

***Ilusya Sub-Location, Ikanga Location, Mutomo Division
(108 Non-participants)***

Household Demography

Head of the Household sex (%)

Sex	Non-participants
Female	24.1
Male	75.9
Total	100.0

Head of the Household age category

Age bracket	Non-participants
20 ò years	.9
20 < years ó 35	29.6
35 < years ó 55	40.7
55 < years ó 70	21.3
70 < years	7.4
not reported	0
Total	100.00

Head of Household level of education

Level	Non-participants
informal	46.3
primary	19.4
secondary	31.5
tertiary	.9
university	.9
not reported	.9
Total	100.0

Head of household main occupation (%)

	Main occupation	Secondary occupation
subsistence farmer	52.8	33.3
businessman	13.9	1.9
regular employment	22.2	2.8
wage earner	1.9	1.9
other	7.4	.9
not reported	1.9	59.3
Total	100.0	100.0

Household annual income-% (KShs.)

Income	Non-participants
10,000 ò income	0.9
10,000 < income ó 30,000	46.3
30,000 < income ó 50,000	25.0
50,000 < income ó 100,000	15.7
100,000 < income	7.4

no response	2.8
not reported	1.9
Total	100.0

Household size(%)

Size	Non-participants
3 ò members	13.9
3 < members ó 8	81.5
8 < members ó 12	4.6
12 < members	0
not reported	0
Total	100.0

Household composition (%)

Composition	Non-participants
females =males	22.2
females > males	17.6
females < males	60.2
Total	100.0

Household Inventory (Assets)

Number of houses (%)

Number of houses	Non-participants
one	0
two or three	92.9
four or five	7.1
not reported	0
Total	100.0

Main house thatch

Thatch type	Non-participants
iron sheets	57.4
grass	40.7
tiles	.9
not reported	.9
Total	100.0

Main house floor type

	Non-participants
cemented	41.7
un-cemented	57.4
other	.9
Total	100.0

Main house number of rooms

<i>Number of houses</i>	<i>Non-participants</i>
one room	18.5
two or three	50.9

four or five	21.3
six and more	8.3
not reported	.9
Total	100.0

Wall material- main house

Wall material	Non-participants
brick/mud	62.0
brick/cement	33.3
block/cement	.9
poll/mud	1.9
other	1.9
Total	100.0

Household with toilets

	Non-participants
households with toilets	63.9
households without toilets	25.9
not reported	10.2
Total	100.0

Other household possessions

Number of chicken and ducks, cows and goats(%)

	Non-participants		
	Chicken/ducks	Cows	Goats
nil	4.6	37.0	6.5
one	2.8	0	0
1 < number ó 5	11.1	33.3	24.1
5 < number ó 10	26.9	13.9	23.1
10 < number	54.6	15.7	46.3
not reported	0	0	0
Total	100.0	100.0	100.0

Number of donkeys

	Non-participants
nil	10.2
0 < donkeys ó 3	88.0
more than four	1.9
not reported	0
Total	100.0

Number of jembes, spades, mattocks, etc.

	Non-participants
nil	3.7
0 < jembes ó 5	50.9
5 < jembes ó 10	43.5
10 < jembes	1.9
not reported	0
Total	100.0

Number of Ox-ploughs, Bicycles, carts/wheel barrows, plant machines, Transistor radios, television sets(%)

	Ox-ploughs	bicycles	carts/wheel barrows	plant machines	radios	TV	motor vehicles
nil	34.3	16.7	69.4	88.9	42.6	91.7	95.4
0 < numberó 3	65.7	82.4	29.6	10.2	55.6	5.6	2.8
3< number	0	0	0	0	0	0	0
not reported	0	.9	.9	.9	1.8	2.8	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Land ownership total land rented (acreage)

	Non-participants	
	owned	rented
5 ò acres	20.4	11.1
5 < acres ó 10	35.2	5.6
10 < acresó 50	39.8	0
50 < acres	0	0
not reported	4.7	83.3
Total	100.0	100.0

Main land use (%)

Use	Non-participants	
	main use	second main use
homestead	2.8	38.0
agriculture	85.2	12.0
livestock grazing	9.3	45.4
rented out	1.9	1.9
not reported	.9	2.8
Total	100.0	100.0

Source of energy

Source of energy

	Non-participants	
	main	second main
firewood	98.1	2.8
kerosene	0	88.0
charcoal	1.9	8.3
solar	0	0
gas	0	.9
not reported	0	0
Total	100.0	100.0

Migration

Year of migration

	Non-participants
1990-1992	1.9

1993-1997	3.7
1998-2001	1.9
no response	3.7
not migrated	88.9
Total	100.0

Nature of migration

	Non-participants
permanent	4.6
temporary	2.8
working outside the location	2.8
no response	.9
not migrated	88.9
Total	100.0

Place of settlement

	Non-participants
village	4.6
town	5.6
abroad	0
no response	.9
not applicable	88.9
Total	100.0

Reasons for migration

	Non-participants
in search of employment	6.5
land inadequacy	1.9
drought coping	0
marriage	0
other	1.9
no response	.9
not migrated	88.9
Total	100.0

Daily water use

Daily water use - litres (Non-participants)

	<i>Cooking</i>	<i>Washing/cleaning</i>	<i>livestock watering</i>
20 ò litres	1.9	.9	.9
20 < litres ó 40	41.7	18.5	3.7
40 < litres ó 60	32.4	27.8	.9
60 < litres ó 80	19.4	27.8	1.9
80 < litres ó 100	3.7	16.7	0
100 < litres	.9	8.3	0
not reported	0	0	92.6
Total	100.0	100.0	100.0

Choice of Water Source: Factor influencing choice of water source:

Non-participants- dry season

<i>Factor/Percentage</i>	<i>Rank 1</i>	<i>Rank 2</i>	<i>Rank 3</i>
distance	6.5	6.5	2.8
Multiple use	6.5	9.3	14.8
quality	12.0	4.6	6.5
quantity	6.5	15.7	3.7
Reliability	23.1	13.9	2.8
No alternative	3.7	13.0	12.0
not reported	41.6	37.1	57.4
Total	100.0	100.0	100.0

Non-participants- wet season

<i>Factor/Percentage</i>	<i>Rank 1</i>	<i>Rank 2</i>	<i>Rank 3</i>
distance	35.2	12.0	2.8
Multiple use	.9	4.6	7.4
quality	11.1	13.9	7.4
quantity	16.7	16.7	8.3
Reliability	1.9	11.1	11.1
No alternative	13.9	17.6	10.2
not reported	20.3	24.1	52.8
Total	100.0	100.0	100.0

Main Source of Water

Source	Dry Season	Wet season
river	0	45.4
piped	0	0
springs	0	21.3
scoop-hole	97.2	15.7
bore-hole	.9	.9
rock catchment	0	0
roof catchment	1.9	15.7
sand dam	0	0
wells	0	0
earth dam	0	0
not reported	0	.9
Total	100.0	100.0

Depth of scoop holes (ft)

<i>Depth (ft)</i>	<i>Non-participants</i>
2 ÷ depth	1.9
2 < depth ÷ 5	4.6
5 < depth ÷ 10	20.4
10 < depth ÷ 15	38.9

15 <depth	27.8
not applicable	.9
not reported	5.6
Total	100.0

Quality of water from main source before and after IWSS

Quality	Dry Season	Wet season
Clean/clear/good	60.2	38.0
Dirty/coloured/bad smell	14.8	55.6
Salty	22.2	1.9
Other	0	.9
not reported	2.8	3.7
Total	100.0	100.0

Quantity of water from main source before and after IWSS (litres)

Litres	Dry season	Wet season
40 ò quantity	1.9	1.9
40 < quantity ó 60	3.7	7.4
60 < quantity ó 80	18.5	14.8
80 < quantity ó 100	8.3	16.7
100 > quantity	64.8	55.6
not reported	2.8	3.7
Total	100.0	100.0

Distance to the main water source before and after IWSS (Km)

Kilometres	Dry season	Wet season
0.5 ò Km	3.7	14.8
0.5 < Km ó 2	16.7	20.4
2 < Km ó 5	22.2	27.8
5 < Km ó 10	39.8	18.5
10 < Km ó 15	13.0	10.2
15 < Km	1.9	0
not reported	2.8	8.3
Total	100.0	100.0

Time taken to and from the main water source (hours)

Hours	Dry season	Wet season
0.5 ò hour	1.9	25.9
0.5 < hours ó 1	11.1	19.4
1 < hours ó 2	23.1	18.5
2 < hours ó 5	50.9	25.9
5 > hours ó 10	13.0	3.7
10 > hours	0	0
not reported	0	6.5

Total	100.0	100.0
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Trips to the main water source in a day

Trips	Dry season	Wet season
One	67.6	56.5
two	28.7	25.0
three	3.7	4.6
four and five	0	0
more than five	0	0
not reported	0	13.9
Total	100.0	100.0

Who used to fetch water before and after IWSS?

Who	Non-participants
husband	2.8
wife	21.3
boys	2.8
girls	1.9
house-help	9.3
girls/husband	0
boys/husband	1.9
husband/wife	6.5
wife/boys	14.8
wife/girls	1.9
wife/house-help	5.6
boys/girls	6.5
boys/house-help	3.7
girls/house-help	0
husband/house-help	1.9
wife/Children	18.5
wife/D.I.L	0
other	.9
no response	0
Total	100.0

Means of fetching water (main) before and after IWSS

Means	Non- participants
human labour	1.9
donkey	74.1
bicycle	3.7
cart/wheel barrow	3.7
motor vehicle	0
human labour/donkey	2.8
human labour/cart/wheel barrow	.9
human labour/bicycle	.9
human labour/motor vehicle	0
donkey/cart/wheelbarrow	5.6
donkey/bicycle	6.5
not reported	0

Total	100.0
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Water rationing (%)

	Non-participants
yes	4.6
no	95.4
not reported	0
Total	100.0

Mode of water rationing before and after IWSS (%)

	Non-participants
Restricted to a fixed amount of water per day	1.9
Queuing	.9
other	.9
not reported	96.3
Total	100.0

Non-participants: Sanitation

Per week	Clothe washing	Body washing
daily	54.6	85.2
once	11.1	1.9
twice	18.5	.9
thrice	13.0	8.3
rarely	.9	.9
when dirty	.9	.9
doesn't	0	0
not applicable	0	0
not reported	.9	1.9
Total	100.0	100.0

Protection of water points

	Non-participants
fencing	49.1
covering well with lid	10.2
locking gate	0
watchman	0
no protection	30.6
not applicable	.9
local arrangements	.9
not reported	8.3
Total	100.0

Soil conservation

Terracing before and after IWSS (%)

	Non-participants
nil	17.6
0 < number ó 3	38.9
3 < number ó 5	11.1
5 < number ó 10	16.7

10 < number	4.6
no response	.9
not reported	10.2
Total	100.0

Tree planting before and after IWSS (%)

	Non-participants
nil	39.8
0 < number ó 5	22.2
5 < number ó 10	16.7
10 < number ó 50	10.2
50 < number	0
no response	0
not reported	11.1
Total	100.0

Gabions before and after IWSS (%)

	Non-participants
nil	80.6
0 < number ó 5	1.9
5 < number ó 10	.9
10 < number	0
no response	1.9
not reported	14.8
Total	100.0

Misonzo before and after IWSS (%)

	Non-participants
nil	39.8
0 < number ó 5	17.6
5 < number ó 10	25.0
10 < number	6.5
no response	0
not reported	11.1
Total	100.0

Grass planting before and after IWSS (%)

	Non-participants
Yes	55.6
No	25.9
no response	0
Not reported	18.5
Total	100.0

Waterborne diseases mitigation measures

Boiling (%)

	Non-participants
Boil drinking water	68.5
not reported	31.5

Total	100.0
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Chemicals application (%)

	Non-participants
Treat drinking water with chemicals	8.3
not reported	91.7
Total	100.0

Clean/clear compound/bushes (%)

	Non-participants
clean/clear compound	1.9
not reported	98.1
Total	100.0

Dry stagnant waters (%)

	non-participants
Dry stagnant water	1.9
not reported	98.1
Total	100.0

Inoculation (%)

	Non-participants
Inoculation	0
not reported	100.0
Total	100.0

Eating well cooked food (%)

	Non-participants
well cooked food	0
not reported	100.0
Total	100.0

Use of mosquito nets food (%)

	Non-participants
Using nets	0
not reported	100.0
Total	100.0

Observing cleanliness of utensils before and after IWSS (%)

	Non-participants
Utensil cleanliness	.9
not reported	99.1
Total	100.0

Mode of choosing water source committee members/dam committee members

Non-Participants:

	Participants (Dam committee)			
	Nomination	Election	Selection	Other mode
Yes	0	42.6	24.1	0

Non-participants:

By whom	Participants (Dam committee)			
	Nomination	Election	Selection	Other mode
not reported	100.0	57.4	75.9	100.0
community	0	34.3	16.7	0
provincial administration	0	0	.9	0
political leaders	0	0	1.9	0
water source members	0	0	0	0
Other	0	8.3	4.6	0
Total	100.0	100.0	100.0	100.0

Non-participants: Duration in office- committee

	Percent
not reported	33.3
one month	0
half-year	0
one year	51.9
two years	3.7
more than two years	8.3
not stated	.9
indefinitely	0
no response	1.9
Total	100.0

Community give people who have not had opportunity to lead a chance to lead

	Non-participants
yes	58.3
no	7.4
no response	.9
not reported	33.3
Total	100.0

Linkage between dam and other committees?

	Non-participants
yes	14.8
no	50.9
not reported	34.3
Total	100.0

If yes to linkage, how?

	Non-participants
considering community committee members in water source committee	7.4
water source committee members considered in other community committee	6.5

source committee members opinion sought in development issues	0
no response	0
other	1.9
not reported	84.3
Total	100.0

Non-participants: Member of any community group?

	Percent
no response	3.7
yes	36.1
no	60.2
Total	100.0

Non-participants: If a member of community group- benefits

	non-participants
advice from older people to young members of the society	0
community members interact freely while working together	2.8
women contribute to a fund to uplift their welfare	11.1
community formed groups for planting vegetables and seedlings for sale	0
formation of groups to help in harvesting/terracing and other undertakings	13.9
making new friends	0
other	12.0

Influence of development agenda by community

	Non-participants
yes	7.4
no	92.6
not reported	0
Total	100.0

If influence yes, how:

<i>How</i>	<i>Non-participants</i>
the community is free to express its interests during development meeting	0.9
before any law/bylaw/rule is passed people community is consulted	0
done through <i>barazas</i> whereby members air their views freely	0
through consultation with those concerned	0
involved when discussing development ideas	0
headman (administrators) consults with the people and forwards their views	0

chairpersons of groups, headmen and other leaders consulted through formation of groups	0
any other way	6.5

Non-participants: impact of water availability on the following:

	positive	negative	no effect
health	21.3	5.6	0
cleanliness	21.3	2.8	0.9
leisure	14.8	8.3	1.9
girl-child school absenteeism	14.8	1.9	6.5
boy-child school absenteeism	14.8	1.9	6.5
girl-child school punctuality	9.3	3.7	10.2
boy-child school punctuality	10.2	3.7	10.2
cooking at the right time	11.1	5.6	7.4

Non-participants: Impact of water scarcity on the following:

	positive	negative	no impact
health	13.0	56.5	1.9
cleanliness	14.8	42.8	5.6
leisure	9.3	35.2	11.1
girl-child school absenteeism	16.7	26.9	18.5
boy-child school absenteeism	15.7	25.0	19.4
girl-child school punctuality	6.5	34.3	21.3
boy-child school punctuality	8.3	31.5	21.3
cooking at the right time	7.4	38.0	18.5

Non-participants: water availability impact on the following

	positive	negative	no impact
security	21.3	0	2.8
pregnancy rates	15.7	4.6	1.9
community cohesiveness	13.0	3.7	5.6
marriage rates	2.8	14.8	6.5

Non-participants: water scarcity impact on the following

	positive	negative	no impact
security	11.1	58.3	1.9
pregnancy rates	16.7	34.3	14.8
community cohesiveness	23.1	40.7	2.8
marriage rates	12.6	26.9	26.9

Is trekking long distances by girls regarded as good?

	Non-participants
good	12.0
bad	88.0
not reported	0
Total	100.0

bad

	Non-participants
tiring	8.3

compromise other household duties	17.6
develop irresponsible behaviour- early pregnancies/marriages	34.3
leads to school absenteeism/lateness	3.7
not generally safe	16.7
other reason	17.6

good

	Non-participants
body exercise and good health	2.8
test of adulthood- could take care of themselves	1.9
other reason	8.3

Hours of sleep

	dry season	wet season
2 ò hours	0	0
2 < hours ó 4	4.6	4.6
4 < hours ó 6	13.0	9.3
6 < hours ó 8	27.8	36.1
8 < hours	47.2	42.6
not reported	7.4	7.4
Total	100.0	100.0

Whom do you consult before participating in community projects (sand dam project)

	Non-participants
husband (in the household)	22.2
husband (elsewhere)	19.4
wife (in the household)	34.3
wife (elsewhere)	1.9
friends	2.8
local administration (headman/Ass. Chief/Chief)	2.8
none	2.8
religious leaders	0
other	6.5
not reported	7.4
Total	100.0

Economic activities (%):

Mentioned	Non-participants
agriculture	98.1
goat/sheep	44.4
cattle	13.9
vegetable growing	9.3
kitchen gardening	13.0
brick making	8.3
tree nurseries	2.8
bee keeping	4.6

Cost of water per 20 litre jerrican (KShs)

	Dry season	Wet season
5 ò shillings	13.9	19.4
5 < shillings ó 10	53.7	50.9
10< shillings ó 15	30.6	25.9
15 < shillings ó 20	1.9	0.9
20 < shillings	0	0

Controlled measure

Measure	Non-participants
covering the well with a lid	0.9
washing of clothes not allowed in the IWSS	0
only participants are allowed	0
planting of grass to check erosion	0
children not allowed to play near the IWSS	0
other control/plan (eg. prayers)	3.7
not controlled	94.4

If not controlled, why?

Why	Non-participants
it is a public/natural resource	8.3
participants are responsible people- respect their efforts	10.2
other reason	45.4

Pollution penalties/action(%)

Non-participants:

Type of pollution	pays fine	report to source committee	report to provincial administration	warning/ cautioned	excommu nicated
washing inside the dam/well	26.9	0	0	6.5	2.8
washing clothes inside the dam/well	25.9	0	0	6.5	2.8
watering animals in the dam/well	26.9	0	0	6.5	2.8
spraying vegetables/crops chemicals around the dam/well	25.0	0	0	6.5	2.8
defecating/urinating near the dam/well	25.0	0	0	6.5	2.8
dropping objects in the source	25.0	0	0	6.5	2.8

Who is responsible for operation and maintenance of your water resource (Sand dam/well)

	Non-participants
source committee members	0
chairperson of the dam committee	0
provincial administration	1.9
community	2.8
watchman	2.8

no body/party	0
government	.9
no maintenance required	1.9
owner	4.6
Sasol/other NGO	0
other	1.9
not reported	83.3
Total	100.0

Source of funds for operation and maintenance of the IWSS if applicable

	Non-participants
dam committee members	0
chairperson of the dam committee	0
no body/party	0
provincial administration	0
community	4.6
politicians	0
no funds needed	0
sasol/ngo	0
other	4.6
not reported	90.7
Total	100.0

Operation and maintenance contribution by households if applicable (KShs)

	Non-participants
25 ò KShs.	0
25 < KShs ó 50	0
50 < KShs ó 75	0
75< KShs ó 100	.9
100 < KShs	2.8
in kind (labour)	0
no funds needed	0
not reported	96.3
Total	100.0

Frequency of water source committee meetings

	Non-participants
monthly	0
once/three months	0
semi annually	0
never meet	0
when there is need	.9
other	.9
no committee reported	0
not reported	98.1
Total	100.0

Control over family resources:

	Income	Labour	Expenditure
husband	36.1	28.7	30.6
wife	3.7	10.2	4.6
husband/wife	55.6	56.5	60.2
children	0	0	0
father/mother-in-law	.9	.9	.9
boys	.9	.9	.9
girls	0	0	0
other	.9	.9	.9

Value household attach to their water source

	Non-participants
500 ò KShs	0
500 < KShs ó 1,000	2.8
1,000 < KShs ó 5,000	5.6
5,000 < KShs ó 10,000	1.9
10,000 < KShs	89.8
not acceptable (invaluable)	0
not reported	0
Total	100.0

Willingness to pay for improved water resource

	Non-participants
500 ò KShs	1.9
500 < KShs ó 1,000	3.7
1,000 < KShs ó 5,000	8.3
5,000 < KShs ó 10,000	6.5
10,000 < KShs	79.6
not reported	0
Total	100.0

Suppose you perceive wrong committee management, what measure would you take?

	Participants
report to chairperson	12.0
report to provincial administration	5.6
quit the source	1.9
report to sponsor	8.3
question the source committee	9.3
alert other members and ask for a meeting	4.6
advice the management accordingly	1.9
request management to quit office	9.3
other	13.0
not reported	34.3
Total	100.0

Willingness to take up leadership position

	Non-participants
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willing to up leadership position	32.4
not willing to lead	34.3
not reported	33.3
Total	100.0

Ownership of water resource (sand dam):

	Non-participants	
	True	False
community	59.3	39.8
individual	26.9	72.2
government	9.3	88.9
schools	0	99.1
KANU	.9	97.2
NGOs	0	99.1
SDP	0	99.1
Christians	0	99.1
<i>Kathambi</i>	0	99.1
other	.9	98.1

Why own the water resource (sand dam): Reasons

	community participated	it is a natural resource	sponsored	other
community	4.6	26.9	0	16.7
individual	15.7	1.9	0	11.1
government	0	.9	.9	8.3
schools	0	0	0	0
KANU	0	0	0	0
NGOs	0	0	0	0
SDP	0	0	0	0
Christians	0	0	0	0
<i>Kathambi</i>	0	0	0	0
other	0	0	0	0

Suppose somebody started demolishing your water resource (sand dam), what action would you take (%):

	As an individual	As a member of the community
ask him/her why	13.0	0
report to dam/source committee chairperson	.9	.9
report to other members	0	0
report to the head man	0	0
report to the provincial administration	52.8	33.3
report to sponsor	0	0
report to the police	13.9	13.9
beat up the person	0	6.5
banish him/her	0	10.2
force him/her to bear the cost	0	13.0
use force to stop him/her	1.9	0
no action	6.5	4.6
other	10.2	17.6
no response	.9	0
Total	100.0	100.0

Any other comment

	Non-participants
need IWSS	14.8
water source near home required	19.4
no comment	55.6
not reported	10.2
Total	100.00