

DRAFT

Malawi: Selected Livelihood Data for Fishing Households

by

John Mims and Laurence Mathieu

LADDER Working Paper No.28

September 2002

ABOUT LADDER

LADDER is a research project funded by the Policy Research Programme of the UK Department for International Development (DFID) that seeks to identify alternative routes by which the rural poor can climb out of poverty. LADDER is working with nearly 40 villages and 1,200 households in Uganda, Tanzania, Malawi and Kenya to discover the blocking and enabling agencies in the institutional environment facing rural people that hinder or help their quest for better standards of living for themselves and their families.

This working paper represents work-in-progress and the reader is advised that it has not been subjected to academic quality control, nor edited for errors of fact or interpretation. The paper forms part of a mosaic of research findings that will contribute towards an overall picture of rural livelihoods and micro-macro links to poverty policies in the case-study countries. The findings and views expressed here are solely the responsibility of the authors and are not attributable to DFID.

All available Working Papers and Village Reports can be downloaded from the project website: <http://www.uea.ac.uk/dev/odg/ladder/>, which also details other information about the project. For any further enquiries, please email j.mims@uea.ac.uk.

Malawi: Selected Livelihoods Data for Fishing Households

by

John Mims and Laurence Mathieu*

DESCRIPTION OF DATA SET

Overview

The purpose of this Working Paper is to provide a basic set of summary statistics arising from the LADDER sample survey work in Malawi. Interpretation of these data tables is facilitated by reference to LADDER Working Paper No.2, which provides the questionnaires from which the underlying data set was compiled.

In addition to the 70 village households investigated in Zomba District (see Working Paper 27), a sub-sample of 50 specialist fishing households was surveyed. The analysis that follows gives a brief summary of the data from these additional households in Katanda and Saukaphimbi villages on Lake Chilwa. The data were collected during August and September 2001, and a map showing the location of the villages is provided in Annex A in this collection.

The general approach to sampling in each village was to identify households whose livelihoods depended heavily on fishing and then allocate each to a category based on residence. This provided a sampling frame for a stratified random sample. With a list of households in each category, 15 households were randomly chosen from the resident fishing households, 5 from the migrant households with families and 5 from the migrants without families. This gave a sample size of 25 households for each village and 50 households overall.

The purpose of drawing the sample in this way was to capture the full range of livelihood circumstances amongst the specialist fishing households in these two villages. The procedure described was not designed to make inferences about the larger populations of specialist fishing households, whether at district or country levels. The purposive fieldwork selection procedure set out to identify and describe a range of fisheries-based livelihood patterns that were likely to contain within them the experiences of a substantial proportion of lakeshore households and individuals in Malawi. However, no claims are made about the statistical representativeness of sample findings with respect to populations in Zomba District nor for Malawi as a whole. Furthermore, since the sample data provided here have not been weighted yet, no attempt has been made to draw inferences about the village populations either.

As such, names of villages and household types used in these tables should be read as shorthand for 'village or household type sample', for example 'Migrant with family' refers only to the 5 or 10 households of that type surveyed. For this reason, the number of households in each analysis is denoted by N rather than n .

* Overseas Development Group, University of East Anglia, Norwich NR4 7TJ, UK. Email addresses: j.mims@uea.ac.uk and l.mathieu@uea.ac.uk

Selected Statistical Definitions

Acronym	Full Name	Description
EAA's	Economically Active Adults	HH members aged 15-60 years, inclusive, regardless of gender, but excluding those still in education
AEUs	Adult Equivalent Units	Based on consumption: male 15 years or older = 1; female 15 years or older = 0.8; male or female 14 years or under = 0.5
CEUs	Cattle Equivalent Units	Based on market value ratios between livestock: cattle =1; Pigs = 0.19; Goats = 0.11; Sheep = 0.09; Ducks = 0.02; Chickens = 0.02; Rabbits = 0.01; Pigeons = 0.004; Others = Given price/Trimmed mean
	Per Capita Income	Net Total Household Income divided by resident AEUs
	Income Terciles or Quartiles	Calculated by ranking households from highest to lowest on the basis of per capita income, a) per district and b) for the whole sample. For Dedza district, terciles contain 70 HHs and quartiles 52 (or 53) HHs; for Zomba district, terciles contain 23 (or 24) HHs and quartiles 17 (or 18); for the whole sample, 210 HHs and 70 HHs respectively

Asset Definitions Used in Constructing Asset Tables and Polygons

Tools of the Trade value based index for ownership of axes, hoes, knives & sewing machines. Index is calculated per HH by:
a) determine typical district price for each tool
b) for each HH, calculate no. of each tool X typical price
c) sum values
d) standardize total value by
HH tool index = (total HH value of tools/maximum value within district sample)X100

Education HH total years in education for resident EAAs. Education level reached taken as proxy for years on basis of None=0; StdIII=3; SdtVIII=8; FormII=10; FormIV=12; Higher=15

Livestock Livestock holding in CEUs

Boat & gear assets

Boat assets

Asset index, calculated similarly to above:

Boat assets = No. owned (per type) x 5% trimmed mean current cost (per type). Standardised by: (HH value/max value) x 100

Household Assets

Key Household Assets

Table 1. Mean & Median Selected Assets, by Household Type, by Village

Saukaphimbi village

		Fishing HH type			All
		Local resident	Migrant with family	Migrant without family	
		<i>N</i>	14	6	5
<u>HH Size</u>	Mean	4.86	6.33	1.00	4.44
	<i>s.d.</i>	4.15	1.63	.00	3.65
	Median	3.50	6.50	1.00	4.00
<u>Area owned (ha.)</u>	Mean	1.11	.17	.04	.67
	<i>s.d.</i>	1.41	.41	.09	1.17
	Median	1.01	.00	.00	.20
<u>Area farmed (ha.)</u>	Mean	1.12	.17	.04	.68
	<i>s.d.</i>	1.39	.41	.09	1.16
	Median	1.01	.00	.00	.20
<u>Tools</u>	Mean	7.77	.88	1.08	4.78
	<i>s.d.</i>	13.84	2.15	2.03	10.83
	Median	2.87	.00	.00	1.65
<u>Education</u>	Mean	11.21	8.33	5.40	9.36
	<i>s.d.</i>	17.46	8.16	3.71	13.67
	Median	4.50	8.50	8.00	6.00
<u>Livestock</u>	Mean	1.25	.06	.02	.72
	<i>s.d.</i>	4.66	.15	.04	3.48
	Median	.00	.00	.00	.00
<u>Boats and gear</u>	Mean	14.40	7.52	14.97	12.86
	<i>s.d.</i>	27.85	4.43	23.51	22.93
	Median	4.35	5.41	5.46	4.56

HH Size: No. of residents (all ages)

Tools: Value based index of tools owned

Education: Total no. of years in education (resident EAAs)

Livestock: Livestock holding in CEUs

Boats and gear: Value based index of boats & gear owned

Katanda village

		Fishing HH type				
		Local resident	Migrant with family	Migrant without family	All	
		<i>N</i>	15	5	5	25
<u>HH Size</u>	Mean	4.93	4.60	1.00	4.08	
	<i>s.d.</i>	2.99	.89	.00	2.80	
	Median	4.00	4.00	1.00	4.00	
<u>Area owned (ha.)</u>	Mean	1.05	1.44	.32	.98	
	<i>s.d.</i>	.57	.41	.72	.66	
	Median	.81	1.42	.00	1.01	
<u>Area farmed (ha.)</u>	Mean	1.01	1.19	.32	.91	
	<i>s.d.</i>	.54	.32	.72	.61	
	Median	.81	1.11	.00	.81	
<u>Tools</u>	Mean	4.17	2.80	.84	3.23	
	<i>s.d.</i>	2.34	.89	.89	2.29	
	Median	4.13	3.16	.75	2.78	
<u>Education</u>	Mean	9.53	8.80	6.40	8.76	
	<i>s.d.</i>	6.65	6.42	3.58	6.03	
	Median	8.00	8.00	8.00	8.00	
<u>Livestock</u>	Mean	.13	.08	.00	.10	
	<i>s.d.</i>	.14	.12	.00	.13	
	Median	.10	.00	.00	.04	
<u>Boats and gear</u>	Mean	13.93	7.56	5.84	11.04	
	<i>s.d.</i>	25.57	4.89	6.35	20.14	
	Median	5.57	5.47	3.53	4.33	

HH Size: No. of residents (all ages)

Tools: Value based index of tools owned

Education: Total no. of years in education (resident EAAs)

Livestock: Livestock holding in CEUs

Boats and gear: Value based index of boats & gear owned

All

		Fishing HH type				
		Local resident	Migrant with family	Migrant without family	All	
		<i>N</i>	29	11	10	50
<u>HH Size</u>	Mean	4.90	5.55	1.00	4.26	
	<i>s.d.</i>	3.53	1.57	.00	3.22	
	Median	4.00	5.00	1.00	4.00	
<u>Area owned (ha.)</u>	Mean	1.08	.75	.18	.83	
	<i>s.d.</i>	1.04	.77	.51	.95	
	Median	1.01	1.01	.00	.81	
<u>Area farmed (ha.)</u>	Mean	1.06	.63	.18	.79	
	<i>s.d.</i>	1.03	.64	.51	.93	
	Median	1.01	.81	.00	.76	
<u>Tools</u>	Mean	5.91	1.75	.96	4.00	
	<i>s.d.</i>	9.75	1.91	1.48	7.79	
	Median	3.23	1.35	.38	2.56	
<u>Education</u>	Mean	10.34	8.55	5.90	9.06	
	<i>s.d.</i>	12.82	7.06	3.48	10.46	
	Median	8.00	8.00	8.00	8.00	
<u>Livestock</u>	Mean	.67	.07	.01	.41	
	<i>s.d.</i>	3.23	.13	.03	2.46	
	Median	.00	.00	.00	.00	
<u>Boats and gear</u>	Mean	14.16	7.54	10.41	11.95	
	<i>s.d.</i>	26.21	4.40	16.93	21.38	
	Median	4.56	5.47	3.77	4.49	

HH Size: No. of residents (all ages)

Tools: Value based index of tools owned

Education: Total no. of years in education (resident EAAs)

Livestock: Livestock holding in CEUs

Boats and gear: Value based index of boats & gear owned

Livestock

Table 2. Livestock Ownership by Sample Households, by Household Type, by Village

Saukaphimbi village

	Fishing HH type			All
	Local resident	Migrant with family	Migrant without family	%
	%	%	%	
<u>Cattle</u>	7.1	.	.	4.0
<u>Chickens</u>	21.4	16.7	20.0	20.0
<u>Ducks</u>	7.1	16.7	20.0	12.0
<u>Pigs</u>	7.1	.	.	4.0
<u>Other</u>	14.3	.	.	8.0
<u>None</u>	78.6	83.3	80.0	80.0

Data are percentages of sample households owning each type of livestock, per HH type

Katanda village

	Fishing HH type			All
	Local resident	Migrant with family	Migrant without family	%
	%	%	%	
<u>Chickens</u>	73.3	40.0	.	52.0
<u>Ducks</u>	20.0	.	.	12.0
<u>Goats</u>	13.3	.	.	8.0
<u>None</u>	26.7	60.0	100.0	48.0

Data are percentages of sample households owning each type of livestock, per HH type

All

	Fishing HH type			All
	Local resident	Migrant with family	Migrant without family	%
	%	%	%	
<u>Cattle</u>	3.4	.	.	2.0
<u>Chickens</u>	48.3	27.3	10.0	36.0
<u>Ducks</u>	13.8	9.1	10.0	12.0
<u>Goats</u>	6.9	.	.	4.0
<u>Pigs</u>	3.4	.	.	2.0
<u>Other</u>	6.9	.	.	4.0
<u>None</u>	51.7	72.7	90.0	64.0

Data are percentages of sample households owning each type of livestock, per HH type

Fishing Assets

Table 3. Mean & Median Fishing Assets, by Household Type, by Village

Saukaphimbi village

		Fishing HH type			All	
		Local resident	Migrant with family	Migrant without family		
		<i>N</i>	14	6	5	25
<u>Boat assets</u>	Mean		12.59	11.74	8.74	11.61
	<i>s.d.</i>		15.94	7.01	2.74	12.30
	Median		7.64	9.03	9.72	8.33
<u>Gear assets</u>	Mean		12.08	3.45	14.97	10.59
	<i>s.d.</i>		28.82	3.65	30.34	24.98
	Median		1.48	2.12	1.54	1.54
<u>Boat & gear assets</u>	Mean		14.40	7.52	14.97	12.86
	<i>s.d.</i>		27.85	4.43	23.51	22.93
	Median		4.35	5.41	5.46	4.56

Katanda village

		Fishing HH type			All	
		Local resident	Migrant with family	Migrant without family		
		<i>N</i>	15	5	5	25
<u>Boat assets</u>	Mean		15.10	12.46	8.07	13.17
	<i>s.d.</i>		24.56	6.48	5.56	19.28
	Median		6.94	9.72	6.76	6.94
<u>Gear assets</u>	Mean		10.07	3.10	3.26	7.32
	<i>s.d.</i>		20.80	2.90	5.40	16.45
	Median		1.88	1.85	.82	1.85
<u>Boat & gear assets</u>	Mean		13.93	7.56	5.84	11.04
	<i>s.d.</i>		25.57	4.89	6.35	20.14
	Median		5.57	5.47	3.53	4.33

All

	Fishing HH type				All
		Local resident	Migrant with family	Migrant without family	
	<i>N</i>	29	11	10	50
<u>Boat assets</u>	Mean	13.89	12.07	8.41	12.39
	<i>s.d.</i>	20.52	6.44	4.15	16.03
	Median	6.94	9.72	6.85	7.08
<u>Gear assets</u>	Mean	11.04	3.29	9.11	8.95
	<i>s.d.</i>	24.56	3.17	21.45	21.00
	Median	1.56	1.92	1.35	1.59
<u>Boat & gear assets</u>	Mean	14.16	7.54	10.41	11.95
	<i>s.d.</i>	26.21	4.40	16.93	21.38
	Median	4.56	5.47	3.77	4.49

Fishing assets are value based index of boats & gear owned

Labour, Education and Domestic Assets

Table 4. Household Demographic and Education Data, by Household Type, by Village and Total

Saukaphimbi village

	Fishing HH type				All
	Local resident	Migrant with family	Migrant without family		
	<i>N</i>	14	6	5	25
<u>HH Size (Actual - resident)</u>	Mean	4.86	6.33	1.00	4.44
	<i>s.d.</i>	4.15	1.63	.00	3.65
	Median	3.50	6.50	1.00	4.00
<u>HH Size (EAAs - resident)</u>	Mean	2.50	2.50	1.00	2.20
	<i>s.d.</i>	1.83	.84	.00	1.53
	Median	2.00	2.00	1.00	2.00
<u>HH Size (AEUs - resident)</u>	Mean	3.61	4.33	1.00	3.26
	<i>s.d.</i>	3.04	1.02	.00	2.58
	Median	2.55	4.45	1.00	2.80
<u>HH Non-residents</u>	Mean	.86	.33	2.40	1.04
	<i>s.d.</i>	1.46	.52	2.30	1.62
	Median	.00	.00	3.00	.00
<u>Age of HH Head</u>	Mean	43.7	36.0	32.8	39.7
	<i>s.d.</i>	13.4	9.1	8.1	12.2
	Median	42.0	31.5	37.0	37.0
<u>Gender of HH Head</u>	Male %	100.00	100.00	100.00	100.00
	Mean	3.36	2.83	5.40	3.64
<u>Education: HH Head (years)</u>	<i>s.d.</i>	3.32	2.93	3.71	3.30
	Median	3.00	3.00	8.00	3.00
	Mean	11.21	8.33	5.40	9.36
<u>Education of HH - All Resident EAAs (years)</u>	<i>s.d.</i>	17.46	8.16	3.71	13.67
	Median	4.50	8.50	8.00	6.00
	Mean	3.38	3.07	5.40	3.71
<u>Education HH per capita resident EAAs (years)</u>	<i>s.d.</i>	2.91	3.15	3.71	3.12
	Median	2.50	2.88	8.00	3.00

Notes:

1. HH Size (Actual): Total no. of adults & children in HH
2. EAAs (Economically Active Adults): those aged 15-60 inclusive, except those in education
3. AEUs (Adult Equivalent Units on basis of consumption): male 15 years or older=1; female 15 years or older=0.8; male or female 14 years or under=0.5
4. Years in education: level reached taken as proxy for years on basis of: None=0; Std III=3; Std VIII=8; Form II=10; Form IV=12; Higher=15
5. Female HH Head: HHs where a) female entered on survey form as HHH (but excluding cases where there is a resident husband listed as well); b) female entered as 'Wife', but no resident husband; c) nobody entered as HHH, no husband listed
6. Age & education of HHH: in de facto female headed households, these data refer to the absent (male) head

Katanda village

	Fishing HH type				All
		Local resident	Migrant with family	Migrant without family	
	<i>N</i>	15	5	5	25
<u>HH Size (Actual - resident)</u>	Mean	4.93	4.80	1.00	4.12
	<i>s.d.</i>	2.99	1.10	.00	2.82
	Median	4.00	4.00	1.00	4.00
<u>HH Size (EAAs - resident)</u>	Mean	2.27	2.20	.80	1.96
	<i>s.d.</i>	1.33	1.10	.45	1.27
	Median	2.00	2.00	1.00	2.00
<u>HH Size (AEUs - resident)</u>	Mean	3.59	3.36	1.00	3.02
	<i>s.d.</i>	2.04	.68	.00	1.89
	Median	2.80	3.60	1.00	2.80
<u>HH Non-residents</u>	Mean	1.00	.40	.00	.68
	<i>s.d.</i>	1.20	.89	.00	1.07
	Median	.00	.00	.00	.00
<u>Age of HH Head</u>	Mean	40.3	35.8	40.8	39.5
	<i>s.d.</i>	15.0	12.0	15.6	14.1
	Median	32.0	35.0	36.0	35.0
<u>Gender of HH Head</u>	Male %	100.0	100.0	100.0	100.0
<u>Education: HH Head (years)</u>	Mean	4.93	4.40	7.00	5.24
	<i>s.d.</i>	3.13	3.51	2.24	3.07
	Median	3.00	3.00	8.00	8.00
<u>Education of HH - All Resident EAAs (years)</u>	Mean	9.53	8.80	6.40	8.76
	<i>s.d.</i>	6.65	6.42	3.58	6.03
	Median	8.00	8.00	8.00	8.00
<u>Education HH per capita resident EAAs (years)</u>	Mean	4.42	4.50	6.40	4.83
	<i>s.d.</i>	2.79	3.46	3.58	3.05
	Median	4.00	3.50	8.00	4.00

Notes:

1. HH Size (Actual): Total no. of adults & children in HH
2. EAAs (Economically Active Adults): those aged 15-60 inclusive, except those in education
3. AEUs (Adult Equivalent Units on basis of consumption): male 15 years or older=1; female 15 years or older=0.8; male or female 14 years or under=0.5
4. Years in education: level reached taken as proxy for years on basis of: None=0; Std III=3; Std VIII=8; Form II=10; Form IV=12; Higher=15
5. Female HH Head: HHs where a) female entered on survey form as HHH (but excluding cases where there is a resident husband listed as well); b) female entered as 'Wife', but no resident husband; c) nobody entered as HHH, no husband listed

All

	Fishing HH type				All
		Local resident	Migrant with family	Migrant without family	
	<i>N</i>	29	11	10	50
<u>HH Size (Actual - resident)</u>	Mean	4.90	5.64	1.00	4.28
	<i>s.d.</i>	3.53	1.57	.00	3.23
	Median	4.00	6.00	1.00	4.00
<u>HH Size (EAAs - resident)</u>	Mean	2.38	2.36	.90	2.08
	<i>s.d.</i>	1.57	.92	.32	1.40
	Median	2.00	2.00	1.00	2.00
<u>HH Size (AEUs - resident)</u>	Mean	3.60	3.89	1.00	3.14
	<i>s.d.</i>	2.52	.98	.00	2.24
	Median	2.80	3.80	1.00	2.80
<u>HH Non-residents</u>	Mean	.93	.36	1.20	.86
	<i>s.d.</i>	1.31	.67	1.99	1.37
	Median	.00	.00	.00	.00
<u>Age of HH Head</u>	Mean	41.9	35.9	36.8	39.6
	<i>s.d.</i>	14.1	9.9	12.5	13.1
	Median	39.0	32.0	36.5	36.5
<u>Gender of HH Head</u>	Male %	100.0	100.0	100.0	100.0
<u>Education: HH Head (years)</u>	Mean	4.17	3.55	6.20	4.44
	<i>s.d.</i>	3.26	3.14	3.01	3.26
	Median	3.00	3.00	8.00	3.00
<u>Education of HH - All Resident EAAs (years)</u>	Mean	10.34	8.55	5.90	9.06
	<i>s.d.</i>	12.82	7.06	3.48	10.46
	Median	8.00	8.00	8.00	8.00
<u>Education HH per capita resident EAAs (years)</u>	Mean	3.92	3.72	5.90	4.27
	<i>s.d.</i>	2.85	3.21	3.48	3.11
	Median	3.00	3.50	8.00	3.75

Notes:

1. HH Size (Actual): Total no. of adults & children in HH
2. EAAs (Economically Active Adults): those aged 15-60 inclusive, except those in education
3. AEUs (Adult Equivalent Units on basis of consumption): male 15 years or older=1; female 15 years or older=0.8; male or female 14 years or under=0.5
4. Years in education: level reached taken as proxy for years on basis of: None=0; Std III=3; Std VIII=8; Form II=10; Form IV=12; Higher=15
5. Female HH Head: HHs where a) female entered on survey form as HHH (but excluding cases where there is a resident husband listed as well); b) female entered as 'Wife', but no resident husband; c) nobody entered as HHH, no husband listed
6. Age & education of HHH: in de facto female headed households, these data refer to the absent (male) head

Table 5. :Selected Domestic Assets, by Household Type, Village and Total

Village	Fishing HH type	Brick/concrete walls	Iron roof	Bicycles
		%	%	%
Saukaphimbi	Local resident	14.3	.0	71.4
	Migrant with family	16.7	.0	16.7
	Migrant without family	20.0	.0	20.0
	<u>All</u>	<u>16.0</u>	<u>.0</u>	<u>48.0</u>
Katanda	Local resident	40.0	.0	73.3
	Migrant with family	20.0	.0	80.0
	Migrant without family		.0	40.0
	<u>All</u>	<u>28.0</u>	<u>.0</u>	<u>68.0</u>
All	Local resident	27.6	.0	72.4
	Migrant with family	18.2	.0	45.5
	Migrant without family	10.0	.0	30.0
	<u>All</u>	<u>22.0</u>	<u>.0</u>	<u>58.0</u>

Constructing Livelihoods

Subsistence

Table 6. Share of Own Consumption* in Total Income

Village	Household Type	<i>N</i>	Share (%)
Saukaphimbi	Local resident	14	19.7
	Migrant with family	6	23.3
	Migrant without family	5	24.3
	<u>All</u>	<u>25</u>	<u>20.5</u>
Katanda	Local resident	15	28.4
	Migrant with family	5	31.8
	Migrant without family	5	44.6
	<u>All</u>	<u>25</u>	<u>32.4</u>
All	Local resident	29	23.2
	Migrant with family	11	29.5
	Migrant without family	10	37.7
	<u>All</u>	<u>50</u>	<u>26.5</u>

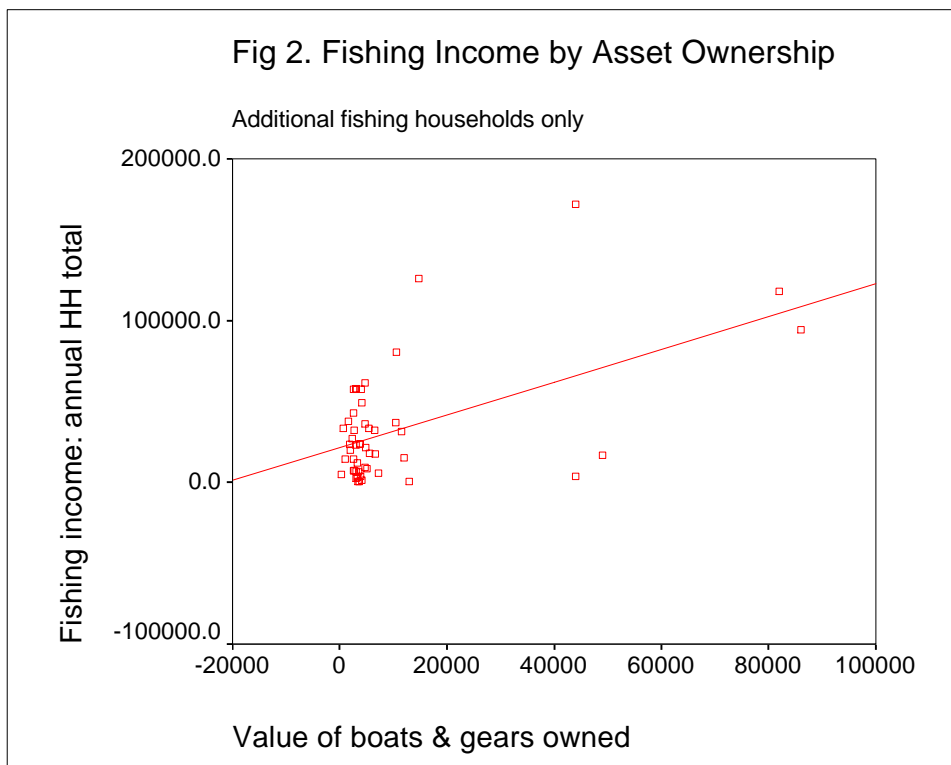
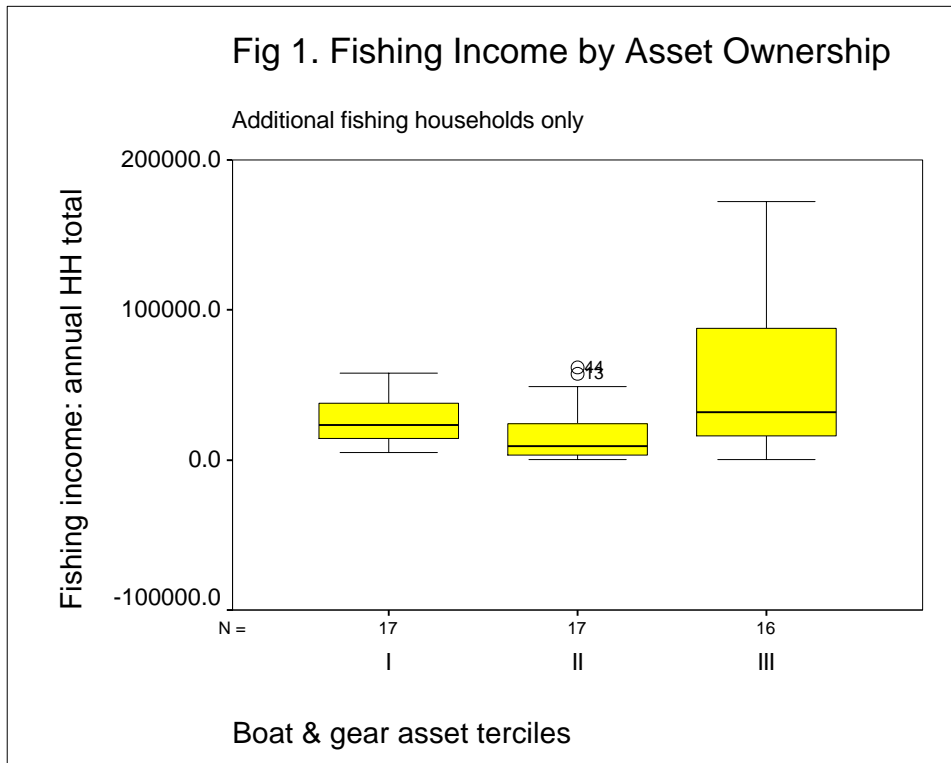
*Total net value of household subsistence as proportion of total net household income
Data are summed across all sample households
Fish consumption estimated at 25% of catch

Fishing

Table 7. Fishing Profitability - Income by Asset Ownership

	Annual fishing income (Mk)			
	Fishing asset tercile			All
	I	II	III	
<i>N</i>	17	17	16	50
Mean	27,475	18,903	50,130	31,810
<i>s.d.</i>	18,256	20,464	51,833	35,241
Median	23,400	9,306	31,660	22,308

Fishing asset terciles are based on value of boats & gear owned



Income Portfolios and Per Capita Incomes

Table 8. Income Portfolios by Household Type, by Village and Total

Saukaphimbi village

	Fishing HH type			All
	Local resident	Migrant with family	Migrant without family	%
	%	%	%	
Maize	2.7	.	.	2.2
Rice	4.7	.	.	3.8
Other crops	.2	.	.	.1
Cattle	11.2	.	.	9.0
Other livestock	5.7	.	.	4.6
Fish	56.6	93.3	97.0	64.3
Wages	3.1	4.5	.	3.0
Self-employment	15.3	2.2	2.7	12.7
Transfers	.4	.	.3	.4
Total	100.0	100.0	100.0	100.0

Katanda village

	Fishing HH type			All
	Local resident	Migrant with family	Migrant without family	%
	%	%	%	
Maize	1.5	.4	2.3	1.4
Rice	6.2	6.1	4.2	5.8
Other crops	1.2	.3	.	.7
Other livestock	1.8	.	.	.9
Fish	73.7	84.5	93.4	80.7
Wages	.2	.	.	.1
Self-employment	13.8	7.8	.	9.3
Transfers	1.6	.9	.	1.1
Total	100.0	100.0	100.0	100.0

All

	Fishing HH type			All
	Local resident	Migrant with family	Migrant without family	
	%	%	%	%
Maize	2.3	.3	1.5	1.8
Rice	5.3	4.5	2.8	4.8
Other crops	.6	.2	.	.4
Cattle	6.9	.	.	4.6
Other livestock	4.2	.	.	2.8
Fish	63.2	86.9	94.6	72.4
Wages	2.0	1.2	.	1.6
Self-employment	14.7	6.3	.9	11.1
Transfers	.9	.7	.1	.7
Total	100.0	100.0	100.0	100.0

Data are percentages of total income, based on incomes summed across all households

Table 9. Household Mean Fishing Income, by Household Type, by Village

Village		Fishing HH type			All
		Local resident	Migrant with family	Migrant without family	
Saukaphimbi	<i>N</i>	14	6	5	25
	Mean	36,103	17,665	21,153	28,688
	<i>s.d.</i>	48,657	12,203	17,831	37,957
	Median	10,786	16,620	16,900	15,240
Katanda	<i>N</i>	15	5	5	25
	Mean	27,292	52,656	40,127	34,932
	<i>s.d.</i>	28,780	21,039	49,601	32,780
	Median	21,600	57,720	23,015	24,000
All	<i>N</i>	29	11	10	50
	Mean	31,546	33,570	30,640	31,810
	<i>s.d.</i>	39,159	24,196	36,535	35,241
	Median	19,800	31,320	19,958	22,308

Income data in Mk

Table 10. Household Mean Per Capita Income, by Household Type, by Village

Village	Fishing HH type				All
		Local resident	Migrant with family	Migrant without family	
Saukaphimbi	<i>N</i>	14	6	5	25
	Mean	16,364	4,487	21,800	14,601
	<i>s.d.</i>	20,449	3,686	17,482	17,845
	Median	6,026	3,810	18,900	5,750
Katanda	<i>N</i>	15	5	5	25
	Mean	14,663	19,077	42,947	21,202
	<i>s.d.</i>	10,202	9,134	49,836	24,794
	Median	13,027	18,089	23,015	15,056
All	<i>N</i>	29	11	10	50
	Mean	15,484	11,119	32,374	17,902
	<i>s.d.</i>	15,714	9,911	36,931	21,638
	Median	12,464	9,158	20,958	11,851

Income data in Mk

Table 11. Household Mean Per Capita Income, by Household Type, by Village (US\$)

Village	Fishing HH type				All
		Local resident	Migrant with family	Migrant without family	
Saukaphimbi	<i>N</i>	14	6	5	25
	Mean	240.2	65.9	320.0	214.3
	<i>s.d.</i>	300.2	54.1	256.6	262.0
	Median	88.5	55.9	277.4	84.4
Katanda	<i>N</i>	15	5	5	25
	Mean	215.2	280.0	630.4	311.2
	<i>s.d.</i>	149.8	134.1	731.6	364.0
	Median	191.2	265.5	337.8	221.0
All	<i>N</i>	29	11	10	50
	Mean	227.3	163.2	475.2	262.8
	<i>s.d.</i>	230.7	145.5	542.1	317.6
	Median	183.0	134.4	307.6	174.0

Conversion rate at time of survey: 68.12 Mk = 1 US

Table 12. Mean net incomes p.a (Mk) - additional fishing HHs vs. main sample

	Sample			All
		Main sample	Additional fishing HHs	
<u>Overall total HH income</u>	<i>N</i>	281	50	331
	Mean	15,816	43,932	20,063
	<i>s.d</i>	20,255	63,122	32,271
	Median	8,730	27,720	10,515
<u>Per capita income</u>	<i>N</i>	281	50	331
	Mean	4,723	17,902	6,714
	<i>s.d</i>	5,793	21,638	10,970
	Median	2,675	11,851	3,009
<u>Fishing income</u>	<i>N</i>	41	50	91
	Mean	15,090	31,810	24,277
	<i>s.d</i>	18,811	35,241	30,056
	Median	7,280	22,308	14,400

Annex A: Maps

