were done to increase business size and production) ii. Improvement of skills (Note skills which were upgraded and how?) iii. Capital investment for materials and equipment (Check one of followings) <input type="checkbox"/> Size of investment for materials and equipment are increased <input type="checkbox"/> Size of investment for materials and equipment are same <input type="checkbox"/> Size of investment for materials and equipment are decreased iv. Level of knowledge in business and financial management (Note knowledge acquired in training)
Economic Promotion	i. Household income (Click one of followings) Increased Same Decreased ii. Individual income (Note the number of family members whose incomes are:) Increased () Same () Decreased () iii. Household expenditure (Note new expenditure items and for what?) iv. Nest asset and worth (Note any property acquired after the loan is disbursed)
Livelihood Security and Empowerment	i. Numbers of family members who have better access to clinic/medicine () ii. Numbers of family members who have better intake/choice of food () iii. Are education costs for children affordable? YES NO iv. Gender relations (Note the participation of family members to decision making process and what kind of decision?) v. Vulnerability (Note any feeling of the improvement in inequality in family and society)

3. Institutional Building (Qualitative in group level)

*Mark the scores in each blanks

Operation and Management	i. Management and responsibility 1 2 3 4 5				
	ii. Meetings and participation 1 2 3 4 5 6				
	iii. Operation of Group 1 2 3 4 5 6 7 8				
	iv. Work of groups 1 2 3 4				
Group Institutionalisation and Self-Reliance	i. Potential autonomy and independence 1 2 3 4				
	ii. Membership base 1 2 3 4 5				
	iii. Knowledge base 1 2				
	iv. Broadening base 1 2 3 4 5				

Design of School Building (Micro Project Standard)



Floor plan

Community School Development in Chibolya Monitoring Sheet

Monitoring Month:

2000

1. Construction Process Monitoring (Monitored by Community, NGO, and JST)

Labour contribution	No. of Unskilled Labour (average):		No. of Skilled Labour:
Construction Process	Planned month	Achieved month	Note
Land Preparation			
Wall Fence			
Wall of Building			
Roofing			
Water Borehole			
VIP Latrines			
Security & Vandalism	Security guard employed: Y/N Incidence of Vandalism or materials stolen: times Name of materials broken or stolen:		

2. Institutional Building (see attached questionnaire) (Monitored by Community)

Operation and Management	Management Responsibilities	1.	2.
	Meeting and Participation	3.	4. 5.
	Operation of Group	6. 7.	8. 9.
	Work of group	10. 11.	12.
Group Institutionalisation and self-reliance	Potential Autonomy	13.	
	Membership base	14.	15.
	Knowledge and skill base	16.	17.
	Broadening base	18.	

3. LCC Performance (Monitored by JST)

Mobilisation/sensitisation	Support to EC/PTA Meeting attendance: Times	Coordination/Networking Coordination w/JST,NGO Y/N	Consultation Regular Visit: Times
Construction	Support to EC/PTA Timely availability Y/N	Coordination/Networking Coordination w/JST,NGO Y/N	Supervision Regular Visit: Times
Operation & Maintenance	Support to EC/PTA Timely availability Y/N	Technical advice Regular visit Times	

4. NGO Performance (Monitored by JST)

Mobilisation/sensitisation	Support to EC/PTA Meeting attendance: Times	Coordination/Networking Coordination w/JST,NGO Y/N	Technical advice Regular Visit Y/N
Construction	Support to EC/PTA Timely availability Y/N	Coordination/Networking Coordination w/JST,NGO Y/N	Supervision Regular Visit: Times
Operation & Maintenance	Support to EC/PTA Timely availability Y/N	Technical advice Regular visit Times	
Teacher Training	Yes/No		
Accountability & Transparency	Monthly Report Financial Record with receipt Evaluation Report (August and November)		

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A-2 Detailed Evaluation Results of Pilot Projects

Project Design Matrix (PDM) :

Project name : Improvement of Water Supply System
Project Area : Bauleni & Chibolya

Duration: Nov 1999 ~ Oct 2000
Target Group : Zones 8&13 / Zones 4&5

Narrative Summary		Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Sustained improvements in community-managed water supply service are extended to the other zones (more zones to cover whole compound).	1. 80% of the population use 20 lpcd (liter per capita per day) of safe water. 2. 80% of the population spend less than 30 min for collection of safe water.	Report by WC/RDC Report by LCC/LWSC	Socio-economic and political conditions provide supportive environment for expansion of community-based demand-led approach to Water Supply.	
Project Purpose Participatory structures and processes for community-managed water supply system is developed.	1. The number of community participants who actively constructed.	Report of LCC/LWSC Report of WC/RDC	Funding for continuity is assured, and disbursed in time.	
Outputs 1. A Water Committee (WC) is established under RDC. 2. WC, RDC and other community members acquire skills and knowledge necessary for community-managed water supply system. 3. Water supply system is installed in collaboration with RDC/LWSC/LCC and sub-contractor. 4. Operation & Maintenance system is developed.	1-1. Monthly monitoring is conducted by RDC and WC. 2-1. Simple maintenance is undertaken by community without external assistance. 2-2. Water supply system is managed by WC and RDC in collaboration with LCC. 3-1. 20 public taps are installed. 4-1. There is no vandalism during and after the construction. 4-2. Community is willing to pay for operation & maintenance.	Report of LCC/LWSC Report of WC/RDC Minutes of community meetings Report of commissioning test	Water quality does not deteriorate. No political interference experienced. Economic standard of people does not deteriorate.	
Activities 1-1. RDC appoints the members of WC. 1-2. JST/Local staff holds Community Action Planning (CAP) workshops with LCC and RDC to develop workplans and define roles of stakeholders. 2-1. JST/Local staff conduct a training for WC and others in efficient operation & maintenance of the water supply system. 2-2. JST/Local staff conduct a training for RDC, WC and LCC staff in effective management of the water supply system. 3-1. Community approves a detail design, particularly location of taps. 3-2. Sub-contractor sinks a borehole with an elevated tank and a power house. 3-3. Sub-contractor in collaboration with community construct 10 public tap stands in Bauleni/ 5 public tap stands in Chibolya . 3-4. Sub-contractor in collaboration with community lay pipelines. 4-1. RDC/WC conduct meetings with community to sensitize for community participation in community-managed water supply system. 4-2. WC sets cost recovery system such as cost of water, method of water fee collection, etc in consultation with community. 4-3. WC sets operation system such as operation hours, amount of water per family per day, etc in consultation with community. 4-4. WC appoints tap attendants and other necessary personnel. 4-5. RDC/WC establish appropriate security system (appointment of security committee, etc).	Inputs Japan 1. Human resources JICA Study Team Sub-contractor 2. Fund (US \$196,000) Construction materials Training materials, fees	Zambia 1. Human resources Steering Committee LCC LWSC and other line agencies 2. Facilities Office space and running cost Voluntary labor for construction	Water level does not change. Trained community leadership is maintained. Community continues working. Preconditions Political situation is stable. Community accepts the project.	

Evaluation Matrix

Project Name: Improvement of Water Supply System

Project Area: Bauleni

NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High, M: Medium, L: Low

Duration: November 1999 - October 2000

Target Group: Bauleni Zones 8 & 13

	Efficiency		Effectiveness		Impact		Relevance		Sustainability				
	Slightly high		Mostly achieved		Many positive than negative impacts		High		Slightly high				
	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance			
Overall Goal Sustained improvements in community-managed water supply service are extended to the other zones (to cover whole compound).		M	M		1 RDC is better known in community due to project activities	H	(+)	1 Water supply meets priority need of community	H	(+)	1 RDC/RC are collecting and banking water levies	H	(+)
					2 New RDC subcommittees are formed	H	(-)	2 Project purpose is consistent with policies and strategies of MLGH/LCC/LWSC	H	(++)	2 Revenue collected is sufficient to cover expenses	H	(-)
Project Purpose Participatory structures and processes for community-managed water supply systems are developed and tested					4 Housing and population in the area of the water supply increases	L	N/A				3 RDC/WC members are stable and understand and perform O&M roles	H	(+)
					1 Monthly monitoring is conducted by RDC/WC	H	(+)	3 Project purpose and approach is consistent with other donors/NGOs	H	(+)	4 Security system is established and functioning	M	(+)
Outputs 1 A Water Committee (WC) is established 2 WC, RDC and other community members acquire skills and knowledge necessary for community-managed water supply system 3 Water supply system is installed in collaboration with RDC/LWSC/LCC and subcontractor. 4 O&M system is developed.		M	(+)		2 Simple maintenance is undertaken by community without external assistance	M	(++)				5 TAs are able and willing to carry out roles according to agreed upon conditions of service	H	(+)
					3 Water supply system is managed by RDC/WC in collaboration with LCC	H	(+)	4 Water infrastructure, water quality and service level meet LWSC	M	(++)	6 Water scheme managers have officebase to work from	H	(+)
Inputs 1 Human resources 2 Funds		M	(++)		4 There is no vandalism during and after construction	M	(+)				7 LCC/ LWSC/ Contractor/NGO provide necessary support to RDC/WC on technical, management and financial matters	H	(+)
					5 Community is willing to pay water levy	H	(-)	8 Necessary tools, back-up spares and manuals are available for O&M	H	(+)			

Evaluation Matrix

Project Name: Improvement of Water Supply System

Duration: November 1999 - October (December) 2000

Project Area: Chibolya

Target Group: Chibolya Zones 4 & 5

NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High, M:Medium, L:Low, N/A: Not applicable or not yet determined

Efficiency		Effectiveness		Impact		Relevance		Sustainability	
Slightly high		Too early to assess		Many positive than negative impacts		High		Slightly high	
Overall Goal Sustained improvements in community-managed water supply service are extended to the other zones (to cover whole compound).				Evaluation Questions 1 RDC is better known in community due to project activities	H	(+)	1 Water supply meets priority need of community	H	(+)
				2 New RDC subcommittees are formed	H	(+)	2 Project purpose is consistent with policies and strategies of MLGH/LCC/LWSC	H	(++)
Project Purpose Participatory structures and processes for community-managed water supply systems are developed and tested				3 Politicians demonstrate support for RDC/RC project and activities	M	(-)			
				4 Housing and population in the area of the water supply increases	L	N/A			
Outputs 1 A Water Committee (WC) is established 2 WC, RDC and other community members acquire skills and knowledge necessary for community-managed water supply system 3 Water supply system is installed in collaboration with RDC/LWSC/LCC and subcontractor. 4 O&M system is developed.				5 Daily water usage increases	M	N/A	3 Project purpose and approach is consistent with other donors/NGOs	H	(+)
				6 Distance to water source and collection time decrease	M	N/A	4 Water infrastructure, water quality and service level meet LWSC	M	(++)
Inputs Japan 1 Human resources 2 Funds				7 Greater percentage of households have access to and use safe water supply	M	N/A			
				8 Frequency of hand washing, bathing and laundry is increased	M	N/A			
				Evaluation Questions 1 Community provides volunteer labor for construction 2 Training in O&M and financial management is sufficient, meets needs, and is cost effective 3 Water Committee is established under RDC 4 Water supply system is installed and operational according to schedule 5. LCC/LWSC/ JST/sub-contractor/ community collaborate to implement project 6 Construction materials and technique are affordable, durable and appropriate	M	(+)			
					H	(+)			
					H	(+)			
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Project Design Matrix (PDM) :

Project name : Improvement of Road System
Project Area : Ng'ombe

Duration: Nov 1999 ~ Oct 2000
Target Group : Population of Ng'ombe

Narrative Summary		Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Sustained improvements in community-managed road system are extended to the other zones.		1. The population have better access to a main road in Ng'ombe.	Report by RC/RDC Report by LCC	Socio-economic and political conditions provide supportive environment for expansion of community-based demand-led approach
Project Purpose A model for community-managed road system is developed.		1. The number of community participants who actively constructed.	Report by RC/RDC Report by LCC	Funding for continuity is assured, and disbursed in time.
Outputs 1. A Road Committee (RC) is established under RDC. 2. RC, RDC and other community members acquire skills and knowledge necessary for community-managed road system. 3. Priority No. 1 road system is improved in collaboration with RDC/LCC and sub-contractor. 4. Operation & Maintenance system is developed.		1-1. Monthly monitoring is conducted by RDC and RC. 2-1. Simple maintenance is undertaken by community without external assistance. 2-2. Road system is managed by RC and RDC in collaboration with LCC. 3-1. Priority No.1 road is constructed. 4-1. There is no vandalism during and after the construction. 4-2. Garbage in ditch is properly disposed.	Report of LCC Report of RC/RDC Minutes of community meetings Report of sub-contractor	No political interference experienced. Economic standard of people does not deteriorate.
Activities 1-1. RDC appoints the members of RC. 1-2. IST/Local staff holds Community Action Planning (CAP) workshops with LCC and RDC to develop workplans and define roles of stakeholders. 2-1. IST/Local staff conduct a training for RC and others in efficient operation & maintenance of the road system. 2-2. IST/Local staff conduct a training for RDC, RC and LCC staff in effective management of the road system. 3-1. Community approves a detail design. 3-2. Sub-contractor in collaboration with community construct open drains with sods in both sides. 4-1. RDC/RC conduct meetings with community to sensitize for community participation in community-managed road system. 4-2. RDC/RC establish maintenance system particularly generation of maintenance fund in consultation with community. 4-3. RDC/RC establish appropriate security system (appointment of security committee, etc).		Japan 1. Human resources JICA Study Team Sub-contractor 2. Fund (US \$59,000) Construction materials Training materials, fees	Zambia 1. Human resources Steering Committee LCC Other line agencies 2. Facilities Office space and running cost Voluntary labor for construction	Trained community leadership is maintained. Community continues working. Preconditions Political situation is stable. Community accepts the project.

Evaluation Matrix

Project Name: Improvement of Road System

Duration: November 1999 - October 2000

Project Area: Ng'ombe

Target Group: Population of Ng'ombe

NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved, H: High, M: Medium, L: Low

Efficiency		Effectiveness		Impact		Relevance		Sustainability							
Slightly high		Mostly achieved		More positive than negative impacts		Slightly low		Slightly high							
				Evaluation Questions		Evaluation Questions		Evaluation Questions							
				Importance		Importance		Importance							
				Result		Result		Result							
Overall Goal Sustained improvements in community-managed road system are extended to the other zones.				1 RDC is better known in community due to project activities		H	(-)	1 Improved road meets one of priority needs of community	H	(+)	1 RDC/RC are collecting and banking road levies	H	(+)		
				2 New RDC subcommittees are formed		H	(++)								
				3 Politicians demonstrate support for RDC/RC project and activities		M	(-)								
				4 Access to community infrastructure and public transport is improved		H	(++)								
				5 Business activities increase		M	(+)								
				6 Sanitation is improved		M	(+)								
				7 Traffic volume increases		M	(++)								
				8 Vehicle speed and danger to pedestrians are increased		N/A	N/A								
Project Purpose A model for community-managed road system is developed.				Evaluation Questions		Importance		Result							
Outputs				1 Monthly monitoring is conducted by RDC/RC		H		(++)							
1 A Road Committee (RC) is established under RDC.		M		(-)		H		(+)							
2 RC, RDC and other community members acquire skills and knowledge necessary for		H		(+)		H		(+)							
3 Priority No. 1 road system is improved in collaboration with RDC/LCC and subcontractor.		H		(++)		H		(+)							
4 O&M system is developed.		M		(++)		H		(-)							
5. LCC/JST/ subcontractor/ community collaborate to		H		(++)		H		(++)							
6.Construction materials and technique are affordable, durable and appropriate		M		(+)											
Inputs		Zambia													
1 Human resources		1 Human resources													
2 Funds		2 Facilities													

Project Design Matrix (PDM) :

Project name : Community-based Health and Hygiene Education Project
Project Area : Chibolya

Duration: Dec 1999 ~ July 2000 (8 months)

Target Group : Zones 4 & 5

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1 A model for participatory health and hygiene education is extended to the other zones. 2 Health and hygiene conditions of people in the project area are further improved with the added impact of the Water Supply Project.	1-1 The model is applied to 5 more zones in Chibolya. 1-2 HEG establishes an incentive mechanism. 2-1 Monthly diarrhoea incidence in the pilot area is decreased.	1-Monitoring report by RDC/HEG 1-2 Report by LCC (Lusaka City Council) 2-1,2-2 Clinic Report	1 No changes in the political situation and government policies. 1 Chibolya RDC, community, clinic and LCC agree with the extension of the 2 Funding source for operation cost for HEG is ensured. 3 Water quality is improved by the Water Supply Project
Project Purpose A model for participatory health and hygiene education is developed by the community.	1 The number of active HEG members. 2 A workplan beyond the project period is developed by RDC/HEG.	1 Monitoring report by RDC/HEG 2 Final report by NGO	1 Chibolya RDC, community, clinic and LCC agree with the extension of the 2 Funding source for operation cost for HEG is ensured. 3 Water quality is improved by the Water Supply Project
Outputs 1 A Health Educators Group (HEG) is organized under RDC. 2 An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC. 3 Community based health and hygiene education program activities are implemented in the community.	1-1 Monthly progress monitoring is conducted by HEG and supervised by RDC. 1-2 Monthly meetings are held independently by HEG/RDC. 2-1 Satisfaction level of training course participants on the course module is more than 80%. 2-2 Satisfaction level of training course participants on the training manual is more than 80%. 2-3 Trained group members' knowledge and skills are improved. 3-1 25% of the target population is covered under outreach household visits. 3-2 Conduct one educational drama performance in the community.	1-1 Report by RDC/HEG 1-2 Bimonthly report by RDC/HEG 1-3 Minutes of the meeting by HEG 2-1 Evaluation sheet collected by NGO after training 2-2 Evaluation sheet collected by NGO after training 2-3 Evaluation sheet collected by NGO after training 3-1 Report by RDC/HEG 3-2 Report by RDC/HEG	1 No political interference experienced. 2 Cooperation from LCC/DHMT (District Health Management Team) is obtained. 3 Cooperation from other community based organizations such as the Water Committee/NHC is obtained.
Activities 1-1 RDC appoints 20 individuals as the members of HEG. 1-2 RDC/HEG organize a workshop to prepare a workplan and to decide the roles and responsibilities of all stakeholders. 2-1 NGO/LCC develop a training course module for TOT (Training of Trainers) for HEG. 2-2 NGO/LCC conduct TOT and refresher training. 2-3 NGO/LCC review and finalize the training manual. 3-1 HEG creates a Work Plan for the community based health and hygiene education program. 3-2 HEG mobilizes community to inform about project purpose/objectives. 3-3 HEG decides key messages for drama /outreach session. 3-4 HEG identifies and negotiates with an existing drama group. 3-5 HEG practices practical teaching methods of outreach health education session and educational drama performance.	Japan 1. Human resources JICA Study Team Sub-contractor (NGO) 2. Fund (US \$ 14,000:including NGO operation cost) Training materials, fees Workshop and training cost	Zambia 1. Human resources Steering Committee LCC (Department of Public Health) DHMT(District Health Management Team) Kanyama Clinic/ EHT at the clinic Community People 2. Facilities Office space & running cost of NGO	1 RDC leadership is maintained. 2 HEG members continue working. 3 Clinic/DHMT continue their collaboration. Preconditions 1 Political situation is stable. 2 Community accepts the project.

NOTE: Health Educators Group (HEG)= 20 members of the community (supervised by RDC)

NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High M: Middle, L: Low

Overall Goal	Efficiency		Effectiveness		Impact		Relevance		Sustainability	
	Slightly Low		Mostly Achieved		More negative than positive		Slightly high		Slightly low	
	Evaluation Questions	Importance/Results	Evaluation Questions	Importance/Results	Evaluation Questions	Importance/Results	Evaluation Questions	Importance/Results	Evaluation Questions	Importance/Results
Overall Goal A model for participatory health and hygiene education is extended to the other zones.										
Project Purpose A model for participatory health and hygiene education is developed by the community.										
Outputs 1. A Health Educators Group (HEG) is organized under RDC. 2. An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC.										
3. Community based health and hygiene education program activities are implemented in the community.										
Inputs See PDM (project design matrix)										

NOTE: HEG=Health Educators Group/20 members of the community, supervised by RDC

NOTE: HEG=Health Educators Group/20 members of the community, supervised by RDC and skills are improved

Project Design Matrix (PDM) :

Project name : Community-based Health and Hygiene Education Project
Project Area : Bauleni

Duration: Dec 1999 ~ July 2000 (8 months)

Target Group : Zones 8 & 13

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1 A model for participatory health and hygiene education is extended to the other zones. 2 Health and hygiene conditions of people in the project area are further improved with the added impact of the Water Supply Project.	1-1 The model is applied to 11 more zones in Bauleni 1-2 HEG establishes an incentive mechanism. 2-1 Monthly diarrhoea incidence in the pilot area is decreased.	1-1 Monitoring report by RDC/HEG 1-2 Report by LCC (Lusaka City Council) 2-1 Clinic Report	1 No changes in the political situation and government policies. 1 Bauleni RDC, community, clinic and LCC agree with the extension of the project. 2 Funding source for operation cost for HEG is ensured. 3 Water quality is improved by the Water Supply Project
Project Purpose A model for participatory health and hygiene education is developed by the community.	1 The number of active HEG members. 2 A workplan beyond the project period is developed by RDC/HEG.	1 Monitoring report by RDC/HEG 2 Final report by NGO	1 Bauleni RDC, community, clinic and LCC agree with the extension of the project. 2 Funding source for operation cost for HEG is ensured. 3 Water quality is improved by the Water Supply Project
Outputs 1 A Health Educators Group (HEG) is organized under RDC. 2 An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC. 3 Community based health and hygiene education program activities are implemented in the community.	1-1 Monthly progress monitoring is conducted by HEG and supervised by RDC. 1-2 Monthly meetings are held independently by HEG/RDC. 2-1 Satisfaction level of training course participants on the course module is more than 80%. 2-2 Satisfaction level of training course participants on the training manual is more than 80%. 2-3 Trained group members' knowledge and skills are improved. 3-1 25% of the target population is covered under outreach household visits. 3-2 Conduct two educational drama performance in the community.	1-1 Report by RDC/HEG 1-2 Bimonthly report by RDC /HEG 1-3 Minutes of the meeting by HEG 2-1 Evaluation sheet collected by NGO after training 2-2 Evaluation sheet collected by NGO after training 2-3 Evaluation sheet collected by NGO after training 3-1 Report by RDC/HEG 3-2 Report by RDC/HEG	1 No political interference experienced. 2 Cooperation from LCC/DHMT(District Health Management Team) is obtained . 3 Cooperation from other community based organizations such as the Water Committee/NHC is obtained.
Activities 1-1 RDC appoints 20 individuals as the members of HEG. 1-2 RDC/HEG organize a workshop to prepare a workplan and to decide the roles and responsibilities of all stakeholders. 2-1 NGO/LCC develop a training course module for TOT (Training of Trainers) for HEG. 2-2 NGO/LCC conduct TOT and refresher training. 2-3 NGO/LCC review and finalize the training manual. 3-1 HEG creates a Work Plan for the community based health and hygiene education program. 3-2 HEG mobilizes community to inform about project purpose/objectives. 3-3 HEG decides key messages for drama / outreach session. 3-4 HEG identifies and negotiates with an existing drama group. 3-5 HEG practices practical teaching methods of outreach health education session and educational drama performance.	Japan 1. Human resources JICA Study Team Sub-contractor (NGO) 2. Fund (US \$ 13,000:including NGO operation cost) Training materials, fees Workshop and training cost	Zambia 1. Human resources Steering Committee LCC (Department of Public Health) DHMT (District Health Management Team) Kanyama Clinic / EHT at the clinic Community People 2. Facilities Office space & running cost of NGO	1 RDC leadership is maintained. 2 HEG members continue working. 3 Clinic/DHMT continue their collaboration.
			Preconditions 1 Political situation is stable. 2 Community accepts the project.

NOTE: Health Educators Group (HEG)= 20 members of the community (supervised by RDC)

Evaluation Matrix

Project Name: Community Health Education Project
 Project Area: Bauleni
 Duration: December 1999-July 2000
 Target Group: Bauleni community (zone 8 and 13)
 NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High, M: Middle, L: Low

	Efficiency		Effectiveness		Impact		Relevance		Sustainability	
	High		Achieved		More positive than negative		Slightly high		Slightly high	
	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance
Overall Goal 1 A model for participatory health and hygiene education is extended to the other zones.										
2 Health and hygiene conditions of people in the project area are further improved with the added impact of the Water Supply										
Project Purpose A model for participatory health and hygiene education is developed by the community.										
Outputs 1 A Health Educators Group (HEG) is organized under RDC.	1.A health educators group (composed of NHC, RDC-HC members and community people) to facilitate the community health activities in place	H	1.Trained HEG members(20) continue working and dropouts are replaced(The number of active HE members)	H	1.The model was applied to outside the target beneficiaries (other zones)	H	1. Organize HEG under RDC to give sanitation&health education is in line with current CBO (central board of health) policy on	H	1. Incentive mechanism and operational cost for HEG to remain active is established	H
2 An appropriate training course method (a course module and a manual) for the community is developed by	2.Monthly progress monitoring is conducted by HEG and supervised by RDC	H			2.Health educators are empowered (respected by community/family)	H	2.The model developed satisfies needs felt not only by the community but also help community work done by the clinic	H	2.80% of the trained HEGs continue educating the community	H
3 Community based health and hygiene education program activities are implemented in the	3.Monthly meetings are held independently by HEG/RDC	H			3.Good cooperation between health educators& LCG to identify household who	H			3.Active members to be health educators are reselected for expansion of the program	M
	4.More than 25% of target population is covered under outreach household visits by HEG	H			4.HEG and NHC work hand in hand and it does not cause conflict	H				
	5. Four health educational drama performances was conducted in the community	H								
	6.Satisfaction level of training course participants on the course module (program) is more than 80%	H								
Inputs	7.Satisfaction level of training course participants on the training manual (handouts) is more than 80%	H								
See PDM (project design matrix)	8. Inputs (NGO human resource, training materials and costs) are appropriate	H								
	9. HEG members knowledge and skills are improved	H								

NOTE: HEG=Health Educators Group(20 members of the community, supervised by RDC

Project Design Matrix (PDM) :

Project name : School-based Health and Hygiene Education Project
Project Area : Chibolya

Duration: April 2000 ~ July 2000 (4 months)
Target Group : Chibolya Middle School students/teachers and the community

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1 A model for participatory <u>Child to Child</u> and <u>Child to Adult</u> health and hygiene education in the school and the community is extended to the other zones and schools in the community. 2 Health and hygiene conditions of students and people in the project area are further improved with the added impact of the Community Health Education Project and the VIP Latrine Project.	1 The model is applied to other schools (including community schools) in Chibolya. 2-1 Monthly diarrhoea incidence in the pilot area is decreased.	1-1 Report by SHCC 1-2 Report by LCC (Lusaka City Council) 2-1 Clinic Report	1 No changes in the political situation and government policies.
Project Purpose A model for participatory <u>Child to Child</u> and <u>Child to Adult</u> health and hygiene education in the school and the community is developed by the community.	1 The number of active SHCC members. 2 A workplan beyond the project period is developed by SHCC.	1. Monitoring report by SHCC 2. Final report by NGO	1 SHCC and RDC agree with the extension of project to the community schools in the area. 2 Funding source for training cost is ensured.
Outputs 1 A School Health Coordination Committee (SHCC) is organized under a school head master. 2 An appropriate training course method (a module) for the school is developed by NGO/LCC. 3 School-based health and hygiene education program activities are implemented.	1-1 Progress monitoring is conducted by SHCC regularly. 1-2 Semi-weekly meetings are held independently by SHCC members. 2-1 Satisfaction level of training course participants on the course module is more than 80%. 2-2 Satisfaction level of training course participants on the training manual is more than 80%. 2-3 Trained group members' knowledge and skills to identify priority needs and to plan and implement school health activities are improved. 3-1 Parents/students mobilization meetings are held as per planned 3-2 Health education drama performances by the students are conducted as per planned	1-1 Report by SHCC 1-2 Bimonthly report by SHCC 2-1 Evaluation sheet collected by NGO after training 2-2 Evaluation sheet collected by NGO after training 2-3 Evaluation sheet collected by NGO after training 3-1 Report by SHCC 3-2 Report by SHCC	1 No political interference experienced. 2 Cooperation from LCC/DEO/School/DHMT (District Health Management Team) is obtained. 3 Cooperation from other community-based organization such as the Latrine Construction Group is obtained.
Activities 1-1 A school headmaster and teachers (existing the Child to Child Committee members of the target school) appoint 12 community/school members for SHCC. 1-2 SHCC organizes a workshop to prepare a workplan and to decide the roles and responsibilities of all stakeholders. 2-1 NGO/LCC develop a training module for the SHCC. 2-2 NGO/LCC conduct training (workshop style, using Participatory Learning and Action method). 3-1 SHCC creates a Work Plan for the school-based health and hygiene education program. 3-2 SHCC prepares tools for digging refuse pits. 3-3 SHCC digs at least two refuse pits. 3-4 SHCC raises funds for buying 26 carton boxes and 8 bins or drums. 3-5 SHCC reorganizes existing school drama group. 3-6 Outside drama group is contracted and it trains school drama group. 3-7 SHCC conducts two educational drama performances (in the school and in the community). 3-8 SHCC liaises with the PTA for the fundraising to get materials to repair non-functional latrines in the school. 3-9 The Latrine Construction Group (see Latrine Project PDM) in the community repairs at least two non-functional latrines in the school.	Inputs Japan 1. Human resources JICA Study Team Sub-contractor (NGO) 2. Fund (US \$ 6,000 :including NGO operation cost) Training materials, fees Workshop/training cost	Zambia 1. Human resources Steering Committee LCC (Department of Public Health) DHMT (District Health Management Team) Chibolya Clinic/ EHT at the clinic Chibolya Primary School DEO(District Education Office) Community People 2. Facilities Office space & running cost of NGO	1 A school head master provides continuous support. 2 RDC/HEG members provide continuous support. 3 Clinic/DHMT and School/District education office (DEO) continue their collaboration. 4 Trained SHCC members continue working.
Preconditions 1 Political situation is stable. 2 School/community accepts the project.			

NOTE: School Health Coordination Committee (SHCC) =14 members of the school/community

Evaluation Matrix

Project Name: School Health Education Project
 Duration: April 1999-July 2000
 Project Area: Chibolya (Chibolya Primary School)
 Target Group: Chibolya Middle School students/teachers and the community
 NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High, M: Middle, L: Low

	Efficiency		Effectiveness		Impact		Relevance		Sustainability	
	High		Achieved		More positive than negative		High		Slightly High	
	Evaluation Questions	Importance	Evaluation Questions	Results	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Results
Overall Goal 1. A model for participatory <u>Child</u> to <u>Child</u> and <u>Child</u> to <u>Adult</u> health and hygiene education in the school and the community is extended to the other zones and schools in the community. 2. Health and hygiene conditions of students and people in the project area are further improved with the added impact of the Community Health Education Project and the VIP Latrine Project.					1. The model was applicable to other schools 2. School and Community communication and collaboration is improved 3. SHCC and the community started communicating more and work hand in hand	H M H	1. Organize SHCC consisting of people from different stakeholders are and improve sanitation situation in school and community is in line with current MOE policy on child to child 2. The model developed satisfies needs felt not only by the school but also assist work should be done by the clinic	H H H	1. Organizational income generating activities to generate operational cost for SHCC to remain active is established 2. Follow up action plan is made 3. Continuous follow up training and supervision is going to be held by CARE	(-) (++) (++)
Project Purpose A model for participatory <u>Child</u> to <u>Child</u> and <u>Child</u> to <u>Adult</u> health and hygiene education in the school and the community is developed by the community.										
Outputs 1. A School Health Coordination Committee (SHCC) is organized under a school head master. 2. An appropriate training course method (a module) for the school is developed by NGO/LCC. 3. School-based health and hygiene education program activities are implemented.										
Inputs See PDM (project design matrix)										
	1. A committee (composed of teachers, pupils and parents) to facilitate the school health activities in place 2. SHCC weekly meetings are held as scheduled 3. Satisfaction level of training course participants on the course module (program) is more than 80% 4. Satisfaction level of training course participants on the training manual (handouts) is more than 80% 5. Inputs (NGO human resource, training materials and costs) are appropriate 6. SHCC members knowledge and skills are improved 7. Two community mobilisation meetings were held as per plan 8. Two health educational drama performances was conducted in the school/community as per plan 9. Two refuse pits dug and 26 carton boxes & drums sourced	H H H H M M M	1. Trained SHCC members (12 people) continue working and dropouts are replaced 2. A workplan during beyond the project period is developed and implemented by RDC/HFG 3. Health Education Activities are continued	H M H						

NOTE: SHCC=School Health Coordinating Committee(12 members)

Project Design Matrix (PDM) :

Project name : Home VIP (Ventilated Improved Pit) Latrine Project
Project Area : Bauleni

Duration: Dec. 1999 ~ July 2000 (8 months)
Target Group : Whole zones (not limited to zone 8&13)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1 A self-sustainable model for safe and sanitary home VIP latrine construction/maintenance is extended to the other zones. 2 Health and hygiene conditions of people in the project area are improved.	1 The model is applied to 11 more zones in Bauleni. 2-1 Monthly diarrhoea incidence in the pilot area is decreased.	1-1 Inspection report of EHT (Environmental Health Technician) 1-2 Report by LCC (Lusaka City Council) 2-1 Clinic report	1 No changes in the political situation and government policies.
Project Purpose A model for safe and sanitary home VIP latrine construction is developed by the community.	1 Damage observed/reported on less than 20% of all VIP latrines installed by the community. 2 Unsanitary conditions observed in less than 20% of all VIP latrines installed by the community. 3 Utilization of home VIP latrine is higher than 90% among beneficiaries. 4 The number of active LCG members.	1-1 Report by RDC/LCG 2-1 Report by RDC/LCG 3-1 Report by RDC/LCG 4-1 Report by RDC/LCG	1 LCC and Bauleni RDC agree with the extension of project. 2 Funding source for construction materials (50% of the cost) is ensured.
Outputs 1 A Latrine Construction Group (LCG) is organized under RDC. 2 An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC. 3 VIP latrines are installed with cooperation of RDC, LCG, and the	1-1 Progress monitoring is conducted by LCG/RDC. 1-2 Monthly meetings are held independently by LCG/RDC. 2-1 Satisfaction level of training course participants on the course module is more than 80%. 2-2 Satisfaction level of training course participants on the training manual is more than 80%. 2-3 Trained group members' knowledge and skills are improved. 3-1 Beneficiaries contribute up to 50% of VIP latrine installation 3-2 42 VIP latrines (including 2 demonstration latrines) are installed by the community.	1-1, 1-2 Report by RDC/LCG 2-1 Evaluation sheet collected by NGO after training 2-2 Evaluation sheet collected by NGO after training 2-3 Evaluation sheet collected by NGO after training 3-1 Report by RDC/LCG 3-2 Report by RDC/LCG	1 Incidents of vandalism do not increase. 2 No political interference experienced. 3 Cooperation from LCC/DHMT (District Health Management Team) obtained. 4 Cooperation from other community-based organization such as the Health Education Group is obtained
Activities 1-1 RDC appoints 10 individuals as the members of LCG. 1-2 RDC/LCG organize a workshop to prepare a workplan and to decide the roles and responsibilities of all stakeholders. 2-1 NGO/LCC develop a training module. 2-2 NGO/LCC conduct TOT (Training of Trainers) for LCG. 2-3 NGO/LCC review and finalize the training manual. 3-1 RDC establishes the selection criteria of beneficiaries. 3-2 LCG builds demonstration VIP latrines. 3-3 Health Educators (see Community Health Education Project PDM) mobilize the Bauleni community to screen beneficiaries according to the selection criteria. 3-4 RDC selects beneficiaries from the community. 3-5 Beneficiaries prepare local materials (river sand, crushed stones). 3-6 LCG/NGO procure and store materials. 3-7 Beneficiaries mould blocks. 3-8 Beneficiaries dig pits and LCG lines them. 3-9 LCG makes slabs. 3-10 LCG makes superstructures.	Japan 1. Human resources JICA Study Team Sub-contractor (NGO) 2. Fund (US \$ 14,000) Construction materials Training materials, fees	Zambia 1. Human resources Steering Committee LCC (Department of Public Health) DHMT (District Health Management Team) Bauleni Clinic/EHT at the clinic Community people 2. Facilities Office space & running cost of NGO	1 RDC leadership is maintained. 2 LCG members continue working. 3 Selected beneficiaries continue to contribute cash, labour, and materials.
			Preconditions 1 Political situation is stable. 2 Community accepts the project.

NOTE: Latrine Construction Group (LCG)= 10 members of the community (supervised by RDC)
Beneficiaries = 40 households in the community

Evaluation Matrix

Project Name: Home VIP (Ventilated Improved Pit) Latrine Project Duration: December 1999- July 2000
 Project Area: Bauleni (not limit) Target Group: Bauleni community
 NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High, M: Middle, L: Low

	Efficiency		Effectiveness		Impact		Relevance		Sustainability	
	High		Mostly Achieved		More positive than negative		High		Slightly Low	
	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance
Overall Goal 1. A self-sustainable model for safe and sanitary home VIP latrine construction/maintenance is extended to the other zones. 2. Health and hygiene conditions of people in the project area are improved.					1. The model is applied to outside the target beneficiaries (same zones, other zones, outside compounds) 2. Value added houses are increased (+ impact for women bricklayers are empowered (generate income, respected by community/family) 3. Women bricklayers are empowered (generate income, respected by community/family) 4. Good cooperation between health educators & LCG to	H M M M	(+) (+) (++) (++)	1. Installation of safe & sanitary toilet is in line with current central and local government's policy on public health/water and 2. The model developed satisfies needs of the middle-high income family 3. The model developed satisfy needs of the low income family	H H H	(++) (+) (+)
Project Purpose A model for safe and sanitary home VIP latrine construction is developed by the community.										
Outputs 1. A Latrine Construction Group (LCG) is organized under RDC. 2. An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC. 3. VIP latrines are installed with cooperation of RDC, LCG, and the community.										
Inputs										
See PDM (project design matrix)										

NOTE: LCG (Latrine Construction Group)

Project Design Matrix (PDM) :

Project name : Demonstrative Communal VIP (Ventilated Improved Pit) Latrine Project
Project Area : Chibolya

Duration: Dec 1999 ~ July 2000 (8 months)
Target Group : Community people in general

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal 1 A self-sustainable model for safe and sanitary communal VIP latrine construction/maintenance is extended to the other zones. 2 Health and hygiene conditions of people in the project area are improved.	1 The model is applied to other areas in Chibolya. 2-1 Monthly diarrhoea incidence in the pilot area is decreased. 2-2 Monthly cholera incidence in the pilot area is decreased.	1-1 Inspection report of EHT (Environmental Health Technician) 1-2 Report by LCC (Lusaka City Council) 2-1, 2-2 Clinic report	1 No changes in the political situation and government policies.
Project Purpose A model for safe and sanitary communal VIP latrine construction is developed by the community.	1 Damage observed/reported on less than 20% of the VIP latrine installed by LCG/RDC. 2 Unsanitary conditions observed in less than 20% of the VIP latrine installed by LCG/RDC. 3 Utilization of the VIP latrine is increased by 20%. 4 The number of active LCG members.	1-1 Report by RDC/LCG 2-1 Report by RDC/LCG 3-1 Report by RDC/LCG 4-1 Report by RDC/LCG	1 LCC and Chibolya RDC agree with the extension of project. 2 Funding sources for construction materials, including both the community and outside sources, are ensured.
Outputs 1 A Latrine Construction Group (LCG) is organized under RDC. 2 An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC. 3 A communal VIP latrine is installed with cooperation of RDC and LCG.	1-1 Progress monitoring is conducted by LCG/RDC 1-2 Monthly meetings are held independently by LCG/RDC. 2-1 Satisfaction level of training course participants on the course module is more than 80%. 2-2 Satisfaction level of training course participants on the training manual is more than 80%. 2-3 Trained group members' knowledge and skills are improved. 3-1 Two demonstration communal VIP latrines are installed by LCG.	1-1, 1-2 Report by RDC/LCG 2-1 Evaluation sheet collected by NGO after training 2-2 Evaluation sheet collected by NGO after training 2-3 Evaluation sheet collected by NGO after training 3-1 Report by RDC/LCG	1 Incidents of vandalism do not increase. 2 No political interference experienced. 3 Cooperation from LCC/ DHMT (District Health Management Team) obtained. 4 Cooperation from other community-based organization such as the Health Education Group is obtained
Activities 1-1 RDC appoints 10 individuals as the members of LCG. 1-2 RDC/LCG organize a workshop to prepare a workplan and to decide the roles and responsibilities of all stakeholders. 2-1 NGO/LCC develop a training module. 2-2 NGO/LCC conduct TOT (Training of Trainers) for LCG. 2-3 NGO/LCC review and finalize the training manual. 3-1 LCG selects a demonstration site. 3-2 LCG prepares local materials (river sand, crashed stones). 3-3 LCG/NGO procure and store materials. 3-4 LCG moulds blocks. 3-5 LCG digs pits and line them. 3-6 LCG members make slabs. 3-7 LCG makes superstructures.	Japan 1. Human resources JICA Study Team Sub-contractor (NGO) 2. Fund (US \$2,000) Construction materials Training materials, fees	Zambia 1. Human resources Steering Committee LCC (Department of Public Health) DHMT (District Health Management Team) Kanyama Clinic/ EHT at the clinic Community people 2. Facilities Office space & running cost	1 RDC leadership is maintained. 2 LCG members continue working.
			Preconditions 1 Political situation is stable. 2 Community accepts the project.

NOTE: Latrine Construction Group (LCG) = 10 members of the community (supervised by RDC)

Evaluation Matrix

Project Name: Demonstrative Communal VIP (Ventilated Improved Pit) Latrine Project
 Duration: December 1999- July 2000
 Project Area: Chibolya
 Target Group: Chibolya community
 NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved
 H: High, M: Middle, L: Low

	Efficiency		Effectiveness		Impact		Relevance		Sustainability	
	Slightly Low		Mostly Achieved		Both negative and positive impacts are observed		High		Slightly low	
	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance
Overall Goal 1 A self-sustainable model for safe and sanitary communal/home VIP latrine construction /maintenance is extended to the other zones. 2 Health and hygiene conditions of people in the project area are improved.					1. The VIP latrine model is applied to outside the target beneficiaries (same zones, other zones, outside compounds) 2. Bricklayers are empowered (generate income, respected by	H	1. Installation of safe & sanitary toilet is in line with current central and local government's policy on public health/water and sanitation 2. The model developed satisfies needs of the community middle-high	H	1. Trained LCG members can continue building and training community for installation of VIP latrine technology 2. LCG is supervised by RDC and built organizational capacity	H
Project Purpose					3. Good cooperation between health educators & LCG to identify household who needs good VIP is in	M				
A model for safe and sanitary communal VIP latrine construction is developed by the community.					4. The VIP latrine constructed is not	M				
Outputs										
1 A Latrine Construction Group (LCG) is organized under RDC.	1. Two demonstrative VIP latrines are installed as scheduled at right site	H			1. Damage is not observed/reported on the communal demo	H				
2 An appropriate training course method (a course module and a manual) for the community is developed by NGO/LCC.	2. Satisfaction level of training course participants on the course module (program) is more than 80%	H			2. Unsanitary conditions not observed in the communal demo VIP	H				
3 A communal VIP latrine is installed with cooperation of RDC, LCG	3. Satisfaction level of training course participants on the training manual (handouts) is more than 80%	H			3. Utilization of the communal demo VIP latrine is increased	H				
Inputs					4. Trained LCG members continue working actively and dropouts	H				
See PDM (project design matrix)					5. Workplan beyond the project is planned and implemented	H				
	4. 80% of the bricklayers (LCG) who received training remain active to build VIP latrines	H								
	5. Inputs (NGO human resource, construction materials and costs) are	H								
	6. Input (construction materials) are provided at	H								

NOTE: LCG (Latrine Construction Group)

Appendix A - 1 - 4 - (1) Community School Project Design Matirix (PDM)

Project name: Community School Development
Project area: Chibolya

Duration :March - November 2000

Target Group: Out-of School children between 9-16years old

Narrative Summary		Verifiable Indicators		Means of Verification	Important Assumptions
Overall Goal 1. More children have access to basic education in the compound. 2. School is maintained and managed properly.	Project Purpose A model for community school is developed by the community.	1. Decrease of out-of-school children 2-1. School facilities are not damaged. 2-2. School is open every day.		Annual report of Ministry of Education	Country's Education strategy does not change.
		1.High participation rate is achieved for the school development. 2. Girls, orphans and under-privileged children are enrolled.		1.Monthly report by NGO 2.Report of Education Committee and PTA	The community (RDC and Education committee) can get fund source.
Outputs 1. Education committee and PTA are formed in collaboration with RDC. 2. Teachers are trained. 3. School building is constructed by the cooperation between PTA, Education Committee and RDC. 4. Maintenance and school running system are developed.		1-1. Monitoring is regularly conducted by PTA Education committee and RDC. 2-1. Teachers get capacities to teach Grade1-4 3-1. Quality control of teacher's training and curriculum development by NGO. 3-1. Number of participants who actively constructed. 4-1. There is no vandalism during and after the construction.		1.-1. Report of RDC and Education Committee. 2-1. Report of PTA and NGO 2-2. Bookkeeping of PTA 3-1. Report of Education Committee and PTA 4-1. Report of PTA	Economic level of households does not worsen.
		Japan 1. Human Resources JICA Study Team (Specialists and local staff) Subcontractor (NGO) 2. Fund US\$ 46,400 Construction materials Teachers' training cost			Trained Community workers continue working. Trained teachers continue working.
Activities 1-1. RDC appoints the members of Education Committee. 1-2. PTA is formed by the parents (gurdians) of selected children. 1-3. Organise workshop to prepare the work plan for construction, role and responsibilities for all stakeholders. 2-1. Education committee and RDC appoint teachers from the community. 2-2. NGO organises teacher's training. 3-1. Make detail design.(2 classrooms w/2 shifts for 160 children) 3-2. Volunteer labours are selected and mobilised. 3-3. Train and supervise labours. 3-4. Prepare the land. 3-5. Build wall fence. 3-6. Complete the wall of the building. 3-7. Complet roofing. 3-8. Build the VIP Latrines. 3-9. Connect water pipe. 3-10. Supply furniture. 4-1. Organse a workshop to decide maintenance system. 4-2. PTA fund is established. 4-3. Textbooks and teaching materials are supplied. 4-4. Monitoring and evaluation system is established.		Zambia 1. Human Resources Steering committee LCC ZCSS and Ministry of Education 2. Facilities Office space and running cost 3. Voluntary labour consubritution			Preconditions The community accepts the project.

Evaluation Matrix

Project Name: Community School Development
 Project Area: Chibolya
 Duration: March - November 2000
 Target Group: Chibolya PTA, EC, RDC and 160 out-of-school children
 NOTE: ++: Very well achieved, +: Mostly achieved, -: Not well achieved H: High, M: Middle, L: Low

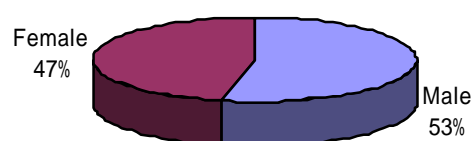
	Efficiency		Effectiveness		Impact		Relevance		Sustainability	
	Slightly Low		Partly Achieved		High		High		Slightly High	
	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance
Overall Goal 1. More children have access to basic education in the compound.					1. Awareness of importance of education was built up.	H	1. Meets the 'Education for all' policy	H	1. Community organisation (EC, PTA) has been established to support the school	H
2. School is maintained and managed properly					2. Only 160 out of 3000 out-of-school children can be enrolled in this school..	M	2. School development was not necessarily highly prioritised in the	M	2. The system of school management and Running has been outlined.	H
Project Purpose					3. Community acquired skills of school construction.	M	3. Meets the needs of poor families and Out-of-school children.	H	3. PTA capacity is still too low to manage and run the school on their own.	H
A model for community school is developed by the community.					4. Community had more trained and qualified teachers.	H	4. Community had more trained and qualified teachers.	H	4. NGO will support technical and financial support in the next two year.	H
Outputs										
1. Education committee and PTA are formed in collaboration between PTA, EC and RDC.	1. Input of materials cost was appropriate.	H	1. Girls, orphans and vulnerable children were enrolled	H	1. Awareness of importance of education was built up.	H	1. Meets the 'Education for all' policy	H	1. Community organisation (EC, PTA) has been established to support the school	H
2. Teachers are trained.	2. Labour cost was higher than planned.	H	2. Only 4 out of 10 workers are from Chibolya	H	2. Only 160 out of 3000 out-of-school children can be enrolled in this school..	M	2. School development was not necessarily highly prioritised in the	M	2. The system of school management and Running has been outlined.	H
3. School building is constructed by the cooperation between PTA, EC and PTA.	3. Materials were not delivered on time.	H	3. Voluntary (unpaid) worker were not provided.	H	3. Community acquired skills of school construction.	M	3. Meets the needs of poor families and Out-of-school children.	H	3. PTA capacity is still too low to manage and run the school on their own.	H
4. Maintenance and school running are developed.	4. Construction is not completed on time.	H	4. Teachers' training was conducted with MOE.	H	4. Community had more trained and qualified teachers.	H	4. Community had more trained and qualified teachers.	H	4. NGO will support technical and financial support in the next two year.	H
Inputs										
Japan 1. Human Resources JICA Study Team (Specialists and local staff) Subcontractor (NGO) 2. Fund US\$ 46,400 Construction materials Teachers' training cost										
Zambia 1. Human Resources Steering committee LCC ZCSS and Ministry of Education 2. Facilities Office space and running cost 3. Voluntary labour contribution										

NOTE: LGG(Latrine Construction Group)

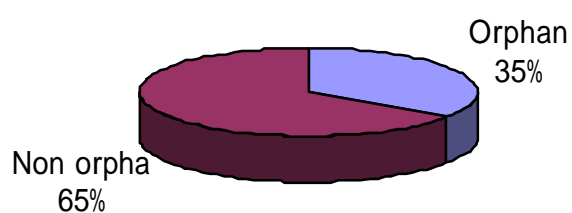
Community School Development

Results of Household Survey for Children to be enrolled

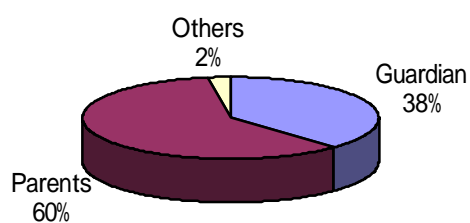
Sex of Children to be Enrolled



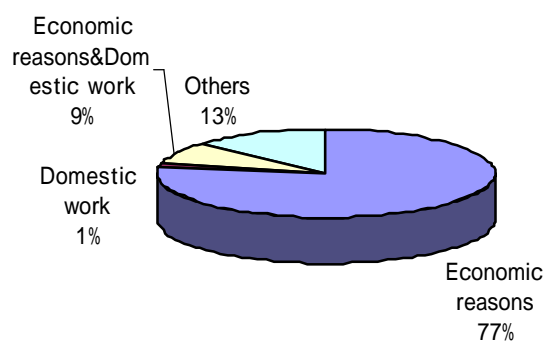
Orphan ratio



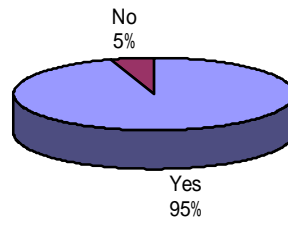
Caretakers of the child



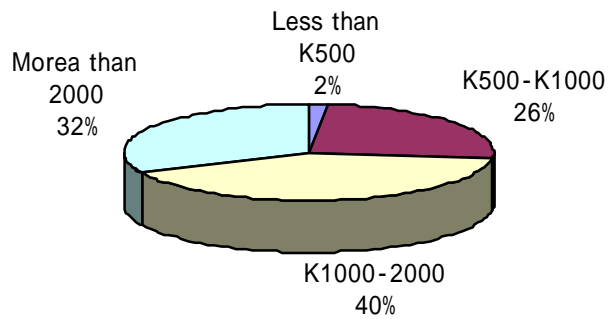
Reason for out-of-school



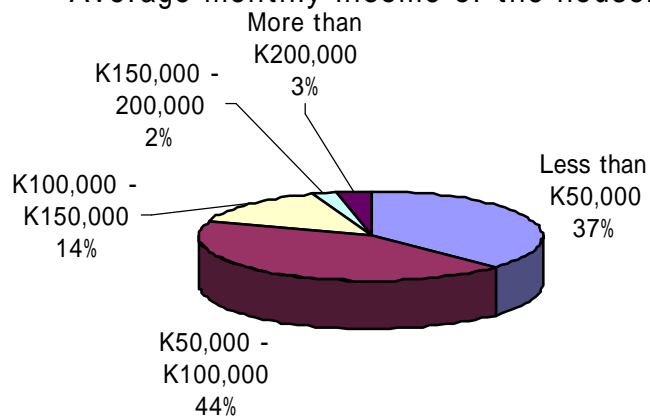
Willing to pay PTA fund?



Affordable amount of PTA fund



Average monthly income of the households



Project Design Matrix (PDM) :

Project name: Income generating project
Project area: Bauleni

Duration : December 1999 - November 2000
Target Group: Women in Zone 8 & 13 for Phase I and all zones for Phase II

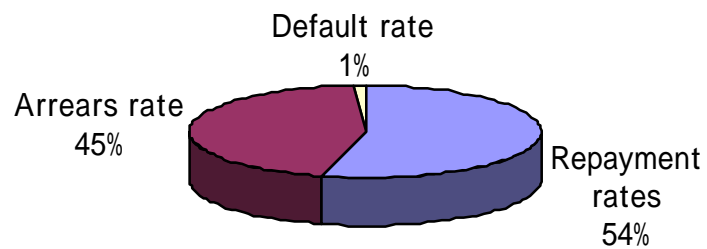
Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal A model for micro finance system is extended to other compound.	1. The number of beneficiaries is increased.	NGO reports	
Project Purpose A model for micro finance system is developed.	1. Loan repayment rate is 90% 2. Repaid money is properly saved for the revolving fund. 3. Improved expenditure pattern.	1.Monthly report by NGO&RDC 2.Report of NGO and group leader	NGO can get fund source for the next phase.
Outputs 1. LCC and RDC/ZDC acquire knowledge and skills to select beneficiaries. (to set up the Micro finance activity). 2. Women groups are organized. 3. All selected beneficiaries receive financial assistance.	1-1. Quality of the selected beneficiaries. 1-2. Fairness of selection process 2-1. Number of groups that are following the work plan. 2-2. Number of women dropped out from the group 3-1. 100 Women to the maximum.	1-1. Observation by NGO 1-2. Report of RDC & NGO 2-1. Report of RDC and NGO 2-2. Monthly report of NGO 3-2. Monthly report of NGO	Market economy does not fluctuate.
Activities 1-1. Inform the community of the project purpose and contents. 1-2 Identify prospective beneficiaries 1-3. Conduct meetings for RDC, ZDC, and prospective beneficiaries. 1-4. Accept application from the candidates. 1-5. Establish selection criteria of the beneficiaries. 1-6. Interview and screen the candidates. 1-7. Select maximum of 50 beneficiaries. 2-1. Organise workshop to prepare the work plan, criteria, rules and regulations. 2-2 Form 5 member-groups. 2-3. Elect officers, such as chairperson, secretary & accountant in each group.	Japan 1. Human Resources JICA study Team (specialist and local staff) 2. Fund US\$ 35,640 (Seed Money for the loan and Subcontractor/NGO)		Selected officers remain in the group
3-1. Organise trainings for the selected beneficiaries on skill and knowledge of credit, business, and accounting. 3-2. Finalise the criteria of loan size, repayment system, and role and responsibilities among group members. 3-3. Establish monitoring and evaluation system 3-4. Disburse the loan. 3-5 Women's Group organise regular group meeting. 3-6 Start monitoring for repayment and business progress.	Zambia 1. Human Resources Steering committee LCC 2. Facilities Office space and running costs Local Community 1. Human Resources RDC/ZDC		Preconditions Community agrees with the project.

Super Goal:
Income is secured and livelihoods are improved.

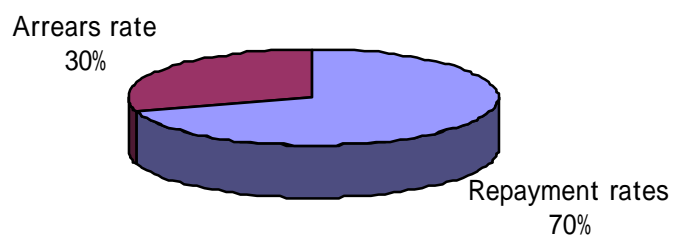
Overall Goal A model for micro finance is extended to other community	Efficiency		Effectiveness		Impact		Relevance		Sustainability		
	Low	High	Partly Achieved		Slightly High		High		Slightly Low		
			Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	Evaluation Questions	Importance	
Project Purpose A model for micro finance system is developed.			<div><div>Evaluation Questions</div><div>1.Loan repayment for Phase 1 could not reach 90%.</div><div>2.Loan repayment for Phase 2 records higher.</div><div>3.There was no misuse of repaid money</div><div>4.Selection of beneficiaries was not appropriate in Phase 1.</div><div>5.Weekly meeting was not held in Phase 1.</div><div>6.Weekly meeting is held in Phase 2.</div><div>7.Few members followed the constitution.</div><div>8.Members 'expenditure pattern was changed</div></div>	<div><div>Importance</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div></div>	<div><div>Results</div><div>(-)</div><div>(+)</div><div>(+)</div><div>(-)</div><div>(-)</div><div>(-)</div><div>(+)</div></div>	<div><div>Evaluation Questions</div><div>1. 64% of members had positivity expenditure change.</div><div>2. 24% of members had income increase.</div><div>3. 86% of members had improvement of skills and knowledge on business and financial management.</div><div>4. 77% of members feels more self reliant</div><div>5. 73% of members felt their life has been changed.</div></div>	<div><div>Importance</div><div>H</div><div>H</div><div>H</div><div>M</div><div>M</div></div>	<div><div>Results</div><div>(+)</div><div>(-)</div><div>(+)</div><div>(+)</div><div>(+)</div></div>	<div><div>Evaluation Questions</div><div>1.Meets the government policy of the poor (poverty was ranked in demands)</div><div>3.Did not reach the poorest of the poor</div></div>	<div><div>Importance</div><div>H</div><div>M</div></div>	<div><div>Results</div><div>(+)</div><div>(-)</div></div>
Outputs 1. LCC and RDC/ZDC acquire knowledge and skills to select beneficiaries to set up financial institution. 2. Women are organised. 3. All select beneficiaries receive financial assistance.	<div><div>Evaluation Questions</div><div>1.Recovery rate for phase 1 is 54.1%.</div><div>2. Default rate for phase 1 is 1 %.</div><div>3. Arrear rate for phase 1 is %.</div><div>4.Recovery rate for Phase 2 is 70%.</div><div>5.All outputs were achieved on schedule.</div><div>6. Loan disbursement for Phase 1 exceeded by 20%.</div></div>	<div><div>Importance</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div></div>	<div><div>Results</div><div>(-)</div><div>(-)</div><div>(-)</div><div>(+)</div><div>(+)</div><div>(-)</div></div>					<div><div>Evaluation Questions</div><div>1.Sustainability index is zero</div><div>2.Not enough revolving fund for next phase</div><div>3.No fund source is available for next phase.</div><div>4.Community cannot operate the financial institution by themselves.</div><div>5.No group solidarity in Phase 1</div><div>6.No group solidarity in Phase 2</div><div>7. More revolving fund in Phase 2</div><div>8.Weekly meeting is held in Phase 2.</div><div>9.More solidarity and peer pressure in Phase 2.</div><div>10. NGO can provide technical assistance.</div></div>	<div><div>Importance</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div><div>H</div></div>	<div><div>Results</div><div>(-)</div><div>(-)</div><div>(-)</div><div>(+)</div><div>(+)</div><div>(+)</div><div>(+)</div><div>(+)</div><div>(+)</div><div>(+)</div></div>	
Inputs Japan 1. Human Resources JICA study Team (specialist and local staff) 2. Fund US\$ 35,640 (Seed Money for the loan and Subcontractor/NGO) Zambia 1. Human Resources Steering committee LCC 2. Facilities Office space and running costs Local Community 1. Human Resources RDC/ZDC											

Impact Assessment of Income Generation

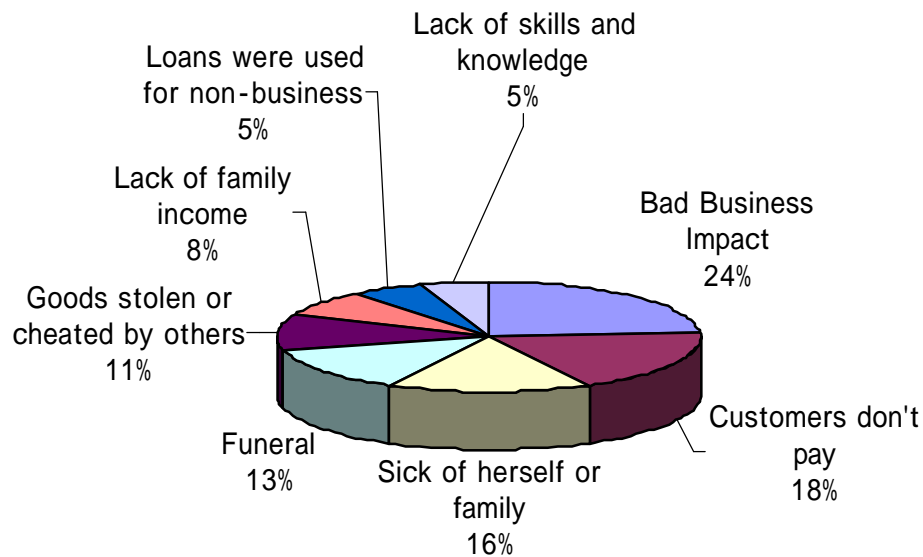
Phase I Repayment Performance (32 weeks: As of 4th Nov. 2000)



Phase II Repayment Performance (15 weeks, As of 31st Oct. 2000)



Reasons of arrears

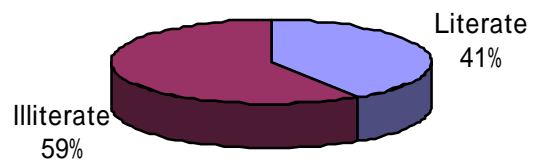


Repayment is lower in Phase 1 group than that in Phase 2.

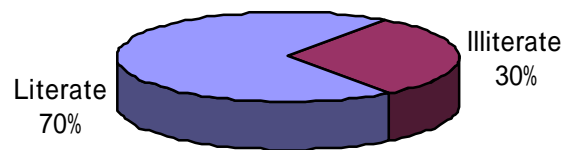
Reasons:

- **High illiteracy rate**
- **Screening of beneficiaries was not appropriate**
- **Cover only Zone 8 & 13**
- **No regular meeting and no peer pressure**
- **Do not follow the Constitution/regulation**
- **Misallocation of capital**
- **No confidentiality about individual information**
- **Repayment period (32 weeks) is short**

Literacy rate (Phase I)

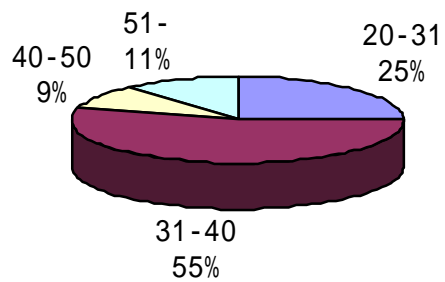


Literacy rate (Phase II)

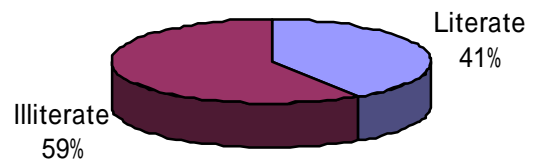


Personal Profile and Impact Assessment on Individual Basis (Phase I)

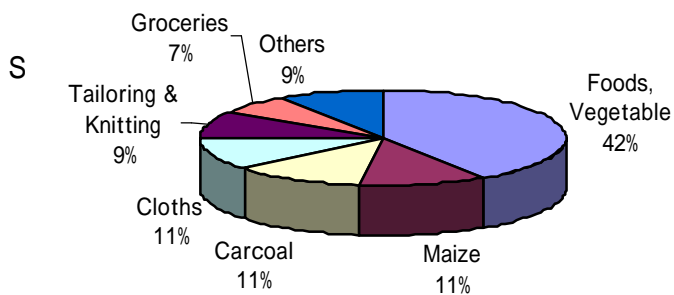
Age



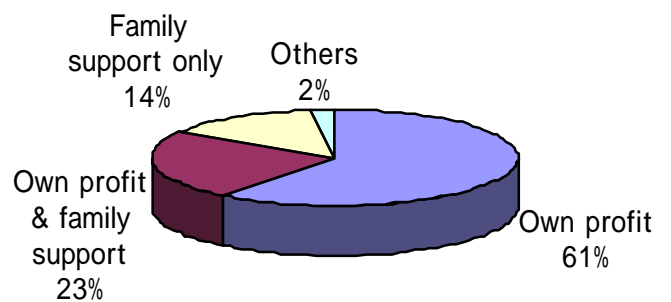
Literacy rate (Phase I)



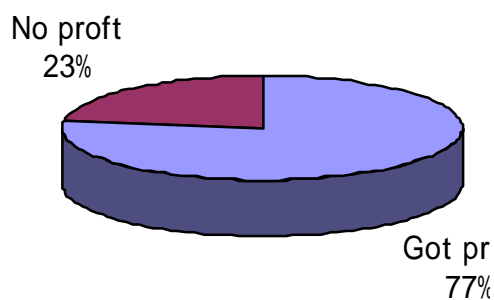
Business Type



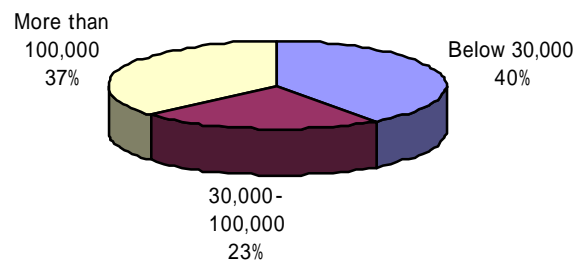
Source of loan repayment



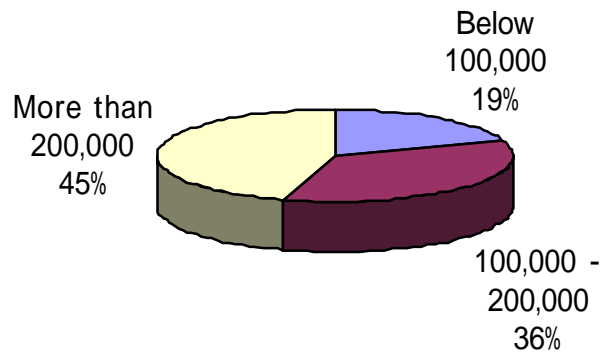
Any profit by business?



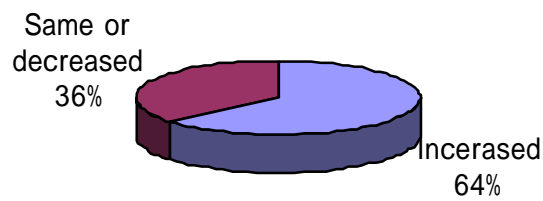
Monthly profit



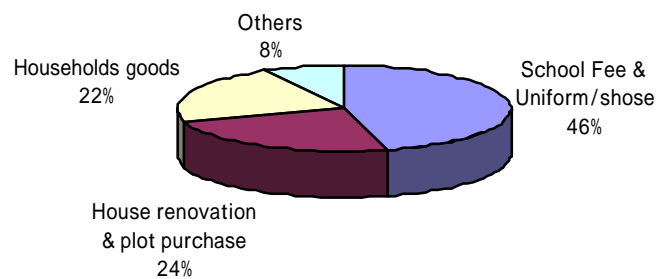
Average Monthly Household Income



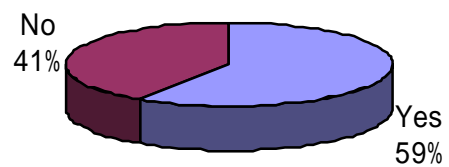
Expenditure increase by loans



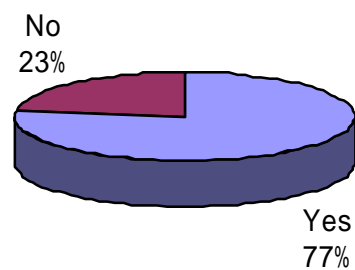
Goods bought after loans



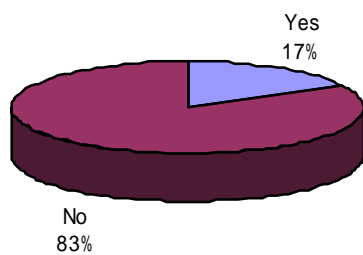
Relation (household & society)
changed?



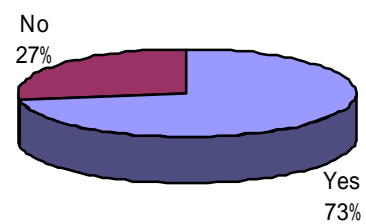
Are you confident now?



Gender relations(Access & Control of
household economy)



Has your life changed after loans?



AMDAMDA INTERNATIONAL								
INCOME GENERATING PROJECT IN BAULENI - LUSAKA								
INDIVIDUAL LOAN REPAYMENT AND SAVINGS' STATEMENT								
PHASE-1		Oct. 2000	LOAN DUE ON: 4 November 2000					
M.M.#	NAME	LOAN DISBURSED	LOAN RECOVERED	SERVICE CHARGE	LOAN ARREARS	SAVINGS & L. I. F	Repayment rate (%)	Type of Business
00101	E. CHICHEBO	500,000	155,650	19,350	375,000	10,000	31.1	Renting a house
00102	J. LUYATO	500,000	500,000	50,000	-	45,000	100	Tailoring
00103	C. MAELA	500,000	203,000	20,000	327,000	-	41.6	Passed away
00104	J. MWANG'ANSA	200,000	200,000	20,000	-	20,000	100	Dry fish
00105	R. MUCHINDU	500,000	206,250	18,750	325,000	-	41.2	Maize
	TOTALS	2,200,000	1,264,900	128,100	1,027,000	75,000	57.4	
00201	M. SHIPANUKA	500,000	136,250	18,750	395,000	5,000	27.2	Tailoring
00202	J. NKOMA	500,000	83,750	6,250	46,000	5,000	16.7	New clothes
00203	S. BANDA	500,000	41,250	6,250	502,500	10,000	8.2	Tailoing and knitting
00204	L. KYOMBELA	300,000	87,100	11,400	231,500	-	29.0	Tailroing
00205	J. NACHELWE	250,000	76,100	6,400	192,500	-	30.4	Knitting
	TOTALS	2,050,000	424,450	49,050	1,367,500	20,000	20.7	
00301	J. KUMWENDA	350,000	33,100	4,400	347,500	7,000	9.4	Charcoal
00302	M. TEMBO	500,000	252,000	25,000	273,000	15,000	50.4	Groceries (soap)
00303	G. MUMBA	500,000	262,000	25,000	263,000	20,000	52.4	Renting a house
00304	G.PUMULO	200,000	92,500	7,500	120,000	6,000	46.2	Charcoal
00305	R. CHIKOTI	500,000	151,000	25,000	374,000	35,000	30.2	Clothes
	TOTALS	2,050,000	790,600	86,900	1,377,500	83,000	38.5	
00401	M. MUSONDA	500,000	112,500	12,500	425,000	15,000	22.5	Groceries
00402	G. BANDA	500,000	282,500	37,500	230,000	35,000	56.5	Vegetable, milneal, bread
00403	M. KABWE	300,000	182,250	15,000	132,750	12,000	60.7	Charcoal
00404	J. SHUMBA	200,000	112,600	9,900	97,500	22,000	56.3	Dry fish and beans
00405	S. SHUGA	200,000	169,000	11,700	39,300	33,000	84.5	Dry fish
	TOTALS	1,700,000	858,850	86,600	924,550	117,000	50.5	

Bauleni IGP - Individual Loan Repayment Statement

Oct. 2000

M.#	NAME	LOAN DISBURSED	LOAN RECOVERED	SERVICE CHARGE	LOAN ARREARS	SAVINGS & L. I. F	Repayment rate (%)		
0501	L. DAKA	500,000	334,750	34,000	181,250	12,500	66.9	Chitenge	
0502	R. MSIMUKO	200,000	177,500	15,000	27,500	11,000	88.7	Chitenge and plastic plates	
0503	E. MWANSA	200,000	37,500	2,500	180,000	4,000	18.7	Dry fish, nuts, maize	
0504	M. KALULU	200,000	200,000	20,000	-	4,000	100.0	Underwear	
0505	N. BANDA	300,000	123,750	11,250	85,000	6,000	41.2	Dry fish, milmeal, nuts, beans	
	TOTALS	1,400,000	873,500	82,750	473,750	37,500	62.3		
0601	C. NKHOMA	300,000	242,500	22,500	65,000	6,000	80.8	Dry fish, tomato, egg	
0602	G. MULUPILA	200,000	110,000	10,000	100,000	4,000	55.0	Dry fish and vegetable	
0603	M. MWANZA	500,000	234,000	25,000	291,000	5,000	46.8	Maize	
0604	E. CHIYAMA	500,000	315,000	25,000	210,000	5,000	63.0	Livestocks (pigs)	
0605	Z. MWANZA	500,000	378,750	41,250	130,000	-	75.7	Dry fish, vegetable	
	TOTALS	2,000,000	1,280,250	123,750	796,000	20,000	64.0		
0701	M. SIBBILISOKWE	500,000	346,750	31,250	172,000	30,000	69.3	Dry fish, vegetable	
0702	E. TEMBO	200,000	157,500	17,500	45,000	12,500	78.7	Charcoal	
0703	N. PHIRI	500,000	192,370	20,630	33,700	20,000	38.4	Renting a house	
0704	B. NAMUSIYA	300,000	191,250	18,750	120,000	10,000	63.7	Maize	
0705	M. NGULETA	500,000	347,550	32,450	170,000	-	69.5	Charcoal	
	TOTALS	2,000,000	1,235,420	120,580	540,700	72,500	61.7		
0801	A. FLOWEZA	500,000	110,500	12,500	427,000	10,000	22.1	Second handed clothes	
0802	M. BANDA	500,000	120,500	12,500	417,000	12,000	24.1	Groceries	
0803	J. PHIRI .B	500,000	298,000	25,000	227,000	17,000	59.6	Second handed clothes	
0804	L. SAKALA	500,000	339,500	37,500	173,000	12,000	67.9	Charcoal	
0805	R. NYIRENDA	350,000	135,000	17,500	232,500	8,000	38.5	Chitenge	
	TOTALS	2,350,000	1,003,500	105,000	1,476,500	59,000	42.7		
0901	J. BANDA	200,000	55,000	5,000	160,000	-	27.5	Second handed clothes	
0902	J. KABALI	315,000	77,875	7,875	260,750	-	38.9	Charcoal and vegetable	
0903	G. BWALYA	300,000	49,950	7,500	272,550	10,000	16.6	Dry fish	
0904	R. ZULU	200,000	35,000	2,500	182,500	-	17.5	Flitters	
0905	M. MTONGA	500,000	132,500	12,500	405,000	15,000	26.5	Second handed clothes	
0906	C. ZULU	450,000	215,770	28,130	251,100	13,100	47.9	Maize	
	TOTALS	1,965,000	566,095	63,505	1,531,900	38,100	28.8		

[illegible]

M.#	NAME	LOAN DISBURSED	LOAN RECOVERED	LOAN OUTSTANDING	SERVICE CHARGE	LOAN ARREARS	SAVINGS	L.I.F		
1301	E. MWALE	300,000	111,000	189,000	11,400	83,850	51,000	15,000	37.0	Tailoring
1302	R.E.M PHIRI	300,000	150,000	150,000	15,200	41,050	53,600	15,000	50.0	Tavern, groceries
1303	M. NKOMA	300,000	112,800	187,200	11,400	82,050	57,000	15,000	37.6	Clothes
1304	A. ILUNDE	300,000	96,600	203,400	11,400	98,250	24,000	15,000	32.2	Barber
1305	M. TEMBO	300,000	150,400	149,600	15,200	40,650	45,000	150,000	50.1	Barber
	TOTALS	1,500,000	620,800	879,200	64,600	345,850	230,600	75,000	41.4	
1401	R. CHILEMBO	300,000	140,300	159,700	11,700	54,250	33,000	15,000	46.8	Tailoring
1402	D. BWALYA	300,000	85,700	214,300	9,000	111,550	12,000	15,000	28.6	Dry fish
1403	E. NALWIMBA	300,000	95,500	204,500	11,000	99,750	12,000	15,000	31.8	Dry fish & vegetable
1404	G.MPANSHY	300,000	103,200	196,800	9,300	93,750	9,000	15,000	34.4	Kitchenware
1405	M. CHISHIMBA	300,000	37,900	262,100	7,400	160,950	12,000	15,000	12.6	Food stuff
	TOTALS	1,500,000	462,600	1,037,400	48,400	520,250	78,000	75,000	30.8	
1501	J. KANYENYE	300,000	75,200	224,800	7,600	123,450	15,000	15,000	25.1	Vegetable
1502	F. LUNGU	300,000	37,600	262,400	3,800	164,850	26,000	15,000	12.5	Dry fish
1503	C. HAKALOBA	300,000	37,600	262,400	3,800	164,850	18,000	15,000	12.5	Shoes
1504	R. CHAPISA	300,000	111,400	188,600	11,400	83,450	33,000	15,000	37.1	Bread
1505	H. ISAAC	300,000	188,000	112,000	19,000	(750)	66,000	15,000	62.7	Groceries
	TOTALS	1,500,000	449,800	1,050,200	45,600	535,850	158,000	75,000	30.0	
1601	B. CHISANGA	300,000	300,000		30,000		27,000	15,000	100.0	Food stuff, bar
1602	M. MVULA	300,000	37,600	262,400	3,800	164,850	6,000	15,000	12.5	Groceries
1603	M. LUNGU	300,000	112,800	187,200	11,400	82,050	21,000	15,000	37.6	Groceries
1604	G. MBEWE	300,000	77,800	222,200	7,600	120,850	-	15,000	25.9	Second handed clothes
1605	D. NAKANYIKA	300,000	75,200	224,800	7,600	123,450	9,000	15,000	25.1	Maize & charcoal
	TOTALS	1,500,000	603,400	896,600	60,400	491,200	63,000	75,000	40.2	

M.#	NAME	LOAN DISBURSED	LOAN RECOVERED	LOAN OUTSTANDING	SERVICE CHARGE	LOAN ARREARS	SAVINGS	L.I.F	Repayment rate (%)	
1701	R. FWAMBO	300,000	150,000	150,000	11,400	41,050	63,000	15,000	50.0	Food stuff
1702	L. MWALE	300,000	150,400	149,600	11,400	40,650	54,000	15,000	50.1	Second handed clothes
1703	J. PHIRI	300,000	132,800	167,200	11,400	62,050	42,000	15,000	44.3	Groceries
1704	S. NAMUYEMBA	300,000	300,000	-	11,400	-	23,000	15,000	100.0	Second handed clothes
1705	M. MUYAYWA	300,000	68,300	231,700	7,600	134,150	39,000	15,000	22.8	Groceries
	TOTALS	1,500,000	801,500	698,500	53,200	277,900	221,000	75,000	53.4	
1801	E. BULANGETI	300,000	112,800	187,200	11,400	82,050	24,000	15,000	37.6	Clothes, kitchenware
1802	C. NANJUWA	300,000	129,000	171,000	15,200	62,050	6,000	15000	43.0	Second handed clothes
1803	C. CHANSA	300,000	-	300,000	-	206,250	0	15000	0.0	Second handed clothes
1804	R. NGAZI	300,000	-	300,000	-	206,250	6,000	15000	0.0	Second handed clothes
1805	J. MWALE	300,000	37,600	262,400	3,800	164,850	19000	15000	12.5	Second handed clothes
	TOTALS	1,500,000	279,400	1,220,600	30,400	721,450	55,000	75,000	18.6	
1901	E. MPANDE	300,000	129,000	171,000	15,200	62,050	36,000	15,000	43.0	Tavern
1902	E. MFULA	300,000	152,800	147,200	15,200	38,250	53,000	15,000	50.9	Hair salon
1903	A. MWALE	300,000	91,900	208,100	11,400	102,950	42,000	15,000	30.6	Food stuff
1904	E. NAMUKASA	300,000	146,200	153,800	15,200	44,850	42,000	15,000	48.7	Barber
1905	M. MWALE	300,000	149,000	151,000	15,200	42,050	33,000	15,000	49.7	Pre-school
	TOTALS	1,500,000	668,900	831,100	72,200	290,150	206,000	75,000	44.6	

AMDA INTERNATIONAL PROJECT OFFICE IN ZAMBIA

BAULENI INCOME GENERATING LOAN TRANSACTION STATUS REPORT BY GROUP

PHASE - I

27 MARCH, 2000 TO 28 FEBRUARY, 2001

GROUP #	1	2	3	4	5	6	7	8	9	TOTALS
LOAN ISSUED	2,200,000	2,050,000	2,050,000	1,900,000	1,400,000	2,000,000	2,000,000	2,350,000	1,965,000	17,915,000
LOAN DUE	2,200,000	2,050,000	2,050,000	1,900,000	1,400,000	2,000,000	2,000,000	2,350,000	1,965,000	17,915,000
LOAN RECOVERED	1,573,000	455,550	983,750	1,011,000	914,500	1,820,000	1,624,700	1,074,100	677,770	10,134,370
LOAN OUTSTANDING	627,000	1,594,450	1,066,250	889,000	485,500	180,000	375,300	1,275,900	1,287,230	7,780,630
S/C EXPECTED	220,000	205,000	205,000	190,000	140,000	200,000	200,000	235,000	196,500	1,791,500
S/CHARGE DUE	220,000	205,000	205,000	190,000	140,000	200,000	200,000	235,000	196,500	1,791,500
S/C RECEIVED	131,750	41,700	78,250	91,150	86,500	175,000	143,850	101,600	69,410	919,210
S/C OUTSTANDING	88,250	163,300	126,750	98,850	53,500	25,000	56,150	133,400	127,090	872,290
LOAN S/C DUE	2,420,000	2,255,000	2,255,000	2,090,000	1,540,000	2,200,000	2,200,000	2,585,000	2,161,500	19,706,500
P. S/C PAID TO DATE	1,704,750	497,250	1,062,000	1,102,150	1,001,000	1,995,000	1,768,550	1,175,700	747,180	11,053,580
P. S/C, LIF PAID TO DATE	1,795,500	497,250	1,087,000	1,193,300	1,038,500	2,053,500	1,841,050	1,214,700	747,180	11,467,980
LOAN S/C ARREARS	715,250	1,757,750	1,193,000	987,850	539,000	205,000	431,450	1,409,300	1,414,320	8,652,920
No. OF LOANEES	5	5	5	5	5	5	5	5	6	46
No. OF GRADUATES	2	-	-	-	2	4	2	-	-	10
SAVINGS/LIF COLLECTED	80,000	-	25,000	68,000	37,500	58,500	72,500	39,000	-	380,500
LOAN REPAYMENT RATE%	72	22.2	48	53.2	65.3	91	81.2	46	35	57
LIF/S.C/SAVINGS %	82	24.3	48.2	63	74.2	103	84	52	36	64
ARREARS RATE%	35	78	52	47	35	9	19	54.3	67	43.4

AMDA INTERNATIONAL PROJECT OFFICE IN ZAMBIA

BAULENI INCOME GENERATING LOAN TRANSACTION STATUS REPORT BY GROUP

PHASE - II JULY 2000 to FEBRUARY 2001

GROUP #	10	11	12	13	14	15	16	17	18	19	TOTALS
LOAN ISSUED	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	15,000,000
LOAN DUE	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	15,000,000
LOAN RECOVERED	1,111,000	1,307,500	1,176,400	885,600	680,900	636,600	675,800	849,700	364,600	1,432,000	9,120,100
LOAN OUTSTANDING	389,000	192,500	323,600	614,400	819,100	863,400	824,200	650,300	1,135,400	68,000	5,879,900
S/C EXPECTED	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000
S/CHARGE DUE	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000
S/C RECEIVED	109,800	125,500	117,800	79,800	66,000	68,000	68,000	75,600	38,000	139,000	887,500
S/C OUTSTANDING	40,200	24,500	32,200	70,200	84,000	82,000	82,000	74,400	112,000	11,000	612,500
LOAN S/C DUE	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000	16,500,000
P. S/C PAID TO DATE	1,220,800	1,433,000	1,294,200	965,400	746,900	704,600	743,800	925,300	402,600	1,571,000	10,007,600
P. S/C, LIF PAID TO DATE	1,295,800	1,508,000	1,369,200	1,040,400	821,900	779,600	818,000	1,000,300	477,600	1,646,000	10,756,800
LOAN S/C ARREARS	413,500	217,000	355,800	684,600	903,100	945,400	906,200	724,700	1,247,400	79,000	6,476,700
TOTAL No. OF LOANEES	5	5	5	5	5	5	5	5	5	5	50
No. OF GRADUATES	1	2	2	-	-	-	1	1	-	4	11
LIF COLLECTED	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	750,000
SAVINGS COLLECTED	105,000	184,000	150,700	274,400	81,000	188,000	76,000	221,000	65,000	206,000	1,551,100
PRINC REP RATE %	74.1	87.2	78.4	59	45.4	42.4	45.1	57	24.3	96	61
LOAN & LIF RATE	80	91	83	63.1	50	47.2	50	61	29	100	65.2
LIF/SAV/S.C %	86	103	92.1	80	55	59	54.2	74	33	112.4	75
ARREARS RATE%	26	13	22	41	55	58	55	43.4	76	5	39.2

Bauleni water pilot project evaluation report

November 2000

Background

Community size and organization

Bauleni is a large settlement on the outskirts of Lusaka. Household plots are relatively large and the surroundings green and mountainous. The rapidly growing population is estimated at around 45,000 divided into 13 zones. Three elected members from each zone comprise the Forum of Zone Representatives (FZR) and 10 of the FZR members comprise the Residents Development Committee (RDC). The pilot studies were implemented in Zones 8 and 13 in the hilly eastern part of the settlement which are currently estimated to have 253 and 229 households respectively. Total population of the pilot area is close to 3000 based on an average household size of 6.

Bauleni was considered well organized and with good capacity at the time the pilot project sites were selected because of the experience of the RDC in working with four other donors on similar infrastructure upgrading projects.

Water supply situation

At the time of the initial surveys, Lusaka Water and Sewerage Company (LWSC) was the main supplier of water to Bauleni with one centrally located borehole, 11 public taps and individual connections serving about 60% of the settlement. LWSC provides water free of charge although some of the taps were taken over by sectors of the community who were charging user fees. The system was found to have low pressure and a lot of leakage.

In the southern part of the settlement, Human Settlements of Zambia (HUZA) operates one borehole and two taps, and PoCMUS has a borehole and single tap. PoCMUS has the plan to develop a scheme in the north, but progress has been slow to date. Private boreholes exist at the Bauleni Basic School, Takamado Primary School and clinic, although the clinic borehole is no longer operational.

The baseline household survey of 300 households in Zones 8 and 13 found that more than two-thirds (72.3%) of the households drew their drinking water from a public tap and that the same source was used for other uses than drinking for almost all households (98.2%). Most households (89.1%) collected water on a daily basis.

Before the JICA pilot water scheme, those in the eastern zones were obliged to walk moderate distances to collect water. Nearly half (45%) of the households took 5-15 minutes to walk to the water source while approximately one-third (30.4%) took less than 5 minutes, indicating availability of a water source within their yard. A relatively small percentage (8.5%) took more than 30 minutes to walk to the source. However, three-quarters (76.6%) of the households queued up for a period of longer than 30 minutes in order to draw water, indicating congestion on the public taps in and near Zones 8 and 13. Consequently, residents felt a strong need for safe water closer to home resulting in their request for a borehole and water supply.

Most households (84.5%) in Zones 8 and 13 paid for their water, and indicated the amount was less than K10,000 per month. Most were paying K5000/month user fees to a church in the area that was running one of the LWSC taps on a commercial basis even though they were not paying to LWSC themselves. This tap was extremely congested with people often waiting

an hour or more to draw their water. Bauleni community representatives ranked water as the first priority need in the settlement, while nearly all residents of zones 8 and 13 (98.5%) also expressed the need for safe water facilities. Over 90 percent expressed a willingness to pay for water and an even higher percentage (96.4%) indicated their willingness to participate in the water project mainly through provision of labor.

Project purpose

Two main purposes were conceived for piloting a water project in Bauleni. The first was to test community participation in a well-organized settlement and the other was to evaluate the possibility of individual connections to the new system. Later, the plan for individual connections was not pursued because it was deemed inconsistent with JICA's grant aid scheme which supports public water supply facilities.

Project approach

Once the decision was made to pilot a water scheme in Bauleni, workshops were held in the community to analyze the problems (sanitation and income generation in addition to water), consider opportunities and threats, identify project sites and develop work plans. Following this, a memorandum of understanding (MOU) was signed between the RDC and JICA Study Team. Lusaka City Council (LCC) Community Development Officers (CDOs) served as the liaison between the community and JST and provided support to both groups.

A contractor was hired to carry out the construction works and laborers were hired from the community at minimum wage (K3000/day) for general workers and slightly higher for skilled (bricklayers). RDC members screened the labor force. Hundreds of community members also volunteered labor for the backfilling of trenches. See details of works schedule and role of community in the table below.

Bauleni water improvement project – role of community in construction works

Item	Start date	End date	Role of community
Borehole construction	31/05/2000	03/06/2000	None
Tap stand design and siting	01/04/2000	30/04/2000	subcontractor designed; community identified appropriate locations
Tap stand construction	01/05/2000	30/05/2000	15 male general laborers employed
Tank construction	07/08/2000	25/08/2000	None
Trench digging	05/06/2000	25/06/2000	25 male general laborers employed
Pipe laying	04/07/2000	20/07/2000	None
Backfilling of trenches	04/07/2000	20/07/2000	labor provided on volunteer basis (est.1000 men and women participated)
Identification of pipe routes	25/11/1999	26/11/1999	subcontractor consulted community; LWSC provided technical support
Construction of pump house and wall fence	06/06/2000	06/09/2000	6-7 bricklayers employed
Locking system installed		25/09/2000	designed and constructed locks; paid for from initial user fees
Flow meters installed		15/09/2000	None
Automatic float switch installed		15/09/2000	None

The system became operational on September 20, 2000.

Project design

The original plans for service level and facilities, along with the actual implementation and current situation are shown in the tables below:

Bauleni water pilot project service level

Description	Plan / estimate	Actual (Nov 2000)
Served area	Zones 8 & 13	Zones 7, 8 & 13
Served population	4,000	1800
Number of households	400	235 (Oct) / 294 (Nov)
Water consumption (lpcd)	20	33
Water demand (m ³ /d)	80	59
Water source	existing	new
Water yield at borehole (l/sec)	10	8
Number of public taps	10	water points 10 / taps 20
Minimal residual water height (m) at tap	5	5
Served population per public tap	400	120 – 300 per water point (60 – 150 per tap)
Length of distribution pipeline (m)	1000	1050

Bauleni water pilot project main facilities

Description	Plan / estimate	Actual
Borehole: 1 unit (depth: m)	60	42
Submersible pump: 1 set (capacity: l/minute)	600	450
Lift pipe: GSP (m)	45	27
Operation room with electric power	1 unit	1 unit
Boundary wall with height of 2m (length: m)	20	56
Transmission pipe: GSP (m)	500	480
Elevated tank: 1 unit (m ³)	60	50
Distribution pipeline: PVC (length: m)	1000	1050
Number of public taps (unit)	10	10 water points (20 taps)

The plan was to use the existing borehole, but upon testing it was found that it was not deep enough to be a reliable water source, therefore a new borehole was drilled just a few meters away. Fire hydrants were not installed due to unavailability.

Training provided under project

Type (provider)	Dates (total days)	Participants	Purpose	Contents
Community water management training (ADaT)	8-12 August 2000 (5 days)	RDC finance and water committees, tap attendants (20)	Provide community with financial and management skills to run new water system	Community participation Team and team-building skills Conflict resolution Project planning and management Project proposal writing Resource mobilisation Financial management Levying and levying methods
Water system operation and maintenance training (LWSC)	(3 days)	RDC finance and water committees, tap attendants (13)	Provide community with technical skills for O&M of new water system	Water production (borehole water supply)—treatment, operation of equipment, record keeping and report writing, maintenance and housekeeping of infrastructure.

		*5 newly-appointed TAs attended LWSC training for Chibolya (Nov 2000)		Water distribution—networks, operation of valves, meter reading, failures and their causes, repairs. Water quality—control, sampling, testing, treatment, cleaning of pipes, reservoirs and elevated tanks. Plumbing Maintenance—electrical, mechanical, fault finding and first line preventive maintenance. Safety
Field trip to other Lusaka settlements to observe water system management	(1 day)	RDC water and finance committees, tap attendants (12)	Provide community with opportunity to observe the O&M systems in other settlements and discuss details with managers	Kamanga—Irish Aid project Ng’ombe—Rotary International and LWSC Chipata—CARE Prospect George—LWSC

Water scheme operation

The RDC Chairman along with three other active RDC members is overseeing the daily operations of the water scheme on a volunteer basis. The Chairman has the most responsibility: he holds the keys to the pump house, operates the pump, chlorinates the water in the tank twice daily, reads meters, and troubleshoots any issues arising. The other three RDC members have the roles of cashier, accountant and back-up operator. The four work together closely on a daily basis.

In addition, a night watchman is employed to patrol the borehole and tank sites, and ten Tap Attendants (TAs) working on a commission basis have the following roles and responsibilities:

- Distributing water (monitoring usage)
- Collecting user fees (currently using exercise books to record) and checking receipts/cards
- Meter reading
- Cleaning tap stands and surrounding area
- Maintaining order at tap stands (stopping children from playing, etc.)
- Public Relations at tap stand
- Reporting faults
- Any other duties assigned

The TA located at the tank site also opens and closes the tank and assists with chlorination. Taps are open daily from 07:00-12:30 (from 06:30 on Sundays) and 14:00-18:00. A limit of 10 containers (200 liters) per household per day was set to safeguard against people drawing on their neighbor’s account, and 2 extra containers are allowed for larger households who demand more.

Financial management

TAs collect the user fees and turn over the money on a daily basis to the acting cashier from the RDC finance committee. For security purposes, the money is handed over inside the fenced borehole site with a witness present.

Water levies

1. Kwacha 3,000/household/month for 10 buckets (4 additional buckets allowed for funerals). (This is standard water levy in Lusaka settlements.)

2. Kwacha 100/bucket
3. Building charge Kwacha 5,000/month (now being increased to Kwacha 10,000/month)

Water levy estimated breakdown (Nov 2000)

Amount	Category
1200	TA Commission (pooled & divided by 12)
400	ZESCO (electricity to operate pump)
300	maintenance
100	chemicals (for treatment)
800	administration <ul style="list-style-type: none"> • transport • stationery • communication • banking • salaries (security guard) • miscellaneous
200	RDC (general bank account)
3000	TOTAL

- Building and per bucket fees are kept separate. TAs will be paid a fixed monthly base salary (currently K 8,000) from these funds.

Membership fee

- Kwacha 5,000/year or Kwacha 500/month
- Membership fees will go directly into capital replacement fund

Accounting

- Accounts will be kept according to the allocation of funds
- LCC finance officers will provide assistance setting up record keeping books and procedures

Evaluation objectives and methodology

Evaluation exercises were carried out in October 2000, only a matter of weeks following the start of operation of the system. Monitoring occurred throughout the implementation process.

The overall objectives of the evaluation were:

1. To assess the appropriateness of the design and quality of infrastructure
2. To examine community participation in the project and ownership of the water system
3. To determine the social and economic impact of the new water supply on Bauleni residents, particularly those in Zones 8 and 13
4. To consider the factors contributing to success and failure
5. To build capacity of LCC and RDC in monitoring and evaluation.

The following methodology were employed:

1. Analysis of community monitoring sheets, task force meeting minutes and member reports
2. One-day participatory workshop involving all stakeholders

3. Focus group discussions with RDC members and Tap Attendants
4. Survey of 300 households in Zones 8 and 13 carried out by subcontractor.

As this was considered a pilot project, the evaluation was generally a self-assessment although an outside subcontractor was used for the household survey and some of the focus group discussions. The lessons learned are intended to be fed into future project designs, guidelines and manuals to be produced by the study.

Findings

Efficiency

Community participation. In the early stages of the project, the community showed reluctance to get involved as demonstrated by the low number of people attending meetings and their lack of punctuality. The slow start was attributed to the history of several water projects being embarked upon, but not followed through in the community. People's confidence in leaders had eroded from being let down and cheated in the past. However, as time went on interest rose along with level of participation. Once construction was underway people were keen to volunteer time and labor. At the time of the evaluation workshop, the meeting room was full of the maximum number of participants before the starting hour. The household surveyors also noted receiving a much warmer welcome when returning to Bauleni following the completion of the project.

Overall, training activities were appropriate and well attended. Gaps in training were filled in during informal discussions with project managers, and community leaders now have a good understanding of what further training is required and where to seek it. RDC members and TAs attended trainings together, so although roles and responsibilities are different, all those actively involved have a broad understanding of both technical and financial management aspects of the water scheme.

Women voluntarily participated in the project in much greater numbers than men. The community attributed this to men working outside the settlement, water being primarily women's concern, and the fact that men are less willing to volunteer for unpaid community work. Some noted that men would rather participate in politics than voluntary work.

However, it is notable that the paid laborers were all men. Although women had applied for some positions and had the necessary skills, there was resistance to hire them. There was no difficulty to recruit the paid laborers as word spread through the community even without advertising.

Eleven of the 12 initial TAs were women. During project implementation, their function was monitoring pipe routes and tap stand areas so they were not encroached upon, monitoring progress, participating in the backfilling of trenches, and attending workshops and training courses.

There were no significant problems related to mobilizing the community, although because the same members tend to get involved in all such donor activities and JST implemented sanitation, health education and income generation components simultaneously, some people noted the competing demands on their time. Also, some community members found that their friends discouraged them from doing work on a voluntary basis.

Stakeholder relations. Working relations among stakeholders were considered excellent. The subcontractor praised the RDC saying they were “well organized, helpful and dedicated”. The project provided the impetus for representatives from JST, HUZA, PoCMUS, LWSC (as water providers) and LCC and Bauleni RDC to sit together to harmonize water tariffs and allocation in the settlement among other issues. The RDC is still involved in discussions with LWSC, but the channels of communication are open and progress is being made. LCC site officers did not take as active role as they could have, although the CDO provided coordination and valuable support.

Technology. According to the subcontractor, the water system designed and implemented is ideal for Bauleni: “The head at each stand post is more than sufficient, the tank is strong and durable and on an unshakable base. The pipes are of high quality. The pump installed is a KSB and therefore will be easily maintained by LWSC. The system is fully automated by a float switch in the tank which signals the pump to switch in when the tank is near empty and to switch off when it is full. The water delivery points are efficient and well built, each with an individual flow meter (and a main flow meter at the borehole outlet).”

The main concern expressed by the community was the design of the stand posts which lack a good base for women to lift the water container to their head, especially when also carrying a child on their back. Other recommendations were for the water points to have shelter (to protect TAs from both rain and sun) and laundry facilities.

Politics. Both LCC officers and the RDC report some interference from politicians concerning the water project. They were apathetic at first, but after seeing the success became interested, as they want to use the project for campaign purposes. Although ABOs are to be non-partisan, the handful of active RDC members in Bauleni report that the FZR is full of individuals who are also active in politics. Consequently, the RDC Chair is often accused of favoring one party or another and must constantly defend himself as non-partisan. TAs also reported that some RDC members expected to be given water free of charge.

To overcome misunderstandings, political party representatives were invited to the evaluation workshop. Only one person came in this capacity, but the dialogue was a useful start as he stated that he would report back to the party his understanding of the project. It is also generally recognized that since the politicians come from the community they and their families benefit from the water scheme and therefore have a stake in its continued success.

Effectiveness

Water committee. Community members who originally volunteered to be on the water committee (WC) later volunteered to become tap attendants mainly because of the opportunity for remuneration. In interviews, the TAs indicated that they volunteered because they wanted to help themselves and the community. It was this group of 11 women and 1 man who have been active in the project and received training along with some RDC members. Therefore, they believe that it is appropriate that they belong to the WC as they have the capacity.

TAs typically report to a water committee which is a sub-committee of the RDC and this is the arrangement that was discussed with the community in meetings and workshops. An LCC officer observed that TAs could not be answerable to themselves. However, efforts to elect a formal water committee to run the JICA scheme failed because there just are not enough people in the community willing to work on a voluntary basis.

In effect, the water committee of Bauleni is the handful of RDC members who remain active in the water scheme—there is no middle level. Although pressure was placed on the RDC to organize both a general water committee and separate committee to run the JICA scheme, it became clear that it would be difficult to find committed volunteers. It was also recognized as time went on that even if a committee were organized, it might bring confusion since they would not be trained or understand the scheme like the current RDC and TAs.

Therefore, at present, the TAs report directly to the RDC which effectively manages the water scheme in addition to other community development roles. The RDC Chair takes on the largest role, but he also shares responsibility and delegates authority to others whom he meets on a daily basis. This group has already responded timely and appropriately to issues that have arisen including:

- technical fault with the pump
- problem of dirty water when system first starts operation
- need for a locking system for the taps
- TAs demanding commission payments (before accounting is in order)
- registered users changing from one tap to another.

Record keeping and security systems are in place, and being further developed as experience grows. For operation and maintenance (O&M), the plan is to train a team of 2 to 3 people to be in charge of running the system. The RDC has collected pamphlets on preventative and rehabilitative maintenance and will arrange for this team to receive further hands-on training.

Impact

Population. Health educators operating under the clinic have recorded tremendous growth in the number of households in Zones 8 and 13 over a one-year period (September 1999 to September 2000): 182 to 253 and 135 to 229 respectively. This flocking to the area is largely attributed to the building of the new water scheme. People had already been allocated plots, but settled elsewhere due to the poor water situation. When the water project became a reality, a building boom ensued, with some constructing too close to the new water points.

Number of registered users. The number of paid consumers for October, the first full month of operation, was 235 although TAs reported that 305 households had registered with the intent to pay. The number improved slightly in November to 294. These lower than expected numbers are viewed as a direct result of easy access to free water from the LWSC system. Therefore they are expected to rise over time as building continues and uniform rates are charged.

2000	Zones 8&13	Outside	Total	% of total households in Zones 8 & 13
October	*	*	235	*
November	198	96	294	73.5%

* exact figures not known because user cards not yet implemented

The RDC also reported that HUZA also had a drop in the number of users since LWSC replaced their pump and the JICA scheme began operating.

Daily water usage. A greater percentage of households using the new water scheme are using more than 150 liters of water daily compared to the average household at the time of the baseline survey. As would be expected, the largest number of households reported using 10 containers (200 liters) per day—the quantity allocated to users of the scheme. However, many

households reported using less than this amount, and just two reported using more. The comparative data are as follows:

Quantity of water used daily (approximate percent of households)

Volume of water	Baseline (all households)	Post project (users of new scheme only)
Less than 50 liters	17%	5%
50 – 100 liters	60%	43%
100 – 150 liters	15%	12%
150+ liters	8%	40%

Source: Household survey 1 and 2

Only about 10% of users said they required more water, most giving 15 containers as the desired amount. All households reported using the water for the scheme for the purposes of drinking, cooking, bathing and laundry. The percentage of households drawing water daily increased slightly from 89% to 98% which is consistent with the higher water consumption and accessibility.

Time use. As expected, the time required to walk to the water source and draw water are significantly less than the pre-project average for users of the new water scheme. Before, one-quarter of households spent more than 15 minutes to walk to the water source (one way), but no users of the new scheme reported taking more than 15 minutes. More significantly, over three-quarters of the households in the baseline reported spending more than 30 minutes to queue and draw water whereas three-quarters of the users of the new scheme said they spent less than five minutes for the same. The data are as follows:

Time taken to water source and queue (approximate percent of households)

Time	Time taken to water source		Time taken to queue and draw water	
	Baseline (all households)	Post-project (users of new scheme only)	Baseline (all households)	Post-project (users of new scheme only)
Less than 5 minutes	30%	88%	6%	76%
6 – 15 minutes	45%	12%	9%	21%
16 – 30 minutes	16%	--	8%	2%
More than 30 minutes	9%	--	77%	1%

Source: Household survey 1 and 2

Hygiene. Two-thirds of households interviewed said that family members wash hands, bathe and wash clothes more frequently since using the new water supply.

Relevance

Community level. The water scheme clearly met the community's need for access to safe water. Only 17% of households interviewed said they didn't use the new tap, mainly citing distance as the reason. A few mentioned the necessity to pay and these are likely those who choose to walk further in order to avoid paying. And 95% of those using the scheme expressed their satisfaction with it.

Once it was clear that the project was for real, the RDC embraced their role as managers and were able to effectively mobilize the community. The project provided the opportunity for the RDC to further demonstrate their skills and commitment to community development.

Peri-urban policies and approach of others providing water. The JST project approach to developing and managing the water scheme is in line with other water providers in the Lusaka settlements. NGOs such as Care Prospect promote a high degree of community participation in all aspects of their water supply projects. Labor for construction is provided on a voluntary basis which means the schedule of works depends on the success and pace of the mobilization process. Capacity building is carried out in phases, and various management models are proposed to community leaders and adapted to each settlement according to needs and demands. RDC members are on the board of trustees that manage the scheme. This arrangement is considered to protect the community from legal problems and also ensure the availability of expert advice on financial, technical and other issues. RDCs also receive revenue from the scheme and have a stake in its smooth operation. The NGO places officers in the community full time during and after implementation. The focus is on community empowerment and sustainability.

On the other hand, LWSC is both water provider in peri-urban settlements as well as the body with overall responsibility for water supply and distribution in Lusaka. They developed a policy document for the peri-urban areas as a means to address the issue of “social water” (water supplied freely to high density areas with communal taps) although they have not dedicated sufficient resources to effectively carry it out. In brief, the statutory legal responsibilities of LWSC are to provide and distribute water to all premises in the area under the jurisdiction of LCC, to exercise overall control over the sources and supply of water, and to levy from the consumers charges in respect of the services provided.

The same document states that the role of LWSC is to bring water to the settlements, while the distribution is undertaken by RDCs or WCs, with some logistical support provided by LWSC. However, because LWSC experienced many difficulties with revenue collection and financial management when delegating this authority to RDCs, their policy has shifted to retaining control over finances. In reality, in many settlements including Bauleni they have continued to provide water without having any mechanism for revenue collection in place. Although working hand-in-hand with community leaders, their priority is the provision of reliable water rather than capacity building.

Although privatized ten years ago, the company which was previously under the jurisdiction of LCC has still not fully made the transition from being a government service provider to profitably running a business. However, they are working on making the necessary changes in order that their operations are profitable, sustainable and don't adversely impact other schemes operating in a single settlement. The new approach of LWSC is to employ its own cashier who is stationed at a particular pay point. The role of the RDC is to sensitize the community on the need to pay for water and also look after the water infrastructure. Tap attendants are employed from the community and earn a commission of K500 on every household that has paid for that month at their respective taps. The RDC also receives K100 from each K3,000 levy collected which means a total of 20% of the revenue is returned to the community.

In Bauleni, JST has given the community full control of O&M and financial management. As required by the RDC constitution, two LCC officers are signatories on the water scheme bank account to ensure accountability. The RDC has risen to the occasion and seem confident in their ability to run the scheme. They are setting up their accounting and other procedures one step at a time, making necessary contacts, and planning for the future. They have formed a good linkage with LWSC. Much of the success to date can be attributed to the leadership skills of the chairman.

Sustainability

ABO structure. The Bauleni RDC was formed in November 1998 with 10 members: 8 men and 2 women. Current active members are about half that number and more women than men. Half of those originally elected to the Forum of Zones Representatives are not active due to death, moving from the compound or simply dropping out. A few of the zone leaders are active and organizing self-help efforts, but in many zones this lowest level of organization (ZDC) is not even known. In some zones, residents other than those elected have replaced those who are inactive, although their positions have yet to be formalized through elections.

In Bauleni, once the RDC established an office at the HUZA Center, residents began calling on the Chairman and bringing in problems. The RDC Chair noted a positive change in attitude from earlier when the RDC members were operating from their homes. Still, half of those interviewed in zones 8 and 13 stated they did not know which zone they lived in and another 12% gave an incorrect answer. Just over one-third knew which zone they lived in and about the same number had attended a zone meeting and knew the name of a FZR member from their zone. Less than 15% of respondents were aware that each zone had elected three members to the FZR, but half of the households could name the RDC Chairman, which would be expected considering the close contact he has had with the community in the process of implementing the water supply scheme.

The reshuffling of zone leaders and high degree of dropouts is natural for a structure that is still not fully established or well understood by the community. The group that has remained at the fore however work well as a team and show firm commitment and strong management skills. Although there is no formally elected water committee at present, they expect that in time a general WC (sub-committee of RDC) will be in place with representatives from each of the different water schemes in the community (JICA, HUZA, PoCMUS, and LWSC). The RDC Chair is also grooming one of the women TAs to take on greater responsibility in operation and maintenance of the JICA scheme.

Tap attendants. The TAs work long hours often exposed to the hot sun or pouring rain. Most are young women and some have small children. The job is demanding on their time which would otherwise be spent on domestic work, church work or income earning activities. The TAs admitted in interviews that if they didn't bring home an income at the end of the month, they wouldn't have the support of their husbands or be able to continue in the role. They worked hard for two months with uncertainty regarding their commission. When the amount of TA pay based on commission was eventually calculated, half of the original 12 dropped out. The TAs clearly had high expectations and considered the TA role as a job rather than community work.

Consolidation of water providers. In Bauleni, the JICA pilot scheme served as a catalyst for the RDC to step up the pace of negotiations with LWSC and other water stakeholders in order to harmonize payment and management systems. However, immediately after the new pilot scheme became operational, LWSC replaced their old pump with a much more powerful one that improved the water pressure in their network to the degree that people began making connections to their homes. Although this was seen as a positive development, because LWSC had still not established a collection system, people were choosing to walk a bit further for free water rather than pay for the new scheme closer to home.

The RDC responded to the situation by initiating meetings with LWSC. They succeeded in putting pressure on them to take action and resolve the issue due to the impact it was having on the number of registered users for the JICA scheme. At the time of this report, a revenue

collection system is being put in place by LWSC in close collaboration with the RDC. Progress is proceeding at a good pace independent of JST.

The Basic School also provides free water at times from their borehole. The RDC is involving them in the same negotiations on setting a uniform tariff for the compound. In the future it is envisioned that the individual schemes in Bauleni will merge operations further at least in terms of operation and maintenance. This would be both economical and efficient.

Community contribution. Overall, the community response to the project was and continues to be positive. Not all leaders are active and supportive, but those who are have carried the project through the small ups and downs. Residents are willing to pay for water service and the leaders are looking inside the community for accountants, operators and a skilled maintenance team. Although nearly all households (96%) stated their willingness to participate in the water project, less than two-thirds (62%) reported participating. Ideally, all those willing would be given the opportunity to participate, but considering the approach to construction and relatively short time frame of the project, this percentage is still high.

LWSC capacity. Monthly task force meetings held at LCC to report progress of the pilot projects were well attended by LWSC staff. The company was also contracted to provide a 3-day O&M training to water scheme operators in Bauleni (and Chibolya). In addition, engineers provided technical support on matters such as pipe location and water quality testing.

As stated above, LWSC is still defining its policies for the peri-urban areas. Although it is their legal responsibility to levy consumers, in fact they do not have the capacity to carry this out. At present they are working on establishing revenue collection mechanisms in the settlements where they are providing water. Although aware early on of Bauleni's concern over provision of free water, little concrete measures were taken to address the issue.

Recognized weaknesses of the firm include low revenue collection ratios, lack of commercial attitude in staff, and ambiguous relationship with LCC. The company focus is to provide water and technical support. Since capacity building has not been a goal, they lack experience in providing training at the community level. They are a vital link to communities in terms of technical support, but they are more likely to gain skills from working together with others on community-managed water supplies than be in a position to impart their own expertise. Fortunately they have an open attitude as they have demonstrated their willingness to cooperate with the Bauleni RDC to harmonize their water network with the others in the compound.

Water quality is deemed safe, water source is stable and equipment is technically sound. Therefore, the water system is considered reliable to supply potable water until 2010 on condition that O&M is sufficiently and appropriately carried out. There is no potential for expansion, but the water supply can accommodate the needs of 6000 population.

Conclusions

1. Bauleni residents were readily willing to provide both volunteer and paid labor during construction, as was expected considering the strongly felt need for water. The fact that only men were hired for paid positions while women provided the bulk of voluntary labor indicates that the RDC and contractor responsible for selection of the workforce could

have been better sensitized on gender issues.

2. In Bauleni, ABOs are still struggling to separate themselves from politics. Even many of those elected do not understand the necessity for this. However, successful projects like the water scheme help RDCs to gain credibility in the eyes of the community as well as serve to further the establishment of the structure and understanding of it among the community. Politicians are spokespeople for the community. Although the RDC must remain non-partisan it is vital that politicians are aware of the activities of the RDC and its subcommittees in order to garner their support.
3. The lack of volunteer spirit was realized when trying to establish the water committee. Because water is a vital need there was no problem to mobilize the community on a temporary basis to participate in the project. However, for the long run, few are willing to volunteer without incentives. This was made clear when half of the TAs dropped out after learning the level of pay they would receive based on commissions. Although it was agreed early on by JST and the community that TAs would work on a commission basis, and after two months of operation TAs had a good understanding of the number of users and revenue collected, their expectations for a decent wage remained. Apparently, the issue of paid versus community work had not been addressed satisfactorily which later created misunderstandings resulting in turnover of TAs.
4. There is a strong need for LWSC with LCC to strengthen tariff setting and enforcement system—not just water, but all services including land use.
5. Improvements to water supply are likely to bring housing and other developments to an area. This includes legal as well as illegal expansion.
6. Community development projects such as water supply improvement are likely to highlight weaknesses in the LCC-RDC system, working relationships, skills, etc. This awareness can be translated into an opportunity to follow up on outstanding issues and make the necessary changes and improvements. LCC officers have a large role to play in providing support to RDCs in the form of development and support of ABO structure at all levels, problem solving, legal advice, facilitating bureaucratic paperwork, project coordination, and taking a proactive stance on political interference.
7. As is common knowledge in the participatory approach to development, better results are often achieved working with existing community groups. In Bauleni, the core group of active RDC members is actually carrying out the work of subcommittees. This arrangement is working and is likely to evolve as responsibilities grow. LCC, donors and NGOs must therefore be flexible and allow communities to form subcommittees at the pace that suits them. However, it is also important to ensure that responsibilities are shared as much as possible so as not to overburden those who are active.
8. The issue of personal incentives for leaders active in community work will continue to be raised although in general terms the RDC constitution states that funds received belong to the RDC and individuals do not have the right to use or spend them without authority. Bauleni RDC members who are now serving as the operators of the water scheme envision hiring people to carry out this work in the future. JST feels it is important that RDC and subcommittee members do not receive incentives on a personal level for their role in community development projects. Any funds generated must go into community accounts. This implies that in Bauleni, the TAs must not be formal members of the WC although they may have a representative on the committee. If an RDC or subcommittee

member seeks a paid position, they must resign from their RDC post.

9. Although not holding a decision-making role with regard to water scheme management, TAs must have a voice. Managers must recognize the importance of keeping TAs happy and consider providing them with shelter, rain gear and flexible working conditions.
10. Financial sustainability will take time to achieve in Bauleni. Donor funds are necessary to cover start-up and recurrent costs for the first several months before the scheme is well established with the target number of users achieved. Financial transparency is important to ensure revenue is properly accounted for, and also to mobilize community labor for operation and maintenance.

Recommendations

1. Ensure a gender sensitive approach is taken to community participation especially concerning paid versus voluntary labor and opportunity costs of participating in project activities.
2. Efforts should be made to involve local politicians in the project to ensure their support and avoid interference due to lack of understanding.
3. It is extremely important that community-managed water improvement projects explore the issue of paid versus volunteer labor thoroughly with the community and come to a clear understanding and consensus on who will be paid for O&M work and on what basis.
4. Solid research needs to be carried out on access to other sources of water in the community and how this will impact on usage and revenue of the new water scheme.
5. LCC must be prepared to monitor building, especially where health hazards may result from encroaching on water points.
6. Regular financial reports on the water scheme must be written and submitted to LCC and also made available to the community at large through the ABO structure in order to avoid any misconceptions on the level of funds raised, wages and other expenditures.
7. Exchange visits to other water schemes should be promoted to assist with selecting the most appropriate management structure and problem solving on issues that arise.

Ng'ombe road pilot project evaluation report

November 2000

Background

Community organization

The settlement of Ng'ombe has a population of around 40,000 divided into 11 zones. Three elected members from each zone comprise the Forum of Zone Representatives (FZR) and 12 of the FZR members comprise the Residents Development Committee (RDC). A 13-member Roads Committee (RC) was newly formed to work with the Lusaka City Council (LCC) officers and JICA Study Team (JST) to implement the road improvement project and oversee on-going fundraising and maintenance. This committee is a sub-committee of the RDC and replaced a former Roads Committee which was inactive. There are 7 women and 6 men on the Roads Committee which includes one RDC member.

Ng'ombe received the highest score among the eight settlements initially surveyed in terms of community organization and capacity—the main criteria used to select the pilot project sites. However, the community ranked roads only third in priority behind water and RDC office or schools as the greatest needs. Nonetheless, as “3” was the highest rank given to roads by any of the 8 communities surveyed, Ng'ombe was selected as the site to pilot a road improvement project and the community was willing to actively participate.

Overview of the problem

The original road was dilapidated with potholes and impassable by vehicles during the rainy season due to lack of culverts and grading. It is a heavily traveled road in the old section of Ng'ombe providing direct access to roadside markets, HUZA community center, Anglican church and the clinic. The poor condition of the road had a negative impact on business activities, access to public transport, access to social infrastructure (schools, churches, clinic) in addition to creating security problems and being unattractive. This section of road had been a problem for a long time.

Project objectives

Based on the community-based problems analysis, the objectives of the pilot project were:

- improve commodity transportation
- improve public transport
- improve access to social infrastructure (clinic, schools, market, churches, etc.)
- protect road surface by installation of proper drainage system

From the point of view of the JICA Study Team, another broader purpose was to develop and test mechanisms for community participation and sustainable management through existing Area-Based Organization (ABO) structures.

Project approach

The project was a joint effort of JST, LCC and the community. Working closely with Community Development Officers (CDOs) and Engineers from the Lusaka City Council, initial contacts were made with the community through the RDC. Sub-contractors carried out a participatory survey on social services development with the involvement of RDC, FZR and women leaders. Community-based workshops were held to discuss issues related to roads and subsequently plan the projects in more detail using the Community Action Planning (CAP) method. LCC and JST met regularly with key RDC and RC members to implement and monitor the project.

A local subcontractor was hired to design and oversee the upgrading. The road was constructed as a labor-based community effort although heavy equipment was brought in for removal of debris, grading, spreading of gravel and compacting. Community residents were paid minimum wage for jobs such as excavating the trenches and removing shrubs. RDC and RC members sensitized the community, monitored the progress of works and established a community management system including the plan to collect a monthly road levy from all households. LCC engineers provided training in road maintenance and liaised closely with JST members on both technical and management concerns.

Description and schedule of physical improvement

The 630-meter primary access road was upgraded through leveling, paving with gravel and installing open drainages (approximately 1300 meters). The carriageway is 4.0 meters width with another 1.0-meter drainage on each side for a total width of 6.0 meters. Culverts are the minimum standard of 600mm diameter although the original design by the subcontractor called for 300mm diameter. The open drains are both stone pitched and sodded, although the sodding (planting grass on the sides of the drains) is scheduled to take place with the onset of rains around November or December 2000. There is an outlet bridge structure equipped for flash floods. Existing electricity poles and houses determined the alignment of the road.

The construction period was mid-April to August 2000, with some additional works carried out in November. Phase 1 was excavation of trenches and installation of culverts. Phase 2 was gravel works. Phase 3 was masonry works and stone pitching. Lastly, pedestrian crossing slabs and speed humps were installed.

Community role in road works

Work	time	Community role
Clearing drains and cutting hedges	2 days	Voluntary labor provided by about 30 people (majority women) living along the road
Excavation of trenches	7 days	<ul style="list-style-type: none"> ▪ 20 – 53 laborers hired from community at minimum wage (majority women) ▪ Roads Committee (RC) Chairman was employed as supervisor of works ▪ Provided tools for small allowance
Installation of culverts	7 days	20 laborers hired
Gravel works	2 weeks	10 laborers hired to remove gravel from ditches (gravel was sprayed by grater)
Shifting location of culverts that were obstructing traffic	3-4 days	10 laborers hired
Masonry works & stone pitching	5 days	None
Pedestrian crossing slabs (original batch)		Procured and delivered by contractor Community assisted with installation
Pedestrian crossing slabs (replacement)	7 days	Constructed by Roads Committee as training exercise with JST, LCC and subcontractor
Speed humps (4 total)	2	Built with RC as on-the-job training
Stone pitching and sodding of remaining drainages	on-going	RC is carrying out work using road levy funds

Training provided under project

1. Financial management (5 days, 19 participants, July-August 2000) including community participation, team and team-building skills, conflict resolution, project planning and

management (planning, operation, maintenance, etc), project proposal writing, resource mobilisation, financial management, levying and levying methods.

2. Road maintenance (4 days, 15 participants, July and October 2000) including description of road structures and their functions, defects and their causes, maintenance techniques, labour-based reshaping, and a field trip to Linda compound to observe a PUSH road project and have an exchange with community members.
3. Road labour-intensive works (10 days, 10 participants, October - November 2000) including measurements, setting-out, use of setting-out tools, stages in road construction, setting-out of horizontal curves, vertical alignment, and practicals in road construction.
4. Practical training for cement slab construction (to replace broken slabs) (7 days, # participants

Roads committee management plan

The roles and responsibilities of the Roads Committee include:

- community sensitization and mobilization
- fundraising and revenue collection for road works
- purchase and storage of tools and materials
- planning, organizing and overseeing basic road maintenance
- liaising with RDC, LCC officers, donors and other stakeholders

A Kwacha 500/household/month levy has been proposed to support road maintenance in the community. This will be collected door-to-door by Roads Committee members. Collection has begun and K160,000 was collected as of November 14, 2000. The funds collected are being turned over to the RDC treasurer and when the amount is large enough an account will be opened. The RDC will keep a portion of the funds.

To compare, other monthly levies in Ng'ombe include:

K3000.00	ground rates
K3000.00	water levy
K 500.00	solid waste (garbage collection)

The ground rates are a statutory levy (must be paid by law) collected by LCC whereas the others including road are by mutual understanding and collected by RDC sub-committees.

Tools were provided by the construction sub-contractor as well as LCC engineering department following training. The Roads Committee is purchasing additional tools required. Sufficient tools are available in the community for simple maintenance.

The Roads Committee intends to mobilize residents to participate in regular clean-up and maintenance works through schools, political parties, churches, business community and locally based NGOs, and executive members of the ABOs including RDC, FZR and Zone Leaders. The RC role would be to organize and supervise the activities.

Evaluation objectives and methodology

Evaluation exercises were carried out in October 2000 approximately two months following the completion of the road improvement works.

The overall objectives of the evaluation were:

1. To assess the appropriateness of the design and quality of infrastructure
2. To examine community participation and ownership
3. To determine the social and economic impact of the improved road
4. To consider the factors contributing to success and failure
5. To build capacity of LCC and RDC in monitoring and evaluation.

The following methodology were employed:

1. Analysis of community monitoring sheets
2. Two-day participatory workshop involving all stakeholders
3. Focus group discussions with RDC, RC and business community along road
4. Survey of 100 households in Zones 1 to 6 carried out by subcontractor.

As this was considered a pilot project, the evaluation was generally a self-assessment although an outside subcontractor was used for the household survey and some of the focus group discussions. The lessons learned are intended to be fed into future project designs, guidelines and manuals to be produced by the study.

Findings

Efficiency

Community participation was limited to a core group of about 20 RDC and newly appointed Roads Committee members for the consultation meetings, planning sessions, training workshops and monitoring and evaluation exercises. Both women and men participated in all stages and activities. In addition, as many as 53 community residents were employed by the subcontractor at minimum wage during road construction works. The RC made the effort to select laborers from each zone in a fair manner. The vast majority of the labor force were women. In the survey of 100 households, only 8 reported participating in the road project through planning meetings, labor provision and drain cleaning.

Responsibility for the road remains in the hands of the few community representatives. Survey results show that the majority of residents were not aware of the road project before the works began. A few months after improvement, half of those surveyed were aware of the existence of the Roads Committee. But residents are still “watching” the activities rather than participating.

The Roads Committee was formed less than a year ago. Its members have participated in a range of project activities including training workshops, selection of community laborers, liaison between construction firm and community, monitoring and evaluation. They have demonstrated both interest and skills in community development. However, it is too early to judge their capacity to meet the on-going requirements of mobilization of funds and labor, and regular road maintenance.

In fact, in the early stages of the project, the community expressed doubts about their ability to mobilize volunteer workers and raise the required funds, and their own technical expertise. They were also skeptical about the ability for the community to fully participate in the project considering the plan to bring in an outside contractor for the bulk of the construction works. They expected and experienced resistance from residents who had hedges and structures encroaching on the road.

Thanks to their opportunity to join an additional 10-day road construction training sponsored by Programme Urban Self Help (PUSH) in Linda compound, RC members feel much more competent in their technical knowledge and skills. There is no question that they have the

ability and resources to carry out the simple maintenance works required. Income generation and community mobilization are another matter and it is unrealistic to expect any noticeable changes in the short project time span. The road was not a priority need, residents are still poor, and historically levy payment has not been enforced. At the close of training workshops, participants stressed their need for more training in income generation, financial management, leadership skills and so on. They still lack confidence in these skills and have not yet experienced any measure of success in applying them to their community development work.

The community's original concern that the community would lack a sense of ownership if an outside contractor was hired was well founded. In fact this seems to have proven true to a large extent. Heavy equipment was brought in to carry out the bulk of the work and this contradicted the intention to inculcate a sense of community ownership. Although this enabled the road repair to be completed more quickly and using more sophisticated techniques, the RC reports continuing resistance from some members of the community and the household interviews also indicate dissatisfaction with the finished product.

In addition to the apparent inappropriateness of the project approach to rehabilitation, there were some shortcomings in the design which has created problems. The engineering consultant raised the issue in their report submitted to LCC Road Engineer:

The main problems arising with the road project has been the depth of the side drains. The initial design of the road had 300 to 400 mm diameter culverts as per storm water flow requirements according to computer analysis based on the topography and watershed of the area. This would have enabled the implementation of shallow and mild slopes for the side drains. However, to maintain LCC standards, these minimum culvert sizes were changed to 600mm which meant that the side slopes were made very steep due to the depth of the trench required and the narrow road width available. This has caused a hazard for vehicles and also the easy erosion of the well-compacted gravel when a car travels on the sides.

In other correspondence he further elaborated:

It is very evident that these large culverts are far too big for the scope of this small road in Ng'ombe. This creates a problem for pedestrians to cross the drains and results in the residents filling the drains with sacks.

Considering the narrowness of the road and the deep drains, when vehicles pass, pedestrians are inconvenienced. This has created the perception that the road is for vehicles rather than pedestrians when in fact the vast majority of the traffic is on foot.

The community maintains there were other problems during construction as reported in their monitoring sheets and during the evaluation workshop. Specifically, they have identified the following:

- Drains need reinforcing with concrete to prevent soil erosion.
- Type of gravel used was poor and not to the required standard. Some parts of the road there is no gravel at all.
- The grader cut off some parts of the drainage making some parts of the road uneven.
- Some bridges are not wide enough for vehicles to maneuver.
- There wasn't enough water on the northern part of the road when the compacting was being done.
- The cement slabs for pedestrian crossing are weak due to improper curing of the cement.

Community residents active during construction raised these and other issues with the contractor and together they worked out solutions. For instance, 3 to 4 days were spent shifting the location of some culverts that were placed in such a way that made it difficult for vehicles to turn.

In terms of financial efficiency, the Ng'ombe road cost was low compared to other roads improved with Japan's grant aid due to hiring a local contractor and using local materials.

Effectiveness

As discussed above, the Roads Committee has the technical capability to maintain the road, but they still lack confidence in their expected role of mobilizing both funds and volunteer labor. An Operation and Maintenance (O&M) system has been developed in theory, but not enough time has lapsed to know how well it will work in practice. The RC has access to the necessary tools for maintenance, but scarce funds are available to cover the costs of materials or transport. RDC and RC members continue to express the need for outside support in the form of training and funds.

A monthly monitoring sheet was developed to assist the community to monitor project implementation including construction works according to the agreed upon action plan and time table. The plan was to develop the sheet with the community, who would then be responsible to complete the form and submit to JST on a monthly basis. Although some problems were highlighted on the sheets, it did not prove to be a very effective method of exchanging information and following up on issues that arose. Similarly, during the evaluation workshop, it was found that open and honest feedback could be drawn out of participants in verbal exchanges, but when they were expected to record their discussions on flipcharts for sharing, they would only write positive points even contradicting early statements.

The community was concerned from the start about vandalism to the road and residents using the drains for waste disposal. Both have occurred, but not to a serious degree. A couple of the cement slabs were intentionally broken by drunken men, which some feel may have been related to jealousy towards those who participated in the project. RC members are also discouraged at the rate at which waste is accumulating, but this problem has the potential to be controlled through the combined effort of the newly formed Solid Waste Committee and Roads Committee.

The Roads Committee organized a clean-up party on 28 October 2000 which was well attended by the core group of active RDC, FZR and RC members. The effort was a mixed success. Rubbish and sand were cleared from the drains, but sacks, broken slabs and in one place a sewerage pipe filled with debris remain in the drains to assist residents to cross. The RC members themselves toiled away at the maintenance works, but the community at large was uninvolved. Nearby residents were not pleased with piles of mixed dirt and rubbish left on the edge of their plots. Clearly, some hostility remains and further community sensitization is imperative. However, the value of RC members demonstrating their skills and commitment to the community road cannot be overlooked.

Impact

The road improvement project provided an impetus for RDC officers to appoint a new Roads Committee to take over from a previous one that was inactive. The new committee was introduced to both the RDC and community and has worked together well as a team. Members have expressed confidence in their technical skills and knowledge following the

recent PUSH training and feel competent to undertake road construction and maintenance work in the community.

The project has provided an opportunity for community representatives to receive training and work together on community development issues. Considering the limited time frame and scope of the project, long-standing issues which affect sustainability such as political rivalry and interference could not adequately be addressed.

An informal survey on traffic volume conducted before and after road improvement confirms the expected increase in all types of vehicles as well as foot traffic (see attached table). There are nearly four times as many large vehicles and eight times as many buses and cars traveling to and from the settlement. Minibuses are much more available than before which improves access to public transport for those traveling to areas outside of the settlement. If we assume that those on bicycle and foot are traveling within the settlement, we can conclude that the improved road has had an impact on either the frequency or route that people travel. Clearly, the improved road surface facilitates the transport of water, foodstuffs and household goods which are all carried on the head or with the aid of a wheelbarrow or bicycle.

Although the community raised issues of safety and security when considering the road project, impact in this area is difficult to assess. Generally people did not feel that security could be improved without the addition of street lighting which was not part of the upgrading project. The improved condition of the road has allowed vehicles to travel at a faster speed which is dangerous for pedestrians particularly children and has generated complaints about increased dust. Because of this outcome, the contractor agreed to construct four cement-reinforced speed humps to control vehicle speed. This work was carried out in November with participation by the Roads Committee.

Sixty percent of households interviewed said that improved access to community infrastructure was the greatest benefit of the improved road. Half also mentioned increased traffic flow as a benefit. On the other hand, two thirds of those asked, replied that the road was too narrow, while a third mentioned increased traffic and dust as well as steep drainages as drawbacks. Increased vehicle traffic means more wear and tear on the road and therefore greater upkeep required. Accidents are also more likely to occur.

Since most of these benefits and drawbacks can be anticipated from the start, it is important to examine what the community values and plan accordingly. For instance, with a wider tar sealed road, controlling speed would be an even greater issue.

Transport fares have increased due to the doubling of the cost of fuel during the project period, so it is not possible to assess the impact of the improved road on household transport expenses.

Following the road improvement, interviews with business owners along the road indicate some increase in business due to the ease of bringing goods into the compound. More women are said to be marketing produce as well.

Drainage improvement is expected to have the following positive impact:

- Prevent road surface deterioration
- Protect housing from flooding
- Reduce outbreaks of water-borne diseases such as malaria and cholera.

Since this review is being done before the onset of the rainy season, it is too early to assess the extent to which these benefits were realized. However, the drains are significantly cleaner than before improvement, which means a positive impact on health and sanitation.

Relevance

Community expectations regarding the road improvement project remained high despite efforts to explain the purpose behind the design and compromised width due to encroachment. The standard width for an access road in an urban settlement is 9.0 meters (3.0x2+1.5x2) including drainage, but it was decided not to force people to move their structures or resettle. Therefore, the road is only 6.0 meters (4.0+1.0x2). This information was presented to community representatives in a workshop setting, but it is possible that the figures were not that meaningful (they did not give a clear picture of the finished product). Additionally, it is questionable whether the information was disseminated to concerned members of the community.

Evaluation exercises revealed that residents had high expectations for the improved road including:

- 2-lane carriageway
- tar-sealed road
- pedestrian path
- stone pitched throughout
- mitered drain to deviate water to opposite side of road (at T-junction near clinic)
- road signs (names)

However, the community also initially wanted to carry out the road works without the help of a contractor, which is inconsistent with the above expectations.

Unlike water, the benefits of an improved community road are indirect and less discernible. Also, water supply was and still is the top priority for Ng'ombe which affects overall satisfaction.

Programme Urban Self Help (PUSH) is the main organization implementing road projects in the Lusaka urban settlements. The overall purpose of their programs is poverty alleviation and household food security with a focus on female-headed households. Based on lessons learned, they have broadened their objectives and now have an extensive training program addressing a wide range of individual and household needs such as functional literacy, entrepreneurship, and family life education.

Participants in PUSH's programmes gain technical skills through labor-based road works training completed in several phases. The community roadwork is a means to train and organize the community, it is not an end in itself. PUSH is now assisting participants of their program by forming linkages with LCC and training graduates in basic contract skills. Thus individuals or groups may sustain their employment by working as contractors for LCC on road building and maintenance projects. In addition, PUSH has incorporated mechanisms such as rental of tools to sustain the maintenance of the community road after completion of the program.

PUSH's experience has proven that to foster a sense of ownership of community road infrastructure, a range of needs must first be addressed. In contrast, in Ng'ombe the road pilot project stood alone.

Another organization working in the urban settlements, Sustainable Lusaka Programme (SLP) recognized that communities will not contribute their time and labor to local initiatives on an on-going basis unless they are able to gain something in return. SLP has therefore incorporated the idea of “community contracting” in the implementation of their programs. SLP assists communities through training and on-going support to create a small enterprise to address environmental problems affecting them. In Ng’ombe, a solid waste committee is now running such a “business” to collect household waste at a small fee to members.

Sustainability

In assessing the Road Committee’s capacity to carry out their expected role of road operation and maintenance, it is important to examine the larger Area Based Organization (ABO) structure in Ng’ombe and consider the degree to which it is established and functioning according to plan. The current RDC was established in 1998, and in fact is the first RDC elected in Ng’ombe. They do not yet have a proper office to work from although they have been involved in projects of other donors including SLP’s solid waste project mentioned above. Many of the same community leaders have been active in both projects, receiving training and holding various responsibilities.

However, according to the household survey carried out in Ng’ombe following the road improvement project, residents’ awareness of zone demarcation and leaders is still very limited and the percentage of people attending zone meetings is low. Also, among the leaders themselves, attendance at community meetings is poor. It seems that only a small number of community members are interested or have the time available to get involved in community development activities.

Percentage of households surveyed who

were aware what number zone they live in	8%
were aware of the name of RDC Chairperson	4%
were aware the number of people from each zone elected to FZR	3%
could name a FZR member from their zone	6%
had participated in a zone meeting	21%
had participated in the JST pilot project	8%
were aware of the existence of the Roads Committee	53%
could name one of the Roads Committee members	9%
were aware of the K500/household/month road levy	28%
were willing to pay the K500 road levy	79%

Source: JST Household Survey October 2000

Therefore, a newly established sub-committee such as the Ng’ombe Roads Committee is constrained from carrying out its roles and responsibilities since it inherits the existing weaknesses in the system. The survey did reveal a much higher awareness of the Roads Committee than general ABO structure. Although in theory information is supposed to be flowing from top to bottom and bottom to top and decisions made in a democratic manner through the RDC, FZR and Zone Development Committees (ZDCs), it appears from our survey that information dissemination has not been effective, as most people were still unaware of the household road levy that was decided on eight months prior to the survey.

The talented Ng’ombe-based Kamoto Theatre Group was enlisted to sensitize the community on the road project prior to construction. Through music, dance and short plays they informed about the road improvement and encouraged community cooperation. The group is a valuable tool for continued sensitization but the RDC reports that they are unwilling to further assist without being paid.

The RDC and Roads Committee are therefore caught in a vicious cycle. They can do little without funds and in an environment where there has been little concept of self-help. Yet the community resists contributing until they are able to perceive the potential benefits.

When developing an action plan at the end of the evaluation workshop, the participants put together a very ambitious program of further training, maintenance works, levy collection, and community sensitization. Most of the activities were to begin immediately and many required outside resources. The leaders feel that a lot is expected of them, but they also expect donors to provide continued support. The maintenance works, however, can be done with resources currently available.

At present the Roads Committee shows commitment to maintain the road, and by the end of November (3 months following completion of construction) they had collected K160,000. Ng'ombe is a large settlement with more than 6000 households, so only around 5% have paid the road levy to date, but this is at least a start. Door-to-door collection of the levy places a heavy burden on those collecting, but they feel that this demonstrates their commitment to the community.

On a positive note, records for September 2000 show that 2012 Ng'ombe households paid ground rates, which is the best performance on the list of 26 compounds. Verbal feedback from other sub-committees of the RDC (solid waste and water) in Ng'ombe also indicate growing willingness of people to pay for community services.

LCC Community Development Officers and Site Officers for Ng'ombe were integrally involved in all stages of the project and are well aware of the plan for community operation and maintenance. They will play a key role in supporting the community to carry out their action plan and sustain the infrastructure.

The contractor commented on the design and finished product in their terminal report and related correspondence:

The actual design of the road is appropriate for the area. It creates a good strong gravel road with ample drainage, an outlet bridge structure equipped for flash floods, etc. The shortcomings of this road are the side drains depth and lack of adequate pedestrian passageway, which is severely limited because the road wayleave has been built up.

The road project has been completed with a smooth strong gravel road in place.... The maintenance of this road, effective immediately, is of vital importance. Without maintenance, no gravel road can last under such rainfall conditions.

Summary of Findings

1. The improved road surface has increased traffic, both vehicular and foot. Residents have better access to public transport and community infrastructure.
2. The increased traffic has provided both benefits and drawbacks to community residents.
3. Community participation in the project was limited to a core group of community leaders and a small number of paid laborers.

4. A Roads Committee is established and sufficiently trained in technical matters related to road maintenance.
5. Sufficient tools were provided by the project to the community for carrying out the basic maintenance works required.
6. An operation and maintenance system has been developed, but it is too early to judge the capacity of the Roads Committee to carry out their plans. At least one clean-up activity was carried out on October 28, 2000.
7. The RDC and Roads Committee in Ng'ombe are still looking for ways to generate income. They recognize that people are not going to be willing to pay a road levy unless they see the direct benefits. Without a base to work from, they have difficulty to meet and carry out their work plans.
8. Residents are unhappy about the narrowness of the road and lack of pedestrian passageway.
9. The 600mm culverts have caused the drains to be deep and with steep slopes. This has created problems for pedestrians to cross the drains and impelled residents along the road to build makeshift crossings and fill the drains.
10. RDC and RC members did not feel that they had control over decisions regarding design and construction of the road.
11. Garbage is accumulating in the drains at a rapid rate.
12. Some isolated incidences of vandalism to the cement crossing slabs occurred.
13. Meetings and informal discussions drew out concerns and critical feedback from the community while written monitoring and evaluation exercises were of limited value.
14. Ng'ombe residents have limited awareness of zone demarcation, names of zone leaders and the existence and functions of the Roads Committee.
15. Community sensitization and mobilization are constrained by many factors including the newness of the ABO structure in Ng'ombe, large zones, poor meeting attendance and the fact that many people are away from the compound during the day when activities are carried out.
16. LCC officers in cooperation with the RDC are realizing some success in collecting ground rates and levies for community services from Ng'ombe residents.

Conclusions

1. In order to achieve community ownership of a road, sufficient time must be scheduled for sensitization. Information must be shared and then time allowed for leaders to disseminate plans to the community at large. The sensitization process needs to be closely monitored. Community leaders should also be consulted on design and other technical matters as much as possible. When community leaders participate in decision-making they are better equipped with the knowledge they need to disseminate. A strict time frame, heavy road-building equipment, and pre-selection of a contractor from outside the settlement work

against the goal community ownership.

2. Most households in the urban settlements live below the poverty line. First and foremost they are looking for a source of income. If basic needs aren't being met, people can give little to community development.
3. Residents of urban settlements are interested in improving their knowledge and skills through participation in community initiatives and many are keen to improve their living environment, but unless there is an incentive, their participation is unlikely to be sustained overtime.
4. The road improvement project did not address the importance of sustaining community participation through providing incentives such as commissions to active community members. Creativity and perseverance is required to generate income from the road.

Recommendations

A. For Ng'ombe:

1. LCC officers (Peri-urban CDOs, Engineering Dept) to provide on-going support to Ng'ombe Roads Committee in Operation and Management.
2. Roads Committee needs to brainstorm and try out various options for generating income and enlisting community labor such as devising a competition among zones, community groups and business sector or developing a rotation system for maintenance responsibilities.
3. Roads Committee should work hand-in-hand with SLP/Solid Waste Committee on garbage collection (from the drains) and disposal.
4. Consider making the road one-way if two-way traffic is inconvenient for pedestrians and vehicles.
5. Drivers need to be sensitized about the need to reduce speed.

B. For future road projects:

5. Where communities are expected to maintain roads, community labor should be used for all possible construction works. Local engineers can be contracted to oversee works.
6. Allow communities to consider benefits and drawbacks at an early stage and make decisions accordingly. Ensure that channels of communication are functioning and information is reaching those targeted.
7. Allow sufficient time for consensus building, sensitization and mobilization.
8. Roads should not be addressed separately from other needs. Especially where communities are expected to generate income for operation and maintenance, they need to be thoroughly equipped with the necessary business skills that would also serve them personally.

9. Monitoring forms should be developed hand in hand with the community, tested and then revised. As the project progresses and issues arise, indicators should also be reexamined. Although monitoring should not be a burden, details such as dates, number of participants, etc. should be provided. Regular meetings need to be scheduled to follow up on problems and commitments.
10. Consider relocating encroachers to other zones in the settlement in order to make the road the standard width. This must be voluntary by consensus and requires compensation.
11. To receive cooperation rather than interference, politicians from the community should be invited and encouraged to attend all consultation meetings with project stakeholders in order that they have an understanding of the project from the beginning.

Chibolya water pilot project evaluation report

December 2000

Background

Community size and organization

Chibolya is a densely populated settlement located near to Lusaka's Central Business District. The diverse population is estimated at 35,000 and includes a number of residents coming from neighboring countries. Chibolya has seven zones with four members from each elected to the Forum of Zone Representatives (FZR). The RDC has 12 elected members. The water pilot project was implemented in the southern parts of zones 4, 5 and 6 and targeted a population of 4000.

The RDC in Chibolya was first established in 1998, about one year before the pilot project began. Community leaders had little or no experience working with donors and NGOs, but the ABO structure was functioning and the support capacity from LCC site officers and community development officers was considered to be good.

Water supply situation

At the time of the initial surveys, Lusaka Water and Sewerage Company (LWSC) was the main supplier of water to Chibolya, with 12 public taps (one-quarter broken down) and some illegal connections. The infrastructure was in poor condition with low pressure and many breakdowns. Only about 25% of the settlement was served, with the western part of the settlement not supplied by the system. Some residents use shallow wells, while many households were collecting their water in the neighboring settlement of Kanyama.

The baseline household survey of 419 households in Zones 4 and 5 found that 72.8% of the households drew their drinking water from a public tap and that the same source was used for other uses than drinking for most households (85%). Most households (86.2%) collected water on a daily basis and it was mainly female members of the family who were responsible.

Before the JICA pilot water scheme, nearly half of the households (48.9%) in Chibolya's zones 4 and 5 had to walk from 5 to 15 minutes to the water source and another 18% walked for 15 to 30 minutes. At the water source, more than three-quarters (78.3%) had to wait for more than 30 minutes to draw the water, indicating serious congestion. Consequently, due to distance and the time required to collect water, over three-quarters of the households (77.6%) used less than 100 liters of water daily.

Poor access to water caused other problems for the community such as danger crossing roads, health hazards, and poor school attendance. The long periods away from home collecting water contributed to domestic violence for women with partners and made the homes of widows and single mothers more subject to theft.

Almost all households (91.4%) in zones 4 and 5 paid for their water, with more than half (58.2%) saying they paid less than K10,000 per month, while one-fifth (20.3%) indicated they paid between K10,000 and K15,000 per month. More than one-eighth (13.8%) of households paid over K15,000 for their water. Generally, residents of Chibolya pay K50 or K100 per 20-liter bucket for water rather than a monthly charge and this results in a high monthly water bill. Chibolya community representatives ranked water as the first priority need in the settlement, while nearly all residents of zones 4 and 5 (97.9%) also expressed the need for

safe water facilities. Almost all (94.5%) respondents indicated their willingness to participate in the water project mainly through provision of labor.

Project purpose and approach

The project purpose was to develop and test participatory structures and processes for community-managed water supply system in a settlement with a newly organized RDC.

Once the decision was made to pilot a water scheme in Chibolya, workshops were held in the community to analyze the problems relating to water and sanitation, consider opportunities and threats, identify project sites and develop work plans. Following this, a memorandum of understanding (MOU) was signed between the RDC and JICA Study Team. Lusaka City Council (LCC) Community Development Officers (CDOs) served as the liaison between the community and JST and provided support to both groups.

Integration with CARE-Prospect

Following receipt of a letter from CARE Prospect (CP), in March 2000 JICA Study Team (JST) decided to integrate the pilot scheme planned for zones 4 and 5 with the larger water scheme planned by CP. This was viewed by both parties as more efficient both technically and regarding future management. A Memorandum of Understanding was signed between CARE and JST to confirm:

- Collaboration in Chibolya compound
- JST pilot scheme for zones 4 & 5 would remain as per the contract with the contractor, and would be implemented in a manner which facilitates integration of the two zones within the overall scheme
- Coordination would be established and maintained
- Detailed engineering coordination and budgeting would be facilitated by the engineering consultant
- Similar community participation would be taken in the pilot project area and remaining area for construction and O&M
- Coordination would be ensured through regular meetings on various aspects of the project (construction, mobilization and institution-building, and environmental health). Each side would take efforts to maintain good working relations, making mutual expectations clear, and promptly raising and addressing any problems
- Joint action plan would be developed and updated on a regular basis.

The community was informed of the integration plan after the decision was made between CP and JST. Formalities of the integration were not completed until July and construction works immediately followed. It was agreed that the JICA pilot taps would be operational by late September 2000 as originally scheduled.

Community participation in construction works

Chibolya residents had a larger role in project implementation than originally planned due to following CP's approach. The following table shows the division of construction work:

Phase I: Contractor	Phase II: Community
1. Drilling borehole	1. Selection of water points
2. Borehole starter room and wall fence	2. Construction of water points
3. Erection of tank and wall fence	3. Soakaway construction
4. Pipe laying (borehole to tank and 5 "JST" water points)	4. Connection of water points
5. Rising main and distribution network	5. Pipe laying
	6. Backfilling of trenches

trenching	
6. Power supply to borehole	

Project design

The original plans were altered slightly after integration with CARE Prospect. The plan framework and main facilities are shown in the tables below.

Plan Framework – Chibolya pilot water scheme

Description	Revised plan
Served Area (Zones)	Zones 4, 5 & 6
Served Population	4,000
Number of Households	400
Designed Unit Water Consumption (lpcd)	20
Water Demand (m ³ /d)	80
Water Source (Borehole)	New (CARE drilled)
Design Water Yield at Borehole (l/sec)	10
Number of Public Taps (unit)	5
Minimum Residual Water Height (m) at Public Tap	5
Served Population per a Public Tap	800
Length of Distribution Pipeline (m)	1,000

Main Water Supply Facilities – Chibolya pilot water scheme

Description (unit)	Chibolya
Borehole: 1 unit (Depth: m)	60
Submersible pump: 1 set (capacity: l/minute)	1,080
Lift pipe: GSP (m)	30
Operation room with electric power (unit)	1
Boundary wall with height of 2m (Length: m)	56
Transmission pipe: GSP (m)	900
Reservoir/elevated tank: 1 unit (m ³)	100
Distribution pipeline: PVC (Length: m)	1,000
Number of Public Taps (unit)	5

Training provided under project

JST proceeded with their original plan of hiring subcontractors to train the community in O&M and Financial Management. The following training was provided:

Community training - Chibolya water pilot scheme

Type (provider)	Dates (total days)	Participants	Purpose	Contents
Community water management training (ADaT)	25-29 September 2000 (5 days)	RDC members, water committee members and tap attendants for zones 4 and 5	Provide community with financial and management skills to run new water system	Community participation Water committee formation and roles Monitoring and evaluation Proposal writing Financial and management

		(20)		options (CARE Prospect model) Conflict resolution Sustainability Bookkeeping and simple accounts
Water system operation and maintenance training (LWSC)	6-8 November 2000 (3 days)	RDC members (2), WC chair, plumber, TAs (9) (13)	Provide community with technical skills for O&M of new water system	Water production Water distribution Water quality Plumbing Safety
Follow-up O&M training (JST and Rankin)	½ day	RDC, WC & TAs (24)	Provide hands-on training following operation	O&M: system parts, daily, weekly, monthly & bi-annual tasks, water supply and health

CARE also provided 10 half days of ABO training and 3 days Participatory Learning and Action (PLA), and arranged an exchange visit to George compound.

Current status of project and cause of delays

The 5 JST water points were operational as of late November 2000, slightly over 2 months behind schedule. The remaining area is scheduled to be completed in January 2001.

Remaining construction works by CARE include installation of automatic chlorination system and meters. Remaining construction works by community (with supervision of CARE) include completion of pipe laying and backfilling of trenches, water point construction and connection, and soakaway construction.

The main cause of the delays was the late signing of the new contract between CP and the engineering contractor, Rankin. This was due to the bureaucratic processes of CP's donor agency, DfID. In addition, some of the required imported equipment was not available, although parts were borrowed from other projects or substituted. The community also reported that the subcontractor (China GEO) was working in all zones rather than focusing on zones 4 and 5. Conflicts regarding pipe location also slowed down some work. Phase II works also depend on the success of community mobilization, although CP reported that the Chibolya community has completed the works in record time.

Temporary operation plan

Because the 5 JST taps are being operated prior to the completion of the whole system, it was agreed to set up temporary operation and financial management (FM) systems. During this trial period, the RDC would be responsible for FM, while JST and CARE would be responsible for technical operation including chlorination. The technical and management implications of operating the first 5 taps ahead of the rest of the system were considered in several meetings. The community decided that operation hours would be from 06:00 – 10:00 and 14:30 – 18:30 (8 hours daily). Taps would be secured by removal until a locking system is in place. Water would be provided for 3 days free of charge to give time to test pressure and other technicalities as well as sensitize the community coming to collect water on the payment system to be implemented and other matters. Tap attendants would be in place during the demonstration period.

Cost recovery system / temporary financial management system

Since the completion date of the whole compound water system is not yet known, it was decided to make arrangements for a temporary system to operate for four months (December 2000 to March 2001). The following was agreed upon with CP, JST, and the community:

- 1) Payment method & water levies: K3500/household/month for 8 or 10 containers (20 liter)

or K50/container. All payments would be made in advance to a cashier at a cash collection point. User cards would be issued for monthly users and tickets to those who buy per container.

- 2) Cashier: Suitably qualified person would be selected from the community and paid a minimum wage. Community to develop conditions of service and make selection with support of CP and JST.
- 3) Cash collection point: The new JST-funded community school will be used as a temporary cash collection point. Days and hours of operation will be gradually reduced. The space would not be available after the start of school in January 2001. (CP is funding the construction of a Compound Planning Office, which will have an office for water scheme management. Estimated date of completion is late December 2000.)
- 4) Banking: Separate current account is being opened at Barclay's Bank with 2 community signatories (RDC Treasurer and WC Chair) and 2 LCC signatories, as is the policy according to the RDC constitution.
- 5) Stationery and office supplies: Start-up funds were allocated by JST to cover the initial stationery requirements of user cards, receipts and tickets as well as basic office supplies.
- 6) Support: Support to the community would be provided by CP officers.

Evaluation objectives and methodology

Evaluation exercises were carried out in November 2000, about the same time the pilot scheme became operational, but before the temporary financial management system was in place. Monitoring occurred throughout the implementation process.

The overall objectives of the evaluation were:

1. To assess the appropriateness of the design and quality of infrastructure
2. To examine community participation in the project and ownership of the water system
3. To determine the social and economic impact of the new water supply on residents of zones 4 & 5
4. To consider the factors contributing to success and failure
5. To build capacity of LCC and RDC in monitoring and evaluation.

The following methodology were employed:

1. Analysis of community monitoring sheets, task force meeting minutes and member reports
2. Two-day participatory workshop involving LCC, the community, and CARE Prospect
3. Focus group discussions with the RDC, water committee and Tap Attendants
4. Survey of 300 households in Zones 4 and 5 carried out by subcontractor (to be compared with baseline survey of 419 households in same area).

As this was considered a pilot project, the evaluation was generally a self-assessment although an outside subcontractor was used for the household survey. The lessons learned are intended to be fed into future project designs, guidelines and manuals to be produced by the study.

Because the water system was not operational at the time of the household survey, the social and economic impact on users of the scheme could not be assessed. In addition, the operation and management system was still being put in place at the time the evaluation was carried out. Therefore, the findings below focus mainly on the process of project implementation and the plans for the future O&M system.

Findings

Efficiency

Community response to the CARE Prospect-JICA Study Team integration plan. The integration was considered beneficial for the long-term outlook of water supply in Chibolya, and in the short-term so as not to be duplicating efforts. But since the collaboration began following the design stage and after JST had conducted workshops and signed an MOU with the community, there was quite strong resistance expressed by the community who felt marginalized when left out of decision-making.

Chibolya RDC expressed their concern at the beginning over the plan to integrate the pilot scheme with CP. These doubts continued during project implementation. Including the RDC in the MOU might have reduced some of their concerns, but in general the group lacks experience working with donors. In fact, the RDC reports that JST is the first donor to implement projects through the ABO structure. Working with two donors simultaneously with slightly different approaches seemed to overwhelm the RDC. Consequently, much effort was required to overcome obstacles.

Delays further disillusioned the community who were expecting water by the original timetable of late September. Most of the delays were unavoidable due to bureaucratic procedures and the fact that the whole project was carried out on a much larger scale. CP also had different concerns and priorities than JST, which created misunderstandings during implementation. Nonetheless, all stakeholders worked hard to overcome obstacles, solve problems and coordinate efforts. Chibolya will have a safe reliable water supply within the next few months.

Collaboration among stakeholders. Although the CP-JST MOU called for regular meetings involving all stakeholders, this was not fully achieved due to the short time frame of implementation and the logistics of getting all parties together. This resulted in some breakdown in communication especially concerning the delays. Whereas JST was pressing to continue operating the pilot scheme on the time frame committed to, CP had other priorities and concerns.

JST was also following the lead of CP with regard to the management structure. JST had been made well aware of CP's interest in establishing a pilot system that would be consistent with the overall financial management system, therefore decisions on FM were made in meetings involving CP, JST and RDC. Postponed meetings resulted in delayed action. Therefore, last minute efforts were made to put arrangements in place by the time the water was flowing. The logistics of opening a bank account, designing and printing stationery, and selecting a cashier and cash collection point proved more difficult and time consuming than expected.

Community mobilization. As mentioned above, the RDC was highly successful in mobilizing community volunteers to carry out the required works. People were recruited through zone leaders and it was decided that residents would lay pipes in their zones. But many volunteered to work in other zones because they wanted to speed up the works before the arrival of the rainy season. Although it was agreed that women would work from 8:00 – 10:00 and men from 8:00 – 11:00, many people were working until 15:00 or 16:00 without receiving any food or drink. They worked 6 days per week. People understood the project was for their own benefit, and were anxious to see the water flow.

In zones 4 & 5 it was estimated by leaders that about 60 people were involved, two-thirds of them women. It is possible that numbers were even higher because the post-project survey

found that 64% of 300 households reported participating in the project, mainly through labor provision. Boys and girls aged over 10 years were also active in quite large numbers. The main work carried out by the community was finishing trench digging, pipe laying and backfilling. They also helped to build the tap stands and soakaways.

The RDC also had success in forming a water committee (WC) and finding tap attendants (TAs). Members walked through the zones with a megaphone asking people to volunteer. The WC has 5 men and 5 women and they've been in place for one year. TAs are 4 women and 1 man. Both of these groups were involved in the construction works along with the RDC members who were encouraging by example and were out there doing physical labor along with everyone else.

Training programs. The 5-day community water management training was evaluated as very useful for those attending. It covered a range of topics, including water committee roles. But it was held before a management model was agreed on with CARE and also before the establishment of the temporary financial management system. Therefore, although broadly addressing water management, it was not specifically tailored to the day-to-day operation of the Chibolya water scheme.

The 3-day water system operation and maintenance training also had shortcomings relating to design, preparation and logistics. Although LWSC has experienced trainers on their staff, they do not have experience in training communities in O&M. The internal coordination between engineers and training staff was lacking, as were practical preparations. It was discovered that no one from LWSC had actually visited the Chibolya site prior to training to better plan the practical sessions. Sessions also had to be rescheduled due to double booking of the training room. To compensate for these shortcomings, an additional half-day training session on O&M was arranged with the community, supported by CARE and the contractor.

Effectiveness

Community awareness and involvement in ABO system. The Chibolya RDC is new but already well known, at least in the pilot project area of zones 4 and 5. In the post-project survey, 48% of residents could name the RDC Chairperson, another 40% had attended a zone meeting, 36% could name one of the Forum members in their zone, 89% were aware of the water committee and 48% had attended a meeting related to the water project.

The comparative figures from pre-project are not known, but it is likely that RDC involvement in the project has been the main factor in this relatively high level of awareness. Over the past year, the RDC has become more established by opening a bank account and registering with the Registrar of Societies, both called for under the RDC constitution.

Subcommittee formation. A total of four subcommittees were formed under the RDC to work with the JICA Study Team and subcontractors and CARE-Prospect. These include Water Committee (JST water scheme), Education Committee (JST community school), Garbage and Solid Waste Committee (CARE) and Gender group (CARE).

Water committee members were supervising community work during construction. The Chair of the WC has also worked hand-in-hand with the RDC during project implementation. WC members gave a variety of responses when asked why they volunteered, including:

- interest in project
- concern about community
- desire for respect
- personal gain (opportunity to learn new skills, get job as plumber, etc.)

It is too early to assess the capacity and commitment of WC members and know how well the committee will be able to carry out its role. Several of the members in fact revealed that family and friends often insult them for their involvement in community work as they don't understand the concept of volunteering. Without the support and encouragement of those around them, it can be difficult for individuals to stay involved.

Water management model for Chibolya. Discussions are still on going between CP and the RDC to select the most appropriate management model for the community. Until integration, JST had been working with the RDC to take responsibility for the small pilot scheme. But CP's strategy is to present different management options and allow the community to select. There are 3 main options, which give differing levels of control to RDC, contractor and the NGO. The two groups have had difficulty reaching consensus. In focus group discussions RDC members expressed their opinion that CP was trying to import management models from outside the community and impose them on Chibolya. RDC members want more community control over the management of the system, while CARE pointed out the legal implications and benefits to having outside legal, financial and technical advisors. CARE emphasized that under the community trust model, the community is protected from legal issues that may arise.

Legal considerations. Because ABOs do not have the capability to own assets according to the constitution, LCC will be the legal owner of the assets, while the community is the symbolic owner. Therefore, LCC will be the custodian of the assets which they will lease to the community. It is possible that LCC will transfer responsibility to LWSC who would then be responsible to protect the system. RDCs are registered under the Societies Act, but a community trust would become a legal entity registered under the Lands Act.

The LCC has registered plot numbers for the Compound Planning Office, tank and borehole sites.

Payment of water levies. In just the first week of revenue collection it became evident that residents of Chibolya are in the habit of paying per container for water rather than paying a monthly levy. Although this results in a water bill 3 or 4 times higher at the end of the month, people are still opting for this method of payment. The WC Chair is now working on ways to educate residents on the benefits of paying on a monthly basis.

Start-up costs. Initial resources necessary to operate the water scheme include stationery (printed user cards, receipts, tickets), general office supplies (accounting books, staplers, calculators, etc.), locks for meter boxes, tools, chemicals, umbrellas and rain jackets for TAs, and many other items. Some of these are essential while others are optional. For expendable items, costs need to be closely compared to revenue. Because the JST had no clear policy on the amount to provide, community leaders were coming to the office on a daily basis to request additional funds. There was little effort to look for resources within the community and economize on these expenses.

Expected problems. In the evaluation workshop, participants were asked to brainstorm potential problems or threats they would experience in running the water supply system. Many items were listed, including the following:

- Security issues (vandalism and theft)
- Corruption (funds mismanagement, reselling water, illegal connections, using other's user cards, etc.)
- Breakdowns (lack of funds, tools, spare parts for maintenance)

- Water pollution
- Community conflicts (fighting at tap stands, TAs showing favoritism, etc.)
- Leadership transition with no proper handover of responsibilities
- Political interference

Some of the above were actual problems during implementation, as three gate valves were stolen, politicians interfered, and when the water first started flowing at the taps there were some disputes among those collecting. Anyway, it is clear that many issues related to running the water supply can arise and those in charge need good skills and adequate support to address them appropriately.

Impact

Political interference. Based on experience, CP has proactively addressed the issue of political interference from the market committee. In anticipation of problems, CP sunk a separate borehole for the market. It is possible that during the dry season this smaller borehole will dry up. However, if a connection were provided now, it is likely that the market committee would expect water free of charge while continuing to sell water, default on their payments to the community, demand representation on the water committee, etc. Therefore, CP advised the community that it is better to delay connecting the market to the community system until requested. At a later date, the community will have an established management system and much more bargaining power. Papers can be signed to protect the community from political interference from the market committee.

Demand for water. The demand for safe water closer to home in the area of the pilot scheme and Chibolya as a whole is great. At the time of the baseline survey, it was found that people spent a great deal of time collecting water (see the table below).

Time	Percent of households	
	To water source	Queuing and drawing water
Less than 5 minutes	25.3	4.5
5-15 minutes	48.9	6.7
15-30 minutes	18.4	7.6
More than 30 minutes	6.2	78.3
No answer	1.2	2.9
Total	100.0	100.0

Source: Baseline household survey

Besides the time and effort required, the situation was causing safety and security problems as well. Women had to wake up early, leave home in the dark, cross a busy road and were sometimes accused of infidelity. The homes of widows and single mothers were vulnerable to thieves.

People with personal taps had taken advantage of the situation and were charging K100 per bucket. The post-project survey, which was carried out before the pilot scheme was operational, found that the majority of households were getting their water from a private tap and paying K100 per bucket. Most households collected an average of 5 buckets per day, meaning their monthly water charge was as much as K15,000 (K500x30 days). These figures are consistent with the data collected in the baseline survey.

The new scheme should reduce the monthly amount households pay for water and the distance needed to travel. Daily water usage is also expected to increase with a corresponding positive impact on health and hygiene. According to the post-project household survey, the

perceived benefits of the project in order of number answering are:

- Closer tap stand
- Increased water consumption
- Improved water quality
- Less expenditure on water fees
- Less waiting time
- Increased pressure

CP and residents have both noted that many people get their water from contaminated shallow wells in the compound due to poor access to safe water and old habit. Sensitizing on this issue will be a big task. Families that have been using the wells for generations are especially difficult to convince, but it is important for both health reasons and cost recovery for the water scheme. The sensitisation process involves compiling an inventory of the wells, raising awareness on burial and finally burial.

Relevance

The water scheme meets the community's priority need for access to safe and reliable water. The project approach of working through the RDC and its subcommittees and building their capacities is in line with the strategies of LCC, as well as other donors and NGOs supporting water improvement projects in the urban settlements. The infrastructure, water quality and service level all meet LWSC standards.

Sustainability

Support. CARE Prospect will work closely with the community to operate and maintain the water scheme. They will be providing a grant for back-up spares and capital replacement. The subcontractor will provide necessary tools. CARE is also funding a Compound Planning Office that will be the base for the RDC and water scheme managers. Under the CARE management models, the scheme is run by professionals who receive a proper wage and benefits.

The financial management system in place now is subject to change once the whole scheme is operational. It is too early to evaluate financial sustainability, stability of the workforce, security for the infrastructure, support systems and other issues affecting the long-term sustainability of the water supply scheme.

Conclusions

1. Obstacles are more likely when working with an inexperienced RDC. In Chibolya, the RDC had a very set mind frame regarding certain issues, making consensus difficult. This was mainly a result of the domineering attitude of some members, which set the tone of meetings. There was little sense of spirit of working together towards common goals.
2. The RDC worked very effectively to mobilize temporary community labor. Sustaining volunteers past the construction stage is likely to be more of a challenge.
3. Training and other capacity building exercises require close support and guidance from project managers to be effective. This is particularly true when training is carried out by contractors who are not closely involved with project implementation. The timing of training is also of critical importance.

4. The integration with CARE Prospect caused delays as would be expected with the larger scale project and greater number of stakeholders involved. The late timing of the integration also meant that during project implementation both JST and CARE were trying to proceed according to their original plans when these were sometimes in conflict. The sorts of misunderstandings that occurred would be avoided if planning were done together from the start.

Recommendations

1. Training materials need to be developed in close consultation with project managers and reviewed prior to training. Those designing training need to have an understanding of the target group and the roles they will be expected to carry out. In the case of O&M engineers and training specialists need to design the training program together to ensure the end result is practical and pitched at the appropriate level.
2. Project task force of donor, NGO, contractor, community and other stakeholders with regular scheduling of meetings should be established for timely addressing of issues.
3. Donor should provide funds for start-up operation costs and a grant for the capital replacement fund. The appropriate amount should be calculated and turned over to project managers, who would be responsible for prioritising the resources needed and budgeting accordingly.

A-3 Results of Social Survey

Results of Social Survey

A.1 Introduction

The JICA Study Team subcontracted with Rankin Engineering Consultants in collaboration with PMTC for a Social Survey covering eight settlements, Bauleni, Chainda, Chazanga, Chibolya, Freedom, Kalikiliki, Old Kanyama, and Ng'ombe. The analysis from this report will form the basis of the conceptual framework for social services development and will also provide an effective tool in the selection of three settlements where pilot studies shall be implemented during the 2nd phase of the Study.

A.2 Objectives of the Survey

- Analysis of the current situation of the social services development in the City of Lusaka,
- Analysis of the current situation of the social services development in the eight settlements, and
- Analysis of the socioeconomic situation in the eight settlements.

A.3 Survey Methodology

The first phase consisted of content analysis of over 20 existing resource documents. The purpose of the literature review was to determine the status of social services delivery in the City and in the selected eight settlements of Lusaka. An attempt was made to fill in gaps in data identified during the literature review through field surveys. This involved conducting interviews using pre-designed questionnaires involving an average of 6 Zonal Development Committee members, 5-6 women leaders and the Resident Development Committee Chairmen for seven of the eight settlements. Owing to the non-existence of RDCs and ZDCs in Chazanga, only information relating to women leaders was collected from there.

Field Observations Survey were done in the settlement where there was no existing map in order to assess the infrastructures and their condition. The three affected settlements are:

- Bauleni,
- Freedom, and
- Chibolya.

Interviews with individual ZDCs, Women Leaders and RDCs were supplemented with communal meetings, as was the case in Chibolya and Freedom.

An infrastructure assessment was conducted for all the settlements, this comprised actual visits to the site by an engineer.

Interview Sample Size

The following is a tabulation of the sample size for interviews:

Compound	No. of ZDCs	No. of Women Leaders	No. of RDC
Bauleni	5	4	1
Chainda	7	5	1
Chazanga	None	5	None
Chibolya	7	5	1
Freedom	5	5	1
Kalikiliki	3	5	1
Old Kanyama	24	5	1
Ng'ombe	7	5	1

Where the women were actually leaders, the position they hold and in which group/organization is indicated. It must be noted though that except in Ng'ombe, it was very difficult to find women leaders. The women therefore interviewed were those that the RDC or its interim selected as women that knew the settlement well enough to give adequate information.

A.4 Country Overview

Zambia, a landlocked country, has a population of 9.8 million (1995 estimates), and an annual population growth of 3.2%. Forty-two percent of the population live in urban setting while 58% live in rural areas (MOH, M & E, 1996). Women of child bearing age constitute 24% of the population while 20% represents children under-five.

Poverty in Zambia continues to be widespread with about 70% of the population living below the poverty line. The gross national product per capita was \$350 in 1996. Declining economic conditions in the country have been compounded by the HIV/AIDS pandemic. This situation has resulted in an upward trend in infant and child mortality rates. The infant mortality rate was estimated to be 92 deaths per 1000 live births in 1982-1986, and 109 per 1000 in 1992-1996.

According to Situation Analysis of Girl Child Education in Zambia, augments evidence of deficiencies in education opportunities for children. "Real spending on education stands at less than half what it had been ten years ago, without any significant or sustained improvements in public spending on the sector. Education

accounts for no more than 10% of total public expenditure and 2.5% of the GNP (1994). The author further affirms that levels of educational provisions have been affected by among other factors, cost sharing measures and under-financing of education. The report further highlights the declines in social service provision as follows:

- Health spending in 1987-1991 was one-third lower in real terms than in 1982-86, while education spending was more than 50% lower.
- The poor still do not benefit from health services now based on a cost-recovery system. The increases in infant and child mortality could be attributed to unaffordability of health services among the poor.
- The under-funding of the schools threw responsibility to parents to support their schools, not just with labor but with cash payments.

According to Prospects for Sustainable Human Development Zambia, living conditions in Zambia by the 1980s had begun to decline. By mid 1990s only 40% of the urban households had electricity. Although most urban residents had access to piped water, much of it was no longer potable. Further, less than half of urban residents had access to adequate sanitation. Garbage collection had deteriorated in the streets.

According to Review of Formal Education Sector in Zambia, problems affecting the quality of the education system in Zambia have in the past included over-centralization. The author states, "At present the Ministry is overcentralized and bureaucratically top heavy. An ODA study in 1992 noted that there is no formal consultative mechanism between departments and that all decisions, however minor, are taken by the Permanent Secretary. This lack of cohesion was particularly evident in the preparation of the draft National Policy where the bulk of the work was done by the Technical Cooperation department with little or no apparent input from the Planning Unit."

A.5 Situation of Social Services Delivery in Lusaka City

The City of Lusaka is the capital of Zambia. According to a joint report by the Environmental Council of Zambia and the City of Lusaka (1997), Lusaka is the most rapidly growing city in Zambia. It has a population of more than one million; an annual growth rate of 6.2% compared with natural population growth of 3.2%. The same report reveals that owing to the expansion of numerous illegal or unplanned settlements, and a reduction in funding to the Lusaka City Council, there has been increased pressure on the Council's service delivery capacity.

According to Study on Poverty Reduction and Government (Ngenda Report), the growing population in the City of Lusaka has resulted in environmental problems such as those related to water and sanitation, solid and liquid waste disposal, insufficient housing and social services, unplanned settlement development, unemployment and worsening urban poverty. Ngenda, et al, suggest that “In Lusaka poverty has reached unprecedented levels, with most households living below the poverty datum line, estimated at less than \$300 per annum” (1998). The situation of inadequate housing has meant that most of the poor are tenants. “Between 35-40% own houses in the poor settlements while the remaining 60% are renters. Social services are inadequate and in a poor state, school places are limited, the health services are in poor condition, inadequate and expensive with the introduction of user fees. As a result most people cannot access the health services where available. Transport services are either absent, expensive or irregular”.

A situation analysis of certain environmental issues as given by the Environmental Council/Lusaka City Council joint report (1997) suggest an inadequate solid waste disposal arrangement. This deficiency affects markets, residential areas, bus stops, medical institutions, commercial, and industrial areas. According to the same report, the areas serviced are usually the town center, low density residential areas, governmental and medical institutions as well as selected markets. Peri-urban areas and most markets are only partially serviced.

According to the same report, the Council collects only about 30,000tons per year of solid waste, which represents 12% of the total solid waste generated. The situation is compounded by the fact that out of 19 refuse collection vehicles only about 8 are serviceable and on the road.

In terms of hazardous waste removal, the report states that “in some cases, the generators do not manage the waste in an environmentally sound manner. Perhaps this could be attributed to the lack of sufficient knowledge in hazardous waste management, and lack of enforceable legislation at present”.

The status of social service delivery in Lusaka is inadequate. “There is evidence of lower levels of education, health services and adjudication facilities and an increase in destitution, evidenced in the number of street children” (Ngenda Report). The report further points out that, “the local authority is unable to cope with infrastructure and service provision due to numerous internal and external problems of their own”.

In terms of Education and Health, there are 124 primary and secondary schools, 18 private and tertiary education institutions while health services include 30 government health institutions and 134 registered private clinics and health centers (Ngenda Report). The report further articulates other aspects of the socioeconomic

status in Lusaka as follows:

- **Gender**
54% of the legal settlement population comprises women. For every poor man there are twelve women. 12% of the total urban poor households constitute female-headed households.
- **Education**
Females have lower education standards. 18% of youths between the age 10-19 cannot read or write, of whom, 80% are females. Further, school attendance is lower for girls than boys. While more girls in secondary school drop out of school.
- **Housing**
The total housing stock for Lusaka stands at 300,000 units of which 90% are squatter units and accommodate 70% of the city's population on an area of less than 20% of the land. Further, population densities are up to 2,000 people per square kilometer concentrated in the CBO (Central Business District) and periphery.
- **Water**
The water reticulation and sewerage systems of the Lusaka and sewerage Company only caters for 36% of the City's population while 64% is serviced by informal systems.
- **Electricity**
Only 24% of the urban poor are serviced with electricity.

A.6 Existing Policies and Reforms

Health Services

By 1990 Zambia had 82 hospitals of which 42 were government run. There were 942 health centers of which 796 were government run; 734 of the health centers were in rural areas and 208 were in urban areas (Duncan 1996). The decline in immunization coverage from 80% in 1990 to 20% in 1992 evidenced a drastic decline in the public health system. Having assessed the deteriorating situation in the health sector, the government instituted health reforms in 1992. According to Duncan's report the health reforms represent a principal initiative to improve equity, access, cost-effectiveness and service quality. The author states that the overall vision of the health reforms is "to provide Zambians with equity of access to cost-effectiveness, quality health care as close to the family as possible". The main approach to implementation involves the decentralization of responsibility for essential functions to the district level. The strategic intent is to make services responsive to local needs and accountable to users. This has entailed the

establishment of District Health Boards consisting of elected and appointed community representatives. According to Duncan, “Decentralization has been based on a process of re-defining the roles of government, individuals and communities in health provision and then building partnerships and cooperation among the different participants. This marks a radical departure from past approaches which were often excessively centralized and non-consultative”.

According to the “Country Health System Profile” of 1998 at the Central Board of Health offices, the aim of the health reforms is to “provide all Zambians with equity of access to cost-effective quality health care as close to the family as possible.” The report further points out that the principal innovations of the reforms included the creation of Central Board of Health, the establishment of autonomous health management boards, and mobilization of popular participation and partnership.

Functionally, the Ministry of Health is responsible for policy formulation for the health sector, development of health legislation, resource mobilization, budget and finance for the system, and external relations with bilateral and multilateral partners in health. It is responsible for monitoring the CBH. Service delivery is no longer a function of the Ministry. Strategic planning for health sector is a major role. The Central Board of Health has been assigned the service delivery function. The Central Board of Health in turn subcontracts to health management boards. Its functions include commissioning of health services, health system development, monitoring and evaluation, and the promotion of public health. The Central Board of Health is responsible for the interpretation of the policies and legislation and is assisted in its support to autonomous district boards by Regional Directorates.

The District Health Office is the technical executive of the District Health Boards. The former supervises hospital personnel through the hospital board and the staff in the health centers and health posts.

In addition to the Public Health System, there are private institutions providing medical services in the country. The Churches Medical Association of Zambia (CMAZ) has been a major partner in the health reforms. This institution provides health services, training of health workers and supervision of district boards. The churches account for up to 30% of health services in the remote areas of the country.

National Drug Policy

Policy areas in the Draft National Policy document of 1994 by the Ministry of Health include existing legislation, pharmacy/poisons Act and registration of pharmacy business. In terms of legislation, the main Acts in Zambia covering the profession of pharmacy and the control of drugs at present are:

- The Medical and Allied Professions Act,
- The Pharmacy and Poisons Act,
- The Therapeutic Substances Act, and
- The Food and Drugs Act.

As regards registration of pharmacy business:

- No one other than a fully registered pharmacist shall carry on the business of a retail pharmacy (in the draft Act there is a requirement that there be pharmacist ownership/majority control of shares to ensure professionalism is not sacrificed for commercialism.
- The words “pharmacist”, “chemist”, “druggist”, or dispensing chemist or any similar word shall mean that the person who has control of the business is a registered pharmacist.
- The word “drug store” shall mean that the person is a registered pharmacist or registered pharmacy technician.

Educational Services

The precursory assessment that led to the educational reform-process revealed that the education system had suffered from excessive decentralization, bureaucracy, poor management and the lack of community involvement. In 1994 the Ministry of Education began a major initiative to determine a process of educational reform that would revitalize the sector. The proposals for education reform were finalized in the form of a national policy on education. The proposals included the following:

- Decentralization of power and authority to the local level.
- Sharing of costs with communities and enhancing accountability.
- Establishment of elected Education Management Boards at the local level to take charge of the management of schools and teachers.
- The Boards are to be accountable to the communities they served.
- Many of the existing educational functions at national and provincial levels such as monitoring, audit and inspection are to be devolved to newly formed District Management Boards.
- The Management Boards are to be introduced in the Copperbelt and eventually extended to the whole country.

According to the “National Policy on Education” of May 1996 by the Ministry of Education, the Policy in terms of access and participation includes the following:

- The goal of the Ministry of Education is that every child should have access to nine years of good quality education.

- As the first step leading to the attainment of the goal of universal basic education, the Ministry will ensure that every child will have access to a minimum of seven years of good quality schooling in a school of parental choice.
- Attainment of the goal of nine years of good quality education for all will be pursued on a partnership basis between the Ministry on one hand, and local communities and providers of education on the other.
- In cooperation with relevant partner ministries, and with communities, non-governmental organizations and religious groups, the Ministry will explore ways of establishing out-reach learning programs that will bring the benefits of school education to children who for valid reasons are not able to attend school in the conventional way.
- Local communities will participate in the development, maintenance and repair of basic schools. As District Education Boards are established they will be mandated to promote such participation.
- The Ministry will negotiate with local authorities, Church groups and other bodies for the resumption by these bodies of some of the responsibility they had in the past for the management of schools.

Strategies adopted by the Ministry of Education in assuring that every child has access to seven years of good quality education including: upgrading all lower basic schools to middle basic level, rehabilitating existing infrastructure, and providing additional or new facilities in response to demand, with special attention to the needs of Peri-urban areas.

Water and Sanitation

According to Prospects for Sustainable Human Development in Zambia, the deterioration of this sector is evident from the following:

- Many years of low levels of investment and inadequate maintenance,
- Lack of safe water supplies,
- Population growth and increased congestion,
- Long walking distances representing a major demand on women's time,
- The lack of serious plans to address water and sanitation demands in shanty towns,
- Budget cuts resulting in much of the water not being treated,
- Poor sewage treatment facilities resulting in poor quality of effluent leading to environmental pollution, and
- Most urban households experiencing prolonged shortages.

In making allusion to the water and sanitation status in Lusaka, Duncan states, "The

extent of past neglect is evident from the fact that Lusaka still does not have a gazette dumping ground. Less than ten percent of garbage is collected, with remainder being left in heaps at roadsides. Because of water supply problems in urban shanty town areas, many households now purchase water by bucket from street vendors. In mid 1994 water cost was Kwacha 100 per bucket”.

In 1991 the Government, with the support from German and Norwegian Governments and other donors began a process of assessing the water sector. This resulted in the approval of the national water policy and overall package of reforms for the water sector in December 1994. The strategic intent of the sector includes:

- An intersectoral strategy emphasizing intersectoral cooperation, decentralization and community-based approaches to provision and associated with health education;
- Establishment of district committees consisting of community representatives; and
- Establishment of a Community Management and Monitoring Unit to provide policy guidelines regarding planning, management and evaluation of water and sanitation interventions.

Housing

According to the National Housing Policy produced by the Ministry of Local Government and Housing (1996), the goal of the policy is “to provide adequate affordable housing for all income groups in Zambia.” The objectives of policy are articulated as follows:

Allocation of a minimum of 15 percent of the national annual budget to housing to support a sustainable housing development program;

Making serviced land available for housing development and streamlining the land allocation system;

Streamlining building standards, regulations and other controls so that they accord with the capabilities, needs and aspirations of the various sections of the population;

Encouraging the production and use of local and affordable building materials;

Assisting the poor to acquire decent shelter through alleviation of their affordability problems;

Fostering housing areas that are functional, healthy aesthetically pleasant and environmentally friendly; and;

Preparation of a national housing implementation strategy.

Information and Media

According to the National and Media Policy document (1996), the intent is through the policy to address three main areas of concern. These are:

- Need to increase media outreach and access to all, particularly to the rural community;
- Need to pursue necessary and relevant legal reforms to enhance the people's right to information, freedom of the press and freedom of expression; and
- Need to encourage private investment in the media and media support industries.

The achieve this the report articulates a number of objectives which include the following:

- Putting in place a comprehensive and national wide human and material resources development program; and
- Amending or repealing laws that hinders the enjoyment of the fundamental freedom of the media, side by side with the promotion of more private investment into the sector.

The policy also identifies strategies to aid the attainment of the objectives. The emphasis is on the creation of a nation-wide communication support infrastructure which will form the basis for a range of incentives to encourage private sector participation and investment in the media and media support industries. Other strategies include the establishment of small rural presses or desktop publishers and installation of additional transmitters, especially in rural Zambia.

Public Service Capacity Building

According to the Public Service Training Policy, Government's intent in the area of capacity building includes the following objectives:

- Ensure that training is relevant, systematic, coordinated and evaluated in order to meet the needs of the Public Service; and
- Ensure the efficient and effective utilization of trained personnel in the Public Service.

A.7 On-going Projects in Unplanned Urban Settlements in Lusaka

The Lusaka Water and Sewerage Company is one of the major players in social service delivery. In accordance with the company's Policy Document on Water Supplies and Sanitation in Peri-Urban Area of Lusaka, under the Companies Act Chapter 686 of the Laws of Zambia, Lusaka Water and Sewerage Company was established to among other things:

- To carry on the business of a Water and Sewerage Company within the area under jurisdiction of Lusaka City Council;
- To provide and distribute a reliable supply of potable water to all commercial, industrial and domestic premises in the area under the jurisdiction of Lusaka City Council;
- To be responsible for the provision, control and maintenance of sewerage for all commercial, industrial and domestic premises in the area under the jurisdiction of the Lusaka City Council;
- To exercise overall control over the sources and supply of water in the area of Lusaka City Council and particularly to conserve, redistribute and augment those water sources;
- To levy from the consumers' charges for the services which the company provides, and to make revisions to those rates in whatever ways and at whatever dates as the company may from time to time deem appropriate; and
- The prescribed area referred to as the area of Lusaka City Council is interpreted as the planned areas of Metropolitan Lusaka.

To foster the participation in the water services in Peri-urban area, the policy document indicates that the company has devised a strategy of working closely with community based committees such as the Resident Development Committee or Water Committee in council recognized areas and in other areas respectively. Their communities elect these committees. The committee's responsibility is to plan for the improvement of water and sanitation conditions.

Owing to the Councils inability to meet refuse collection demands, some community-based organizations have initiated garbage removal programs. These include PUSH-Zambia, Care-PUSH, Irish Aid, Stop Uve Anti Cholera Society and JICA Project.

According to the report, PUSH Zambia, a national NGO supports a range of activities such as the construction of latrines and installation of midden boxes for refuse collection and disposal. PUSH-Zambia uses Food-for-Work" mode of assistance. In Lusaka the project is carried out in Bauleni, Mtendere, Garden, Kalingalinga, Chawama and Chaisa.

CARE-PUSH, now CARE Programme of Support for Poverty Elimination and Community Transformation PROSPECT a project of the CARE international NGO supports community based garbage collection, rehabilitation of community centers, extension of School, etc in George, Kanyama and Chipata Compounds. Community officers from CARE-PUSH work closely with Resident Development Committees (RDCs).

Stop Uve Anti Cholera Society is an anti-cholera group based in Chaisa Township. It is a voluntary organization with 30 members. The societies main mandate is to fight cholera through awareness creation and garbage removal. Chaisa has 50,000 people and is not serviced by the Lusaka City Council in terms of refuse removal.

JICA-Project, implements a cost recovery community based water supply project in George settlement. The project works closely with the local Resident Development Committee CARE international and the Lusaka Water and Sewerage Company. Potable water supply is directly billed to families and 50% of the funds collected goes towards the maintenance of the supply system and the other 50% go towards capacity building.

The Lusaka Water and Sewerage Company Policy Document articulates the company's future position as follows:

The company will undertake to provide services only where confirmed Lusaka Water and Sewerage Company ownership of facilities is in place.

Where the installations have been constructed by either a donor agency, non-governmental organization or service clubs, the company will only take over ownership where facilities must comply with Lusaka Water and Sewerage Company standards on construction and of safety.

The ownership of facilities must be the subject of formal hand-over to the company.

The formal hand-over will only be accepted when the following additional agreements with the beneficiaries are in place:

- Mechanisms of payments and collection of charges in place.
- Any free support provided by the company is matched by equivalent contributions from community.
- All conditions placed on the community by promoter are agreed and in place.
- Lusaka Water and Sewerage Company will provide technical support to the donor agency or contractor involved in the provision of water supplies.

Master Plan details for social services delivery in Lusaka were not readily available. It was understood that the Lusaka City Council with support from World Bank is in the process of working on completing the Master Plan.

A.8 Comparative Description of the Eight Compounds

The following analysis is made from the RDC, the women's questionnaires and the narratives of the eight settlements. The information from the zones was not reliable

and has therefore not been used in this analysis.

Population, Number of Zones and Ethnic Diversity

Settlement	Total Population	Number of Zones	Number of Ethnic Groups
Bauleni	Information not available	13	5
Chainda	Information not available	5	5
Chazanga	Information not available	None exist	None exist
Chibolya	30,000	7	5
Freedom	Information not available	None exist officially	4
Kalikiliki	14, 803	5	5
Ng'ombe	40,000	10	5
Old Kanyama	62,240	24	8

Source: RDC Questionnaire

Old Kanyama is the largest settlement of all the eight study areas, it also has the largest population and the largest number of zones. Old Kanyama also has the largest number of ethnic groups represented in the area.

Local Administration

Of the eight settlements, only Freedom and Chazanga are not zoned and do not officially have an RDC in place

Major Economic Activities

For all seven settlements whose RDCs were able to give in information, petty trading is the major economic activity engaged in by the men. This is the same for the women, except in Chainda, where beer brewing and selling is the major activity that women engage in.

Average Monthly Income

Bauleni	Chainda	Chazanga	Chibolya	Freedom	Kalikiliki	Ng'ombe	Old Kanyama
75,000	100,000	-	70,000	100,000	50,000	95,000	70,000

Source: RDC Questionnaire

Bauleni and Kalikiliki have the lowest average incomes whereas Freedom and Chainda have the highest.

Availability of Credit

Bauleni	Chainda	Chazanga	Chibolya	Freedom	Kalikiliki	Ng'ombe	Old Kanyama
Yes	Yes	-	No	No	No	No	Yes

Source: RDC Questionnaire

Bauleni, Chainda and Old Kanyama residents currently have credit available to them. It must be noted though that “Kaloba”, when residents use the services of a money lender, is available in all the settlements. Residents, in particular the women interviewed in all eight settlements, did not consider this credit available due to the high interest rates charged on the money borrowed.

Sanitation Facilities – Availability of Latrines at Each House

Bauleni	Chainda	Chazanga	Chibolya	Freedom	Kalikiliki	Ng'ombe	Old Kanyama
No	No	Yes	No	No	No	No	No

Source Women's Questionnaire

Except in Chazanga, all residents in the other seven settlements have to share pit latrines with neighbors or use the public ones such as those found at bars/taverns.

Availability of School in Compounds

Bauleni	Chainda	Chazanga	Chibolya	Freedom	Kalikiliki	Ng'ombe	Old Kanyama
Yes	No	-	Yes	No	No	Yes	Yes

Source: RDC Questionnaire

Of the seven settlements that were able to answer this question, four said they have a school available in the settlement.

Major Priority Problem in Compounds

The major problems in each settlement are summarized below.

Bauleni

According to the Bauleni Needs Assessment, the major problems of Bauleni are as follows:

- Inadequate water,
- Lack of maternity wing at the local clinic,
- Uncollected garbage and unhealthy environment,
- No street lighting,
- Lack of secondary school,
- Poor market infrastructure,

- Lack of adequate residential plots,
- Insecurity,
- Lack of education,
- Poor road, and
- No women's club.

According to the RDC questionnaire, the major problems of Bauleni are as follows:

- Inadequate water,
- Uncollected garbage,
- Lack of maternity wing at the local clinic,
- Poor road,
- No police post, and
- Small market.

Chainda

According to the Chainda Community Profile, the major problems of Chainda are as follows:

- Inadequate water,
- Far distance to school,
- Unemployment, and
- No police post,

According to the RDC questionnaire, the major problems of Chainda are as follows:

- Poverty,
- No school,
- Insecurity,
- Unemployment, and
- Lack of maternity wing at the local clinic.

Chazanga

According to the Chazanga Needs Assessment, the major problems of Chazanga are as follows:

- Inadequate water,
- Poor road,
- Lack of school,
- Lack of clinic,
- Insecurity / Police post,

- Lack of community center,
- Poor sanitation / sanitary conditions, and
- Poor market.

Chibolya

According to the Chibolya Needs Assessment, the major problems of Chibolya are as follows:

- Inadequate water,
- Lack of clinic,
- Insecurity,
- Uncollected garbage / poor toilets,
- Skills center / community hall,
- Poor road / drainage, and
- Lack of secondary school.

According to the RDC questionnaire, the major problems of Chibolya are as follows:

- Unemployment,
- Excessive drinking,
- Water and sanitation,
- Clime,
- Lack of health facilities, and
- Lack of recreation facilities.

Freedom

According to the Freedom Community Profile, the major problems of Freedom are as follows:

- Lack of clinic,
- Inadequate water,
- Lack of school,
- Illegality of township,
- Poor road,
- Lack of sanitation facilities,
- Lack of self-help project infrastructure, and
- Inadequate building space.

According to the RDC questionnaire, the major problems of Freedom are as follows:

- Inadequate water,

- Lack of health facilities,
- No garbage disposal facilities,
- Poor sanitation, and
- Lack of education facilities.

Kalikiliki

According to the Kalikiliki Community Profile, the major problems of Kalikiliki are as follows:

- Inadequate water,
- Lack of clinic / health center,
- Lack of school,
- Insecurity / lack of police post,
- Poor road / lack of commuter transportation,
- Uncollected garbage / poor sanitation,
- Community hall,
- No market,
- Lack of street lighting, and
- Lack of bus stop.

According to the RDC questionnaire, the major problems of Kalikiliki are as follows:

- Inadequate water,
- Lack of clinic,
- Lack of school,
- Poor road,
- Lack of police post, and
- Uncollected garbage.

Ng'ombe

According to the Ng'ombe Community Consultations 1998, the major problems of Ng'ombe are as follows:

- Inadequate water,
- Lack of school,
- Poor road,
- Lack of market,
- Uncollected garbage,
- Lack of police post, and
- Lack of toilets.

According to the RDC questionnaire, the major problems of Ng'ombe are as follows:

- Inadequate water,
- Poor road,
- Uncollected garbage,
- Poverty, and
- Lack of education.

Old Kanyama

According to the Old Kanyama Community Profile, the major problems of Old Kanyama are as follows:

- Inadequate water,
- Lack of clinic,
- Poor road,
- Insecurity,
- Lack of school,
- Lack of post office,
- Legality of township, and
- Community center.

According to the RDC questionnaire, the major problems of Old Kanyama are as follows:

- Inadequate water,
- Insecurity,
- Poverty,
- Lack of clinic,
- Poor road,
- Uncollected garbage,
- Inadequate education facilities,
- No recreational facilities,
- No skills center, and
- No women's club.

For the seven RDCs that indicated major problems in their settlement, six (Bauleni, Freedom, Chibolya, Kalikiliki, Old Kanyama and Ngombe) all listed water as the priority problem. Chanzanga has no RDC and did not therefore indicate any problems. All the settlements except Freedom and Ngombe also indicated that there

is a security problem in their area, Chazanga again has no RDC so they did not answer this question.

Problems identified in settlement

Bauleni	Chainda	Chibolya	Freedom	Kalikiliki	Ngombe	Old Kanyama
<ul style="list-style-type: none"> • Water • Garbage • Maternity facility • Road • Security • Market 	<ul style="list-style-type: none"> • Poverty • School • Security • Unemployment • Maternity facility 	<ul style="list-style-type: none"> • Unemployment • Excessive drinking • Water/sanitation • Security • Health facility • Recreation facility 	<ul style="list-style-type: none"> • Water • Health facility • Garbage • Sanitation • School 	<ul style="list-style-type: none"> • Water • Clinic • School • Road • Security • Garbage 	<ul style="list-style-type: none"> • Water • Roads • Garbage • Poverty • School 	<ul style="list-style-type: none"> • Water • Security • Poverty • Health facility • Road • Garbage

Obviously, most of the problems identified by the RDCs can be classified as community infrastructure, or something visible as "hardware", with the exception of poverty. The RDCs do not perceive, as their priority problems, what may be called as "software", or something that is associated with enhancement of knowledge, attitudes, skills of the community people, that is destined to improve the living conditions in the settlements.

Clearly, the RDCs do not see the linkages between "hardware" and "software". The perception of the RDCs in terms of the priority problems is an implication of the lack of understanding and ignorance of the RDCs and the community people at large. Thus, the need to enhance knowledge, attitudes, and skills of the community is capitalized so that a maximum impact may be achieved through development of community infrastructure.

A.9 Driving Forces and Constraints

The driving forces and constraints for project implementation in the settlements are summarised below.

Driving Forces and Constraints for Project Implementation in Compounds

Compound	Driving Forces	Constraints
Bauleni	<ul style="list-style-type: none"> ➤ RDC in place and eager to see environmental improvements in place ➤ Sub- Committees in place ➤ Current RDC members' level of education was good ➤ Positive political intervention and cooperation ➤ Basic infrastructure available ➤ Interventions by/ experiences with donors, NGOs has brought awareness on developmental issues ➤ Skills in production of low cost building materials ➤ One of the cleanest settlements in Lusaka ➤ Willingness to contribute labour and even money 	<ul style="list-style-type: none"> ➤ Largeness of the settlement may make it difficult to implement a project. There is now Bauleni over-spill 1 and over-spill 2¹
Chainda	<ul style="list-style-type: none"> ➤ The RDC and some members of the community are trained in is trained simple management and book keeping skills ➤ World Vision has made the community conscious of development ideas including income generating activities ➤ Basic infrastructure is available, for example, a good main road, clinic and water supply ➤ An active LCC Site officer ➤ Willingness to contribute labour and even money 	<ul style="list-style-type: none"> ➤ No more room/land for expansion
Chazanga	<ul style="list-style-type: none"> ➤ Eagerness to start new projects ➤ RDC about to be formed while councillor is in place. Project could influence formation of RDC 	<ul style="list-style-type: none"> ➤ Very little experience with reputable or major NGOs or donors ➤ No experience in project

	<p>and work with a new RDC and councillor with no conflict</p> <ul style="list-style-type: none"> ➤ Small settlement even though still expanding ➤ History and experience of voluntarism especially by the women ➤ Willingness to contribute labour and even money 	<p>management</p> <ul style="list-style-type: none"> ➤ There may be negative political interference ➤ Insecurity is a real issue ➤ No basic infrastructure, the roads are bad ➤ Community still very rural ➤ Far from town
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Compound	Driving Forces	Constraints
Chibolya	<ul style="list-style-type: none"> ➤ New RDC in place and eager to see environmental improvements in place ➤ High level of unemployment may make people keen to participate for something to do to pass time ➤ Proximity to town may make it easier to have a project there ➤ Current RDC members' level of education was good ➤ Willingness to contribute labour and even money 	<ul style="list-style-type: none"> ➤ No sub-committees in place yet ➤ Insecurity ➤ No more land for expansion ➤ Basic infrastructure lacking, for example the roads are very bad. ➤ Elicit beer brewing and drinking may have a negative effect on any project
Freedom	<ul style="list-style-type: none"> ➤ Can influence RDC formation and Sub-Committees ➤ Small Community so it would be manageable ➤ Anticipation of new project because there hasn't been any intervention yet ➤ High level of unemployment may make people keen to participate for something to do to pass time ➤ Willingness to contribute labour and even money 	<ul style="list-style-type: none"> ➤ High political interference and rivalry was observed ➤ No RDC Sub Committees ➤ No experience with projects or project management/no interventions ➤ No basic infrastructure like roads, clinic, schools ➤ Far from town ➤ Bad narrow, dusty, roads
Ng'ombe	<ul style="list-style-type: none"> ➤ The RDC and some members of the community are trained in is trained simple management and other skills ➤ Current RDC members' level of education was good ➤ The RDC is pro active, it can make project proposals ➤ Sub –Committees in place ➤ Market Committee under RDC so there is co-operation. ➤ SLP has made the community conscious of development ideas including income generating activities ➤ Basic infrastructure is available, for example, clinic, Police Post 	<ul style="list-style-type: none"> ➤ Largeness of the settlement may make it difficult to implement a project.

Compound	Driving Forces	Constraints
	<p>(not completed yet)</p> <ul style="list-style-type: none"> ➤ Skills in road construction and maintenance ➤ Skills in production of low cost building materials ➤ A lot of room/land for expansion still available ➤ The Kamoto Theatre Group provides awareness on environmental improvements to the settlement ➤ Gender awareness and participation is quite high ➤ The only settlement where the church works in close collaboration with the politicians and the RDC ➤ The interdenominational committee brings people with different backgrounds together, this is a plus for community participation at grassroots ➤ An active LCC Site officer, so house census/numbering in progress ➤ Not too far away from town ➤ Willingness to contribute labour and even money 	
Old Kanyama	<ul style="list-style-type: none"> ➤ The RDC is pro active, it can make project proposals ➤ Sub –Committees in place ➤ Experience with garbage collection at a fee ➤ Basic infrastructure is available, for example, clinic, markets, filling stations, two Police Posts. ➤ Room/land for expansion still available ➤ Gender awareness and participation is quite high ➤ An active LCC Site officer, so house census/numbering in 	Largeness of the settlement may make it difficult to implement a project.

Compound	Driving Forces	Constraints
	progress ➤ Proximity to town ➤ A lot of intervention and so people are aware of what development programmes are and what they can do to contribute ➤ Willingness to contribute labour and even money	

A.10 Needs for Social Services

The leaders of eight settlements ranked their needs for social services as follows. The first priority need is sufficient and clean water.

Needs for Social Services in Compounds

Priority	Bauleni	Chainda	Chazanga	Chibolya	Freedom	Kalikiliki	Ng'ombe	Old Kanyama
1	Water	School	Police Post	Water	Water	Water	Water	Water
2	Clinic	Police Post	School	Clinic	Clinic/ Ambul.	Clinic	RDC office	Security
3	Employment	Clinic/ Ambul.	Road	Security	Road/ Drainage	School	Road	Employment
4	Garbage Collect	Employment	Water	Second. School	Tittle Deeds	Road/ Drainage	Market	Road
5	Police Post	House	Education	Road/ Drainage	Credit Facility	Police Post	Police Post	Clinic
6	Second. School	Clean Water	Health Center	Garbage Disposal	Skills Center	Public Transport	Garbage Collect	Second. School
7	Market	Income Generat.	Market	Skills Center	School	Comm. Hall	Skills Center	Toilets
8	Road	Comm. Hall	Skills Center	House	Market	Employment	Orphanage	Garbage Collect
9	-	Electric.	Women's Club	Market	Police Post	Garbage Collect.	Local Court	Women's Club
10	-	Trade School	-	-	-	Street Light	Supermarket	Bus Shelter
11	-	Market	-	-	-	Tittle Deeds	Bakery	Shopping Complex
12	-	Road	-	-	-	Shopping Center	Public Phone	-
13	-	Graveyard	-	-	-	-	-	-
14	-	Bus Shelter	-	-	-	-	-	-

A-4 Results of Baseline Survey
(before Pilot Projects)

RESULTS OF BASELINE SURVEY (BEFORE PILOT PROJECTS)

I. Introduction

1.1 General Background Information

Bauleni and Chibolya are among the many unplanned settlements in Lusaka which have grown quickly during the post-independence era. The two settlements are low-income areas and their life evolves around the tasks with which to meet the basic needs of food, housing, health care, water and education. In order to meet these basic needs, the people in these settlements engage themselves in a number of small income-generating activities such as vending, buying and re-selling, lending and borrowing of money at high interest, illicit beer brewing and some household-based repairing and manufacturing of different items. These activities are mainly done both in addition to and in the absence of formal employment. Lusaka City Council is not obliged by law to provide services in illegal and unplanned settlements.

The effects of unemployment have been many, and especially with the current economic restructuring which has resulted in company liquidations and employee redundancies (retrenchment). The easily noticeable, serious and often interrelated clean piped water supply.

The environmental problems of immediate concern in these settlements include:

- poor sanitation;
- inadequate and unsafe water supply;
- poor solid waste management; and
- high incidence of water born-diseases such as dysentery and cholera, especially during the rainy season.

In addition to these environmental problems, these settlements also suffer from the following socio-economic problems:

- high levels of poverty;
- low educational attainment levels;
- unemployment;
- high levels of crime and violence; and
- lack of inadequate provision of social services by Lusaka City Council because the settlements are illegal and unplanned.

1.2 Statement of the Problem

The baseline survey addressed the adverse environmental and socio-economic conditions of the two unplanned settlements of Bauleni and Chibolya in Lusaka, through the study of the knowledge, attitude and practices of their residents in order to improve decision-making for project planning, implementation, monitoring and evaluation.

1.3 Objectives of the Study

Overall objective:

To promote the capacity of the community so that the effects of community participation are maximized and the management capacities of the communities are strengthened.

Specific objectives:

1. To collect household baseline data about knowledge, attitudes and practices (KAP) regarding economic and educational activities, as well as water, health and sanitation in each of the two communities in order to assist and facilitate project planning, implementation, monitoring and evaluation.
2. To identify ways in which community participation in the pilot project and project management capacity can be enhanced for the improvement of living conditions of each settlement.
3. To prepare a study report with recommendations for submission to JICA and other key stakeholders.

1.4 Research Design and Methodology Used

The baseline study collected data from a total sample of 748 selected households, 329 households from zones 8 and 13 in Bauleni and 419 households from zones 4 and 5 in Chibolya in Lusaka, using a structured questionnaire.

The two main methods of data collection used in the study were:

- (a) **secondary data review**, aimed at learning from the existing records about the socio-economic and the environmental conditions of unplanned settlements, including regulations of the local authority (LCC) on the unplanned settlements.
- (b) **structured personal interview for heads of household**: with the 748 selected households in Bauleni and Chibolya settlements, aimed at revealing a wide range of issues including economic, educational, water, health and environmental issues.

The objective of using these methods of baseline data collection was to provide

detailed households and community information in order to analyze and understand the challenges and prospects of the unplanned settlements, and the types of needs and environmental problems which they had experienced. The collected baseline data, were analyzed quantitatively using SPSS computer software in order to get tabular distributions and descriptive statistics.