Livelihoods and poverty reduction in coastal communities in the Western Region of Ghana:

Analysis of livelihoods baseline data of the ICFG Program

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This is a working document .

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1 Introduction

This report is the result of the livelihoods baseline survey as part of the USAID-funded Integrated Coastal and Fisheries Governance (ICFG) Program for the Western Region of Ghana (Hen Mpoano). The survey aims to provide a baseline for interventions to be implemented as part of the Hen Mpoano project by:

1. Establishing a baseline of the status of livelihoods of households in target communities (assess income levels and sources, seasonality issues, assets, vulnerability)
2. Establishing a simplified nutritional baseline of households in target communities and fish species consumed
3. Identifying opportunities for livelihood diversification in the target opportunities

The survey was implemented in February and March of 2012 in four target communities: Anlo Beach (Shama district), Akwidaa and Dixcove (Ahanta West district), and New Town (Jomoro district). These communities represent a range of livelihoods and conservation issues as well as a geographical spread, and are the target communities for further work, especially by WorldFish.

This document is structured as follows. Section 2 describes the research approach including the sampling design. Section 3 brings out some limitations in the data. Subsequently Section 4 gives a detailed description of the dataset, summarized in tables and figures. Finally Section 5 gives a synthesis of the major findings and implications.

2 Research approach

Sampling strategy

Ideally the sampling frame would have been based on a random sample from a comprehensive list of households. However apart from the constraint that these lists are not available this would also have resulted in a sample that is very dispersed geographically which was not feasible in terms of resource availability and logistical planning.

We therefore follow the approach also taken in the Feed the Future Initiative (USAID) which consists of two stages. In the first stage the target communities were divided into clusters and individual clusters were than selected, with a cluster's chance of being selected proportional to the population residing in the cluster. The second stage was to select households within the selected clusters.

The sampling strategy was based on aerial maps of the communities, overlaid with a grid. Individual clusters were selected through a "Probability Proportional to Size sampling" method, which means that the chances of a cluster being selected are proportional to the number of houses identified in the cluster. The identification of the number of households in each cluster was done by using the number of structures identified on the map. While this is a crude approach - as the aerial maps may not have been fully up-to-date, nor a reliable means to identify individual houses - it did succeed in bringing out differences in population density in each of the clusters resulting in an approximation of an equal probability for each of the households of being selected. The second stage then consisted of numbering structures on more detailed cluster maps and randomly selecting the appropriate number for the sample and the reserves.

The unit of analysis is the household and this therefore also formed the basis for our sampling strategy. For an approximation of numbers of households in each community we used Ghanaian census data. Unfortunately the information for the 2010 population census was not available yet and we have therefore used the data from the 2000 census inflated by 20%. The sample size was then decided by the desired confidence level and confidence interval of the results and the expected variability in the responses. We have used a confidence level of 90% and a confidence interval of 5%. Expected variability is assumed to be 30%. Table 1 shows an overview of the sample size as planned and what was actually achieved in the field. This results in a confidence interval of around 6% instead of 5%.

Table 1. Number of households and sample size in the four target communities

Community	Estimated no. of households	Desired sample size	No. of clusters (sample size / 30)	Actual sample size	Confidence interval actual
Anlo Beach	380	143	5	100	6.5%
Akwidaa	320	134	5	94	6.5%
Dixcove	1370	196	7	153	5.8%
New Town	330	135	5	100	6.3%
Total				**447**	

In some of the communities it is common for more than one household to share a dwelling. To avoid additional complexity in the sampling framework we interviewed all households in the selected house separately. When a structure indicated on the map was not a household dwelling, but was privately owned (e.g. a smoking shed) the household that owns this structure was interviewed ONLY IF they were located adjacent to the structure. Public structures (e.g. school, hospital, government office) were excluded from the survey. This process was documented.

Questionnaire

The questionnaire consisted of several components:

- Section 0: Identification: intended to enable identification of the household in case of follow up questions or for participation in any interventions.
- Section A: Household Roster: identifies the members of the household and lays the foundation for many questions later on. This section gives the interviewers the information they need to collect all incomes from all members of the household. It will also allow for calculation of the so-called dependency ration, i.e. how many working adult members support the children and those unable / unwilling to work.
- Section B: Education and Occupation: This section deals with the education and occupation of household members of 10 years of age and above. This information will tell us about the "human assets" the household has available and the most important sources of income in the household
- Section C: Risks and Shocks: This section is about the shocks households face and how they cope with them so will tell us more about the household's resilience.
- Section D: Sicknesses and Injuries: This section will tell us about the health status and vulnerability of the household. Illnesses and injuries among economically active household members will result in a reduction in income for the household.
- Section E: Death in the Family: the death of economically active household members result in a lower income level for the household
- Section F1: Land Holding and Utilization:
- Section F2: Crop Production and Yield Utilization:

- Section F3: Livestock Rearing: collects information on livestock being reared by the household and income derived from this livestock through sales of live animals and animal products
- Section G1: Calendar of fishing and fishing related activities:
- Section G2: Fishing
- Section G3: Fishing Related Activities
- Section H: Income from Other Sources
- Section I: Assets
- Section J: Access to Natural Resources
- Section K: Access to Financial Services
- Section L: Membership of groups and networks
- Section M: Nutrition and Food Security
- Section N: Livelihoods identity
- Concluding Remarks

3 Data limitations

While care was taken to derive a randomly selected, representative and reliable data set, a number of data limitations need to be taken into account:

- The sampling framework based on aerial photographs - while the best available option to derive a random sample - was sometimes a challenge to implement on the ground. This was mainly due to structures being marked that either no longer existed, were not household dwellings or structures marked individually turned out be part of other marked structures resulting in households being sampled twice. Mostly this issue could be dealt with by reverting to the reserves list.
- There were some difficulties with language barriers in Anlo Beach. In cases when the respondent could only speak Ewe, help was solicited from willing community members to translate.
- Time and resources limitations resulted in a smaller sample size than initially planned.
- In one of the communities, Akwidaa (new settlement), it was difficult to find people during the day due to the nature of their work (farming). There is no electricity available in this community and this caused limitations in implementing the survey at night. This may have brought in some bias into the sample. Data collection time was extended here so has to gather as much info as possible.
- In New Town some households were unavailable because of migration away from the community (e.g. to Ivory Coast). This may have resulted in a bias in the sample.
- In July 2007, a new Ghanaian currency was introduced, with a rate of 1 new cedi against 10,000 old Cedi. Some respondents however may still refer to the old currency. To add to the confusion, in day-to-day life people often used to omit the thousands when referring to the old currency. For example 10,000 old Cedi may be referred to as 10, which in the new currency would be 1 Cedi. This fact may have gone unnoticed by the interviewer during some interviews. While we have aimed to correct the error where it was obvious, this may have not happened for all cases, causing some uncertainty in the financial data.
- The income data is of poor quality, it was difficult for people to recall specific amounts of income and costs. As a result, the income data are unreliable, especially those for trading and processing fish. Efforts to impute incomes based on average fish prices and costs also did not yield usable figures. It was therefore decided to establish income terciles based on household income excluding fish processing.

4 Description of the dataset

The description of the dataset in this section was heavily influenced by the work conducted in the DfiD funded LADDER project, undertaken by the University of East Anglia in four African countries[1]. Their quantitative survey instruments also aimed to assess the assets, livelihoods activities and changing vulnerability contexts.

Terms and definitions

Household (HH):	A group of people who live together and take food from the "same pot." In our survey, a household member is someone who has lived in the household at least 6 months, and at least half of the week in each week in those months. If someone stays in the same household but does not bear any costs for food or does not take food from the same pot, they are not considered household members. For example, if two brothers stay in the same house with their families but they do not share food costs and they cook separately, then they are considered two separate households.
EAAs:	Economically Active Adults HH members aged 15-60 years, inclusive, regardless of gender, but excluding those still in education. Also includes those aged above 60 that are still economically active.
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 (from secondary data): Cattle including calves=1.00, Pigs=0.15, Sheep=0.14, Goats =0.10, Rabbits=0.02, Chicken=0.02, Other poultry=0.01.
Per Capita Income:	Net Total Household Income divided by AEUs
Income Terciles:	Calculated by ranking households from highest to lowest on the basis of per capita income, a) per community and b) for the whole sample. Income terciles were based on income excluding fish processing and trading income as these data proved to be unreliable. For some households income terciles could not be established because a component of household income contained missing data, in those cases the results are only presented in the overall results but data are excluded from the data presented under the income terciles. For that reason the number of cases included in the tables in the column "all" are higher than the sum of the number of cases in the three columns for the income terciles.

5 Main findings

It has become apparent in literature on poverty reduction that livelihoods of the poor comprise of many activities. Income diversification is a means to cope with risks and seasonality related to agriculture and fisheries. Poverty is multi-dimensional as it not only relates to income and consumption levels, but also to a lack of basic needs (access to shelter, health, and sanitation) and the ability to cope with shocks. Understanding poverty therefore requires the analysis to go beyond measuring income, to include factors such as education levels, health status, ownership and control over capital, financial and natural assets and

[1] For more information about LADDER see: http://www.uea.ac.uk/dev/People/staffresearch/ladder

access to social networks. The livelihoods survey conducted for the Hen Mpoano project aimed to encompass all these dimensions. The main findings of the survey are presented in this section, while the next section presents summary tables of the results.

Household assets

Average household size is 6 members and is quite similar across the communities with the exception of Akwidaa where household size is slightly higher. About 40% of households have a female head. In those households a husband is either not resident or not listed as a household member. Across the sample 14% of households have a household member that has migrated for employment, studies, marriage or other reasons. Migration is much less common among households in New Town, however this may be related to the timing of the survey as New Town is a migrant village with fishers coming in for fishing during peak season.

Mean education level of economically active adults is on average 5.2 years, but much higher in Anlo Beach (5.6 years) than in Akwidaa (4.7 years). The highest level of education reached by anyone in the household is about 9 years. In Anlo Beach and Dixcove education levels are higher for the highest income tercile, but in New Town and Akwidaa highest mean education levels are attained by the middle income tercile. Almost half of the adult household members in the sampled households had not attained any education level, while 21% finished primary school and 22% junior secondary school. Senior secondary school was finalized by less than 8% of the household members. Education levels are consistently lower for women than for men across the four communities. Less than 40% of all adult household members are literate.

About one fifth of the sampled households had an occurrence of an illness or injury in the past year, and this is more or less even across income terciles. A death in the household in the past 5 years has occurred in over 40% of households but is less common in the higher income tercile than in the middle and lower income terciles. Use of the National Health Insurance Scheme (NHIS) is higher among those households as well. The mean number of days a sick or injured household member stopped working is 54 days, but is overall lower for the lowest income tercile. This could potentially be due to a higher necessity to earn an income, regardless of whether a person feels well enough to work. The most common health issue across the four communities is malaria with 20% of illnesses attributed to this disease.

Group membership is common across the four villages, with the majority of those groups indicated as a group connected to the church with as its main aim worshipping, singing and prayer. Overall only 3% is a member of a group that has a business or vocational purpose. The exception is Anlo Beach where the majority of group membership is with a community group.

About 28% of the households indicate they had a loan in the past year. Borrowing money is more common in Dixcove than in the other communities. The average value of the loan is also much higher in this community. About 16% of households have savings, but again this is higher in Dixcove (27%). Value of the savings is highest in Dixcove and New Town, lowest in Akwidaa.

Land ownership is markedly higher in Akwidaa than in other communities, an average of about 1 hectare, while in the other three communities this is less than 0.33 hectares. This is both due to a higher proportion of households owning land as well as larger land area (more

than double the size of that in Anlo Beach, almost triple the size in New Town, and four times the size in Dixcove).

Livestock ownership is limited in all four communities, on average 0.34 cattle equivalent units. Goats and chicken are most commonly owned livestock, but chicken rearing is markedly more common in Anlo Beach than in the other three communities with over 60% of households owning chicken, compared to 21-24% in the other three communities. Livestock ownership is least common in New Town, with about 31% owning some kind of livestock compared to 46% for the overall sample.

Vulnerability

The vast majority of households have experienced a shock in the past year (only 2.5% indicates they did not). Overall the most common shocks are increases in food prices, increases in input prices, flooding, lower fish availability, destruction of housing, and drought. However, occurrence of shocks differs across communities. In Akwidaa the third most common shock is pests or diseases affecting crops. As this community has a higher level of agricultural activity, this is not surprising. In Anlo Beach the most common shock is flooding, due to the location of the village. The effect of '*green green'* (a type of algae that affects fish catch because it gets entangled in fishing nets and other gear) is most experienced in New Town. In Dixcove and New Town adverse weather affecting fish catch is also commonly indicated as a shock. The shocks experienced as most severe are increase in food prices, flooding, destruction of housing, low fish availability, death of adult members, and job loss by a household member. The occurrence of most shocks is higher for the highest income tercile.

Coping mechanisms to overcome shocks that are most commonly used include working harder, reducing consumption, borrowing money from a relative, do nothing, and use savings. Borrowing from a moneylender or non-relatives is less common. Working harder and reducing consumption are common coping mechanism for the highest income tercile especially.

Nutrition

The mean number of meals eaten per day is slightly less than three. Fish is commonly eaten in all communities with about 80% of meals containing some fish. Meat and chicken / poultry on the other hand are eaten only occasionally; on average less than one meal per week contained meat and also less than one meal contained chicken or poultry.

At the time of the survey some food insufficiencies occurred, with households having insufficient food during 3 days in the past 30 days on average. More than 50% indicated they suffered food insufficiencies in the past year, in Dixcove this is even as high as 80% of households, while Anlo Beach is best off with 37% of households. Almost 40% had an adult occasionally skipping meals because of insufficient money available to buy food and again this is highest in Dixcove (62% of household) and lowest in Anlo Beach (20% of households). Both food and fish shortages occur most in May to July, except for in New Town where this is most common in April.

Fish species most commonly consumed differ by community. In Akwidaa and Dixcove tuna species are indicated by almost all households as most commonly consumed, while this is much less for the other two. Sardines and related species are commonly eaten across all communities. In addition, households in Anlo Beach indicate they commonly eat tilapias,

shrimp, large hairtail and cassava fish. Tilapia is also commonly eaten in New Town, as well as threadfin and anchovy.

Livelihoods activities

Respondents were asked about the primary and secondary occupation of all household members. Fishing is among the top 3 of occupation for men for all communities, but is only highest in Anlo Beach and Dixcove. For women fish processing is among the top 3 but is the highest in none of the communities. This place is taken up by small business/ petty trading in most of the communities. Farming is also a common occupation in all communities for both men and women.

Crops grown most commonly are cassava, oil palm, maize, coconut, plantain and pepper. Maize is however much more commonly grown in Anlo Beach than in the other three communities, while coconut is much more common in New Town and oil palm in Akwidaa and Dixcove. Surprisingly, use of animal products is low, and if it is used it is mostly for home consumption and not for sale, except in Anlo Beach where sales are more common.

Fishing and fishing related activities are seasonal. Peak fishing season is August to October but intensity of fishing and fish processing differs across the communities. Equipment making however has its peak at times when the fishing intensity is lowest and when more time is available for this activity. High intensity fishing season is shortest in New Town. In Akwidaa at any time of the year, less than 35% of households are involved in fishing or related activities and this is almost similar in New Town. Anlo Beach and Dixcove have more households involved in these activities throughout the year. What becomes clear from these results is that fishing and fishing related activities are not the most important source of livelihood for many of the households in these communities.

Apart from livelihood activities other sources of income include transfers such as remittances, pensions and gifts.

Constructing Livelihoods

Fishing, animal product production, and agriculture are also important sources for subsistence. For animal products this is the most important way in which these products are used; overall 88% of production is used for own consumption in the household, while for crops this is 39% and for fish 27%. In New Town and Anlo Beach more fish and crops are used for home consumption than in the other two communities. A larger proportion of animal products are consumed at home in Akwidaa and Anlo Beach. A higher proportion of fish is used for subsistence in the highest income tercile, while for animal products and crops this proportion is higher for the lowest income tercile.

Households in the higher income terciles consistently have a higher number of livelihoods activities than the households in the lowest income tercile. Overall, agriculture makes up a larger proportion of income for the lowest income tercile and transfers are also a larger component for this group. The higher income terciles in contrast have higher proportions of non-farm income. Income portfolios in general, differ between communities, for example non-farm income makes up a much higher proportion in Dixcove and New Town than in the other two communities. There is a wide range in per capita income between the lowest and highest income terciles however these findings need to be treated with caution due to unreliability of some of the income data.

Livelihoods Identity

It seems respondents do not feel a high level of commitment to their present livelihood activity. There is a high willingness to learn a new livelihood activity if given the opportunity. Overall, over 73% of the respondents assert they would like to do this. However, when asked if they would change their occupation if they win a large amount of money in the lottery only about half of the respondents indicate they would. Willingness to change is slightly higher in Dixcove and lower in Akwidaa.

Among the reasons for not desiring to learn another occupation is inability because of age or health, and not knowing what else to do. Time limitations are also given as a reason for not wanting to learn a new occupation. Among the reasons for desiring to learn a new occupation are that the current occupation is not profitable enough, too hard or labor intensive, instability of present income and seasonality of present occupation. New occupations popular among men are carpentry, driver (car/taxi), masonry, mechanic and tailor, while for women these are (petty) trading / provision store, bakery (bread / cake / pastry), fish mongering / processing, catering, hairdressing, dressmaking / seamstress and tie and dye.

6 Summary tables of results

Household assets

Key Household Assets

Table 2. Mean & Median Selected Assets, by Community

Asset		Community				
		Akwidaa	Anlo Beach	Dixcove	New Town	All
	N	*100*	*94*	*153*	*100*	*447*
HH size	Mean	6.47	5.87	5.98	5.83	6.03
	St.dev.	*3.84*	*4.42*	*4.50*	*3.37*	*4.10*
	Median	6.00	5.00	5.00	5.00	5.00
Land area owned (ha)	Mean	1.04	.33	0.06	0.18	0.36
	St.dev.	*3.60*	*1.39*	*0.37*	*0.78*	*1.90*
	Median	.03	.01	0.00	0.00	0.00
Mean education (yrs)	Mean	4.65	5.61	5.40	5.07	5.21
	St.dev.	*3.54*	*3.71*	*3.73*	*3.70*	*3.68*
	Median	4.73	5.87	5.00	4.94	5.00
Maximum education (yrs)	Mean	9.15	9.77	8.82	9.42	9.23
	St.dev.	*3.98*	*4.20*	*4.48*	*3.92*	*4.19*
	Median	9.00	10.00	9.00	9.00	9.00
Livestock (CEU)	Mean	0.45	0.32	0.37	0.20	0.34
	St.dev.	*1.04*	*0.39*	*1.09*	*0.59*	*0.87*
	Median	0.00	0.16	0.00	0.00	0.00
Boats (index)	Mean	5.29	4.00	5.33	2.55	4.42
	St.dev.	*18.18*	*15.20*	*16.52*	*11.70*	*15.69*
	Median	0.00	0.00	0.00	0.00	0.00
Other physical assets (index)	Mean	12.02	16.33	14.79	19.46	15.54
	St.dev.	*12.46*	*16.06*	*14.06*	*17.67*	*15.21*
	Median	6.76	11.88	10.13	13.64	10.63

HH Size: No. of residents (all ages)
Mean education: Mean no. of years in education (resident EAAs), household members are considered resident when they have spent more than 6 months in the household. This also includes those above 60 still economically active. For households without a resident EAA the education of the resident household head is used.
Maximum education: Maximum level of education attained by any of the household members
Livestock: Livestock holding in CEUs, based on value according to Ghana Living Standards Survey 2008
Boats: Value index of boats owned based on size and engine of the boat and typical values: Boat index = (total HH value of boats/maximum value within village sample) X 100
Assets: Index for total asset holdings: Asset index = (total HH value of assets/maximum value within village sample) X 100. Asset value are based on a 10% trimmed mean

Table 3. Mean & Median Selected Assets by Income Tercile, by Community

Community: Akwidaa

Asset		Per capita income tercile I	II	III	All
	N	*31*	*31*	*31*	*93*
HH size	Mean	6.97	7.00	5.81	6.47
	St.dev.	*4.42*	*3.67*	*3.49*	*3.84*
	Median	6.00	6.00	5.00	6.00
Area owned (ha)	Mean	1.20	1.55	0.33	1.04
	St.dev.	*3.64*	*5.23*	*0.77*	*3.60*
	Median	0.02	0.04	0.03	0.03
Mean education (yrs)	Mean	3.96	4.95	4.35	4.65
	St.dev.	*3.34*	*3.47*	*3.84*	*3.54*
	Median	3.50	5.67	4.71	4.73
Maximum education (yrs)	Mean	8.16	9.77	9.27	9.15
	St.dev.	*4.08*	*3.02*	*4.83*	*3.98*
	Median	8.00	10.00	9.00	9.00
Livestock (CEU)	Mean	0.29	0.49	0.57	0.45
	St.dev.	*0.68*	*0.92*	*1.47*	*1.04*
	Median	0.00	0.08	0.00	0.00
Boats (index)	Mean	3.08	1.38	9.91	5.29
	St.dev.	*15.37*	*7.66*	*23.28*	*18.18*
	Median	0.00	0.00	0.00	0.00
Other physical assets (index)	Mean	9.99	10.51	15.16	12.02
	St.dev.	*9.71*	*8.09*	*17.30*	*12.48*
	Median	6.81	8.60	10.70	9.22

Community: Anlo Beach

Asset		Per capita income tercile I	II	III	All
	N	25	26	26	*94*
HH size	Mean	5.36	5.27	5.27	5.87
	St.dev.	*5.69*	*2.88*	*2.66*	*4.42*
	Median	4.00	5.00	5.00	5.00
Area owned (ha)	Mean	0.00	0.01	0.26	0.33
	St.dev.	*0.01*	*0.02*	*0.91*	*1.39*
	Median	0.00	0.01	0.01	0.01
Mean education (yrs)	Mean	4.46	5.39	6.20	5.61
	St.dev.	*3.19*	*3.49*	*4.14*	*3.71*
	Median	5.00	5.00	6.54	5.87
Maximum education (yrs)	Mean	8.48	9.58	9.81	9.77
	St.dev.	*3.64*	*4.20*	*4.34*	*4.20*
	Median	9.00	9.00	10.00	10.00
Livestock (CEU)	Mean	0.36	0.33	0.34	0.32
	St.dev.	*0.38*	*0.42*	*0.41*	*0.39*
	Median	0.22	0.14	0.20	0.16
Boats (index)	Mean	0.00	0.00	5.48	4.00
	St.dev.	*0.00*	*0.00*	*13.34*	*15.20*
	Median	0.00	0.00	0.00	0.00
Other physical assets (index)	Mean	12.54	16.01	18.07	16.33
	St.dev.	*15.80*	*14.89*	*12.95*	*16.06*
	Median	9.54	9.32	16.49	11.88

Community: Dixcove

Asset		Per capita income tercile			
		I	II	III	All
	N	47	44	46	*153*
HH size	Mean	7.02	5.93	4.96	5.98
	St.dev.	*5.48*	*4.93*	*2.49*	*4.50*
	Median	5.00	5.00	4.00	5.00
Area owned (ha)	Mean	0.08	0.06	0.05	0.06
	St.dev.	*0.48*	*0.37*	*0.30*	*0.37*
	Median	0.00	0.00	0.00	0.00
Mean education (yrs)	Mean	5.38	4.81	5.83	5.40
	St.dev.	*3.98*	*3.57*	*3.52*	*3.73*
	Median	5.00	4.50	5.80	5.00
Maximum education (yrs)	Mean	9.00	8.25	8.98	8.82
	St.dev.	*5.43*	*4.04*	*3.92*	*4.48*
	Median	9.00	9.00	9.00	9.00
Livestock (CEU)	Mean	0.36	0.54	0.25	0.37
	St.dev.	*0.90*	*1.70*	*0.51*	*1.09*
	Median	0.00	0.00	0.00	0.00
Boats (index)	Mean	3.79	5.12	3.31	5.33
	St.dev.	*15.96*	*19.48*	*8.27*	*16.52*
	Median	0.00	0.00	0.00	0.00
Other physical assets (index)	Mean	18.06	14.06	11.35	14.79
	St.dev.	*18.00*	*13.53*	*8.39*	*14.06*
	Median	12.56	8.63	9.71	10.31

Community: New Town

Asset		Per capita income tercile			
		I	II	III	All
	N	31	32	32	*100*
HH size	Mean	5.91	6.90	4.44	5.83
	St.dev.	*3.26*	*3.83*	*2.12*	*3.37*
	Median	6.00	6.50	4.00	5.00
Area owned (ha)	Mean	0.01	0.34	0.22	0.18
	St.dev.	*0.02*	*0.95*	*1.02*	*0.78*
	Median	0.00	0.01	0.00	0.00
Mean education (yrs)	Mean	4.49	5.92	5.18	5.07
	St.dev.	*3.42*	*3.06*	*4.52*	*3.70*
	Median	5.20	6.17	4.00	4.94
Maximum education (yrs)	Mean	8.82	10.47	8.97	9.42
	St.dev.	*4.22*	*2.98*	*4.02*	*3.92*
	Median	9.00	10.50	9.00	9.00
Livestock (CEU)	Mean	0.08	0.36	0.07	0.20
	St.dev.	*0.17*	*0.87*	*0.13*	*0.59*
	Median	0.00	0.00	0.00	0.00
Boats (index)	Mean	0.00	0.94	6.36	2.55
	St.dev.	*0.00*	*4.34*	*19.51*	*11.70*
	Median	0.00	0.00	0.00	0.00
Other physical assets (index)	Mean	13.26	23.47	20.07	19.46
	St.dev.	*8.77*	*20.33*	*18.43*	*17.67*
	Median	10.53	17.77	12.79	13.64

Natural Assets

Table 4. Land Owned and Farmed, by Community

Land type		Community				
		Akwidaa	Anlo Beach	Dixcove	New Town	All
	N	*100*	*94*	*151*	*100*	*445*
Area owned (ha)	Mean	1.05	0.31	0.06	0.18	0.36
	St.dev.	*3.60*	*1.38*	*0.37*	*0.78*	*1.90*
	Median	0.03	0.01	0.00	0.00	0.00
Area farmed (ha)	Mean	0.79	0.31	0.03	0.16	0.29
	St.dev.	*2.46*	*1.38*	*0.26*	*0.76*	*1.41*
	Median	0.02	0.01	0.00	0.00	0.00

Table 5. Size Distribution of Land Owned and Farmed, by Households, by Community (in %)

Area range	Community									
	Akwidaa		Anlo Beach		Dixcove		New Town		All	
	own	farm	own	farm	own	farm	own	farm	own	farm
None	16.00	20.00	39.36	40.43	79.74	82.35	60.00	62.00	52.57	55.03
Less than 0.01 ha	11.00	10.00	23.40	23.40	1.96	1.96	5.00	4.00	9.17	8.72
0.01 - 0.03 ha	21.00	22.00	18.09	18.09	9.15	7.84	15.00	16.00	14.99	14.99
0.03 - 0.05 ha	16.00	15.00	10.64	9.57	3.92	3.92	7.00	6.00	8.72	8.05
0.05 - 0.1 ha	11.00	10.00	3.19	3.19	1.96	1.31	4.00	5.00	4.70	4.47
0.1 -1.0 ha	7.00	8.00	0.00	0.00	0.00	0.00	3.00	2.00	2.24	2.24
1.0 - 3.0 ha	7.00	6.00	1.06	1.06	1.31	1.31	4.00	3.00	3.13	2.68
More than 3.0 ha	11.00	9.00	4.26	4.26	1.96	1.31	2.00	2.00	4.47	3.80

Data are percentages of sample households that own / farm land in this range

Table 6. Mean Land Owned by Income Tercile, by Community

Community		Per capita income tercile			
		I	II	III	All
Akwidaa	*N*	*30*	*31*	*31*	*100*
	Mean	1.20	1.55	0.33	1.05
	St.dev.	*3.64*	*5.23*	*0.77*	*3.60*
	Median	0.02	0.04	0.03	0.03
Anlo Beach	*N*	*25*	*25*	*26*	*94*
	Mean	0.00	0.01	0.26	0.31
	St.dev.	*0.01*	*0.02*	*0.91*	*1.48*
	Median	0.00	0.01	0.01	0.01
Dixcove	*N*	*46*	*43*	*46*	*151*
	Mean	0.08	0.06	0.05	0.06
	St.dev.	*0.48*	*0.37*	*0.30*	*0.37*
	Median	0.00	0.00	0.00	0.00
New Town	*N*	*33*	*30*	*32*	*100*
	Mean	0.01	0.34	0.22	0.18
	St.dev.	*0.02*	*0.95*	*1.02*	*0.78*
	Median	0.00	0.01	0.00	0.00
All	*N*	*135*	*131*	*133*	*447*
	Mean	0.32	0.44	0.20	0.36
	St.dev.	*1.83*	*2.60*	*0.76*	*0.19*
	Median	0.00	0.00	0.00	0.00

Table 7. Livestock Ownership, by Community

Livestock type	Community				
	Akwidaa	Anlo Beach	Dixcove	New Town	All
	%	%	%	%	**%**
Goats	34.0	33.0	24.2	3.0	23.5
Sheep	7.0	2.1	2.6	4.0	3.8
Chicken	21.0	61.7	24.2	23.0	31.1
Other poultry	0.0	33.0	0.7	2.0	7.6
Other livestock	0.0	0.0	0.7	3.0	0.9
None	53.0	27.7	60.8	69.0	53.9

Data are percentages of all sample households owning each type of livestock. Other livestock are cattle, pigs, rabbits, and crocodiles, each type owned by only 1 household. Totals do not add up to 100% because some households have more than one type of livestock.

Table 8. Mean Number of Livestock Owned by Livestock Type, by Community

Community		Livestock type				
		Goats	Sheep	Chicken	Other poultry	Other livestock
Akwidaa	Mean	3.22	0.61	3.02	0.00	0.00
	St.dev.	*8.31*	*2.52*	*7.44*	*0.00*	*0.00*
	Median	0.00	0.00	0.00	0.00	0.00
Anlo Beach	Mean	1.69	0.06	7.10	3.98	0.00
	St.dev.	*3.10*	*0.44*	*9.68*	*7.48*	*0.00*
	Median	0.00	0.00	5.00	0.00	0.00
Dixcove	Mean	1.96	0.34	4.25	0.07	0.07
	St.dev.	*4.53*	*2.94*	*11.72*	*0.89*	*0.81*
	Median	0.00	0.00	0.00	0.00	0.00
New Town	Mean	0.47	0.44	4.64	0.21	0.47
	St.dev.	*3.21*	*2.34*	*12.36*	*1.48*	*2.90*
	Median	0.00	0.00	0.00	0.00	0.00
All	Mean	1.85	0.36	4.66	0.91	0.13
	St.dev.	*5.24*	*2.37*	*10.70*	*3.87*	*1.46*
	Median	0.00	0.00	0.00	0.00	0.00

Data is the community-level mean of the mean number of each type of livestock owned in the last 12 months (i.e. average of presently owned and owned 12 months ago).

Table 9. Mean Livestock Assets in Cattle Equivalent Units by Income Tercile by Community

Community		Per capita income tercile			
		I	II	III	All
Akwidaa	*N*	*31*	*31*	*31*	*100*
	Mean	0.29	0.49	0.57	0.45
	St.dev.	*0.68*	*0.92*	*1.47*	*1.04*
	Median	0.00	0.08	0.00	0.00
Anlo Beach	*N*	*25*	*25*	*26*	*94*
	Mean	0.36	0.34	0.34	0.32
	St.dev.	*0.38*	*0.43*	*0.41*	*0.39*
	Median	0.22	0.14	0.20	0.16
Dixcove	*N*	*47*	*44*	*46*	*153*
	Mean	0.36	0.54	0.25	0.37
	St.dev.	*0.90*	*1.70*	*0.51*	*1.09*
	Median	0.00	0.00	0.00	0.00
New Town	*N*	*33*	*30*	*32*	*100*
	Mean	0.08	0.36	0.07	0.20
	St.dev.	*0.17*	*0.87*	*0.13*	*0.59*
	Median	0.00	0.00	0.00	0.00
All	*N*	*136*	*132*	*134*	*447*
	Mean	0.24	0.52	0.26	0.34
	St.dev.	*0.47*	*1.39*	*0.51*	*0.87*
	Median	0.00	0.00	0.00	0.00

Cattle Equivalent Units Based on market value ratios between livestock (from secondary data): Cattle including calves=1.00, Pigs=0.15, Sheep=0.14, Goats =0.10, Rabbits=0.02, Chicken=0.02, Other poultry=0.01. Means for all HHs

Table 10. Access to and Use of Natural Resources

Community	Use of Natural Resource			All (%)
	Fishing (%)	Collect Firewood (%)	Other (%)	
Akwidaa	43.0	71.0	5.0	80.0
Anlo Beach	58.5	51.1	6.4	68.1
Dixcove	43.1	27.5	2.0	51.6
New Town	28.0	55.0	0.0	56.0
All	43.0	48.3	3.1	62.4

Data are percentage of HHs that use a particular common natural resource and overall the percentage of households that uses any common natural resource.

Human Assets

Table 11. Household Demographics and Education, by Community

Human Asset		Community				
		Akwidaa	Anlo Beach	Dixcove	New Town	All
	N	*100*	*94*	*153*	*100*	*447*
HH size (Actual)	Mean	6.47	5.87	5.98	5.83	6.03
	St.dev.	*3.85*	*4.42*	*4.50*	*3.37*	*4.10*
	Median	6.00	5.00	5.00	5.00	5.00
HH size (EAAs)	Mean	2.66	2.55	2.54	2.29	2.51
	St.dev.	*1.81*	*2.10*	*1.95*	*1.35*	*1.84*
	Median	2.00	2.00	2.00	2.00	2.00
HH size (AEUs)	Mean	4.71	4.33	4.27	4.15	4.36
	St.dev.	*2.71*	*3.20*	*3.20*	*2.39*	*2.93*
	Median	4.10	3.60	3.60	3.60	3.60
HH non resident	Mean	0.43	0.83	0.23	0.15	0.38
	St.dev.	*1.07*	*1.94*	*0.78*	*0.61*	*1.18*
	Median	0.00	0.00	0.00	0.00	0.00
Age of HH Head	Mean	51.78	52.09	46.75	44.83	48.55
	St.dev.	*16.76*	*14.65*	*18.35*	*18.02*	*17.42*
	Median	46.50	50.00	42.00	40.50	45.00
HH Head is Female	Mean	0.39	0.44	0.38	0.41	0.40
	St.dev.	*0.49*	*0.50*	*0.49*	*0.49*	*0.49*
	Median	0.00	0.00	0.00	0.00	0.00
Max Education of any HH Member (Years)	Mean	9.15	9.77	8.82	9.42	9.23
	St.dev.	*3.98*	*4.20*	*4.48*	*3.92*	*4.19*
	Median	9.00	10.00	9.00	9.00	9.00
Education of HH – all resident EAAs (Years)	Mean	4.65	5.61	5.40	5.07	5.21
	St.dev.	*3.54*	*3.71*	*3.73*	*3.70*	*3.68*
	Median	4.73	5.87	5.00	4.94	5.00
Literacy of HH – share of all resident EAAs	Mean	0.37	0.40	0.32	0.38	0.36
	St.dev.	*0.35*	*0.37*	*0.37*	*0.37*	*0.36*
	Median	0.47	0.40	0.20	0.33	0.33
HH with migrants		17.0%	26.6%	9.8%	6.0%	14.1%

HH Size (Actual): Total no. of adults & children in HH
EAAs (Economically Active Adults): those aged 15-60 inclusive, except those in education
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
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.
Age & education of HH head: in de facto female headed households, these data relate to the absent (male) head

Table 12. Household Education Level, by Income Tercile, by Community

Community		Per capita income tercile			
		I	II	III	All
Akwidaa	*N*	*31*	*31*	*31*	*100*
	Mean	3.96	4.95	4.35	4.65
	St.dev.	*3.34*	*3.47*	*3.84*	*3.54*
	Median	3.50	5.67	4.71	4.73
Anlo Beach	*N*	*25*	*25*	*26*	*94*
	Mean	4.46	5.46	6.20	5.61
	St.dev.	*3.19*	*3.54*	*4.14*	*3.71*
	Median	5.00	5.00	6.54	5.87
Dixcove	*N*	*47*	*44*	*46*	*153*
	Mean	5.38	4.80	5.83	5.40
	St.dev.	*3.98*	*3.57*	*3.52*	*3.73*
	Median	5.00	4.50	5.80	5.00
New Town	*N*	*33*	*30*	*32*	*100*
	Mean	4.49	5.92	5.17	5.07
	St.dev.	*3.42*	*3.06*	*4.52*	*3.70*
	Median	5.20	6.17	4.00	4.94
All	*N*	*136*	*132*	*134*	*447*
	Mean	4.70	5.15	5.43	5.21
	St.dev.	*3.59*	*3.43*	*3.95*	*3.68*
	Median	5.00	5.00	5.17	5.00

Household education: Mean years in education for all resident EAAs.

Table 13. Education Level Reached, by Gender and Community

Education Level		Gender of resident HH member: Male		Female		All	
		count	%	count	%	count	%
Akwidaa	None	79	40.3	141	53.2	220	47.7
	Primary school	45	23.0	64	24.2	109	23.6
	Junior secondary school	53	27.0	48	18.1	101	21.9
	Senior secondary school	15	7.7	9	3.4	24	5.2
	Vocational training	3	1.5	3	1.1	6	1.3
	University degree	1	0.5	0	0.0	1	0.2
Anlo Beach	None	46	26.9	117	54.2	163	42.1
	Primary school	39	22.8	42	19.4	81	20.9
	Junior secondary school	64	37.4	43	19.9	107	27.6
	Senior secondary school	16	9.4	13	6.0	29	7.5
	Vocational training	3	1.8	1	0.5	4	1.0
	University degree	3	1.8	0	0.0	3	0.8
Dixcove	None	131	47.1	172	51.2	303	49.3
	Primary school	59	21.2	72	21.4	131	21.3
	Junior secondary school	64	23.0	60	17.9	124	20.2
	Senior secondary school	22	7.9	26	7.7	48	7.8
	Vocational training	0	0.0	4	1.2	4	0.7
	University degree	2	0.7	2	0.6	4	0.7
New Town	None	62	37.8	131	56.7	193	48.9
	Primary school	29	17.7	48	20.8	77	19.5
	Junior secondary school	44	26.8	33	14.3	77	19.5
	Senior secondary school	25	15.2	19	8.2	44	11.1
	Vocational training	2	1.2	0	0.0	2	0.5
	University degree	2	1.2	0	0.0	2	0.5
All	None	318	39.3	561	53.5	879	47.3
	Primary school	172	21.3	226	21.6	398	21.4
	Junior secondary school	225	27.8	184	17.6	409	22.0
	Senior secondary school	78	9.6	67	6.4	145	7.8
	Vocational training	8	1.0	8	0.8	16	0.9
	University degree	8	1.0	2	0.2	10	0.5

Data are counts and percentages of resident EAAs

Table 14. Reasons for Migration, by Community

Reasons for Migration	Community: Akwidaa	Anlo Beach	Dixcove	New Town	All
	Count	Count	Count	Count	Count
Employment	31	40	15	10	96
Studies / learn a trade	16	14	15	5	50
Marriage	7	5	0	1	13
Other	4	13	4	1	22

Data are a count of reasons for migration. The category “Other” includes among others fishing, pasture land, accommodation, health reasons, social visit, and electricity.

Table 15. Health in the HH by Income Tercile, by Community

Community	Health related issues		Per capita income tercile			
		N	I	II	III	All
Akwidaa	*N per tercile*		*31*	*31*	*31*	*100*
	Occurrence of disease in HH (share)	*100*	0.18	0.16	0.26	0.20
	Occurrence of death in HH	*100*	0.65	0.65	0.55	0.58
	Occurrence of death of child below 15 years	*100*	0.03	0.03	0.00	0.02
	Use of NHIS (share)	*48*	0.17	0.38	0.43	0.32
	Mean no. of days stopped work for disease	*38*	56.08	74.42	29.75	54.33
Anlo Beach	*N per tercile*		*25*	*25*	*26*	*94*
	Occurrence of disease in HH (share)	*94*	0.18	0.29	0.23	0.22
	Occurrence of death in HH	*94*	0.20	0.36	0.35	0.34
	Occurrence of death of child below 15 years	*94*	0.00	0.00	0.00	0.00
	Use of NHIS (share)	*47*	0.38	0.27	0.30	0.33
	Mean no. of days stopped work for disease	*39*	41.03	124.25	173.31	88.74
Dixcove	*N per tercile*		*47*	*44*	*46*	*153*
	Occurrence of disease in HH (share)	*153*	0.20	0.23	0.23	0.22
	Occurrence of death in HH	*153*	0.49	0.45	0.22	0.41
	Occurrence of death of child below 15 years	*153*	0.04	0.07	0.02	0.04
	Use of NHIS (share)	*74*	0.31	0.30	0.59	0.40
	Mean no. of days stopped work for disease	*65*	44.86	43.94	27.87	44.36
New Town	*N per tercile*		*33*	*30*	*32*	*100*
	Occurrence of disease in HH (share)	*100*	0.23	0.22	0.28	0.25
	Occurrence of death in HH	*100*	0.42	0.47	0.34	0.42
	Occurrence of death of child below 15 years	*100*	0.06	0.10	0.00	0.06
	Use of NHIS (share)	*54*	0.42	0.38	0.53	0.45
	Mean no. of days stopped work for disease	*49*	35.04	55.51	27.83	39.88
All	*N per tercile*		*136*	*132*	*134*	*447*
	Occurrence of disease in HH (share)	*447*	0.20	0.24	0.24	0.22
	Occurrence of death in HH	*447*	0.49	0.46	0.34	0.43
	Occurrence of death of child below 15 years	*447*	0.04	0.05	0.01	0.03
	Use of NHIS (share)	*223*	0.34	0.33	0.47	0.38
	Mean no. of days stopped work for disease	*191*	43.62	68.98	50.88	54.26

Occurrence of disease in HH is the average of the share of HH members that have experienced an illness or injury in the last 12 months.
Occurrence of death is the percentage of households that have experienced a death in the family in the last 5 years
Use of National Health Insurance Scheme (NHIS) is the HH mean for those that have fallen sick only
Mean number of days stopped work is the HH mean for those HH members that have fallen sick or were injured only.

Table 16. Five Most Common Diseases, Across Households

Community	Illness/ injury	Per capita income tercile I	II	III	All
		%	%	%	%
	N per tercile	*31*	*31*	*31*	*100*
	Malaria, fever	12.9	16.1	25.8	18.0
	Stomach ache	3.2	6.5	6.5	6.0
Akwidaa	Head ache	6.5	0.0	9.7	5.0
	Pain/swelling in body/limbs	3.2	3.2	3.2	4.0
	Waist pain	9.7	0.0	9.7	6.0
	Other illness / injury	38.7	29.0	19.4	30.0
	N per tercile	*25*	*25*	*26*	*94*
	Malaria, fever	12.0	24.0	34.6	22.3
	Stomach ache	8.0	4.0	0.0	5.3
Anlo Beach	Head ache	0.0	12.0	7.7	6.4
	Pain/swelling in body/limbs	0.0	0.0	3.8	1.1
	Waist pain	12.0	0.0	3.8	4.3
	Other illness / injury	24.0	36.0	30.8	33.0
	N per tercile	*47*	*44*	*46*	*153*
	Malaria, fever	12.8	25.0	26.1	22.2
	Stomach ache	17.0	15.9	6.5	11.8
Dixcove	Head ache	8.5	0.0	8.7	5.9
	Pain/swelling in body/limbs	2.1	4.5	4.3	4.6
	Waist pain	0.0	0.0	2.2	0.7
	Other illness / injury	21.3	20.5	26.1	22.9
	N per tercile	*33*	*30*	*32*	*100*
	Malaria, fever	6.1	30.0	12.5	17.0
	Stomach ache	12.1	10.0	9.4	11.0
New Town	Head ache	3.0	20.0	0.0	7.0
	Pain/swelling in body/limbs	12.1	3.3	6.3	7.0
	Waist pain	3.0	6.7	0.0	3.0
	Other illness / injury	27.3	33.3	34.4	32.0
	N per tercile				
	Malaria, fever	11.8	22.7	24.6	20.1
	Stomach ache	11.0	9.8	6.0	8.9
All	Head ache	4.4	7.6	6.7	6.0
	Pain/swelling in body/limbs	5.1	3.0	3.7	4.3
	Waist pain	5.1	1.5	3.7	3.1
	Other illness / injury	30.1	25.6	27.6	28.6

The value is the share of households that has had a reported occurrence of this illness in the HH in the last 12 months.

Domestic (Physical) Assets

Table 17. Selected Domestic Assets, by Community and Total

Asset	Community				All
	Akwidaa	Anlo Beach	Dixcove	New Town	
	%	%	%	%	**%**
Secure rights on homestead land	87.0	90.3	69.1	80.8	80.2
Brick / concrete floor	86.0	89.4	95.4	81.0	88.8
Brick / concrete walls	70.0	80.9	95.4	42.0	74.7
Drinking water from private well/tap	0.0	12.8	22.9	12.0	13.2
Electricity main source of lighting	1.0	63.4	83.0	88.0	61.7
Toilet available with house	33.0	23.4	19.6	25.0	24.6
Owns wax cloth	80.0	69.1	84.3	76.0	78.3
Owns table	74.0	86.2	75.8	80.0	78.5
Owns radio/ tape recorder	50.0	51.1	58.2	46.0	52.1
Owns television	6.0	33.0	59.5	35.0	36.5
Owns smoking oven	22.0	31.9	36.6	37.0	32.4

Data are community-level percentages of sample households with each asset

Social Assets

Table 18. Types of Organizations, % of HH Members by Community

Organization	Community				All
	Akwidaa	Anlo Beach	Dixcove	New Town	
	%	%	%	%	**%**
N	*96*	*84*	*121*	*83*	*384*
Member of a group	96.0	89.4	79.1	83.0	85.9
Vocational group	4.0	1.1	3.3	4.0	3.1
Council / political group	1.0	7.4	1.3	0.0	2.2
Religious group	89.0	40.4	75.2	79.0	71.8
Community group	9.0	56.4	4.6	4.0	16.3
Other type of group	1.0	1.1	2.0	0.0	1.1

Data are community-level percentages of sample households that are a member of each group. Vocational group is a grouping of Fishermen's group, Fish processing group, Drivers union, Farmers group, and Business group. The category 'Other type of group' includes Women's group and Financial institute / micro-finance.

Financial Assets

Table 19. Loans and Savings, by Community

Financial assets		Community				All
		Akwidaa	Anlo Beach	Dixcove	New Town	
	N	100	94	153	100	447
Loans	%	22.0	23.4	37.3	23.0	27.7
	N	20	13	51	14	98
Mean value of loans	Mean	439.60	474.62	1139.31	246.50	780.80
	St.dev.	482.30	300.54	4329.45	270.36	3142.26
	Median	240	500	400	150	335
Savings	%	6.0	17.0	26.8	10.0	16.3
	N	6	14	41	10	71
Mean value of savings	Mean	766.67	1329.50	1954.15	2040.00	1742.72
	St.dev.	760.70	1276.15	2006.32	1517.45	1759.16
	Median	500	1000	1400	1650	1000

Loans and Savings are community-level percentages of sample households that have each type of financial asset.
Mean value of loans and savings is the mean value of the loans / savings of those that have this asset.

Vulnerability

Table 20. Most Common Shocks, % of HH by Community

Most Common Shocks	Community				
	Akwidaa	Anlo Beach	Dixcove	New Town	All
	%	%	%	%	**%**
Increase in food prices	75.0	48.9	83.0	83.0	74.0
Increase in input prices	66.0	35.1	62.7	64.0	57.9
Flooding	47.0	67.0	54.9	40.0	52.3
Other issues than green-green & adverse weather affecting fish availability	45.0	43.6	58.8	58.0	52.3
Destruction of housing	58.0	55.3	33.3	47.0	46.5
Drought	53.0	24.5	47.7	47.0	43.8
Adverse weather affecting fish availability	26.0	36.2	46.4	50.0	40.5
Pests or diseases that affected almost all crops before harvest	61.0	22.3	19.0	37.0	33.1
Green-green affecting fish catch	10.0	9.6	34.0	53.0	27.7
Experienced no shocks	1.0	7.4	2.0	0.0	2.5

Data are community-level percentages of sample households that have experienced each shock. Values indicated in red are the three highest for each community.

Table 21. Most Severe Shocks, % of HH, by Community

Most Severe Shocks	Community				
	Akwidaa	Anlo Beach	Dixcove	New Town	All
	%	%	%	%	**%**
Increase in food prices	28.0	14.9	47.1	53.0	37.4
Flooding	22.0	58.5	22.9	8.0	26.8
Destruction of housing	39.0	31.9	17.6	23.0	26.6
Other issues than green-green & adverse weather affecting fish availability	22.0	20.2	22.9	29.0	23.5
Death of adult members	27.0	16.0	16.3	20.0	19.5
Job loss by household member	20.0	6.4	20.3	25.0	18.3
Pests or diseases that affected almost all crops before harvest	22.0	5.3	2.0	7.0	8.3
Occurrence of green-green affecting fish catch	0.0	0.0	7.8	23.0	7.8

Data are community-level percentages of sample households that have experienced each shock and have indicated them among the three most severe shocks. Values indicated in red are the three highest for each community.

Table 22. Mean Loss from Adverse Events, by Community

Shocks	Community									
	Akwidaa		Anlo Beach		Dixcove		New Town		All	
	N	Cedi	N	Cedi	N	Cedi	N	Cedi	N	Cedi
Increase in food prices	28	189	11	93	68	461	51	1006	158	563
Flooding	21	527	50	1068	31	601	8	1191	110	842
Destruction of housing	39	1033	29	1203	26	1377	22	440	116	1040
Other issues affecting fish catch	18	417	16	326	34	343	28	208	96	314
Death of adult members	27	1907	13	1969	23	1068	20	5223	83	2483
Job loss by HH member	20	564	4	1500	30	2742	25	1162	79	1628
Pests or diseases (crops)	22	631	5	2190	3	369	7	1586	37	1001
Occurrence of green-green	0	N/A	0	N/A	12	5750	22	446	34	2318

Data are community-level percentages of sample households that have experienced each shock. Three highest mean losses for each community marked in red.

Table 23. Five Most Common Shocks, by Income Tercile by Community

Shocks		Per capita income tercile			
		I	II	III	All
		%	%	%	%
Akwidaa	Increase in food prices	60.0	87.1	80.6	75.8
	Increase in input prices	63.3	64.5	71.0	66.7
	Pests or diseases that affected crops before harvest	66.7	67.7	45.2	60.6
	Destruction of housing	56.7	58.1	58.1	58.6
	Flooding	33.3	51.6	61.3	47.5
Anlo Beach	Flooding	65.2	81.0	80.0	72.1
	Destruction of housing	47.8	61.9	68.0	59.3
	Increase in food prices	26.1	61.9	64.0	52.3
	Other issues than green-green & adverse weather affecting fish availability	17.4	52.4	56.0	46.5
	Adverse weather affecting fish availability	8.7	38.1	56.0	39.5
Dixcove	Increase in food prices	91.1	84.1	82.2	84.0
	Increase in input prices	53.3	61.4	77.8	63.3
	Other issues than green-green & adverse weather affecting fish availability	46.7	54.5	77.8	59.3
	Flooding	66.7	52.3	48.9	56.0
	Adverse weather affecting fish availability	37.8	45.5	62.2	47.3
New Town	Increase in food prices	75.8	80.0	93.8	83.0
	Increase in input prices	51.5	56.7	81.3	64.0
	Other issues than green-green & adverse weather affecting fish availability	54.5	46.7	71.9	58.0
	Occurrence of green-green affecting fish catch	57.6	43.3	56.3	53.0
	Adverse weather affecting fish availability	51.5	33.3	62.5	50.0
All	Increase in food prices	68.2	83.5	78.8	75.6
	Increase in input prices	50.0	56.7	70.5	59.3
	Flooding	49.2	55.1	57.6	53.6
	Other issues than green-green & adverse weather affecting fish availability	40.2	49.6	68.2	53.3
	Destruction of housing	50.0	55.1	37.1	47.6

Data are community-level percentages of sample households that have experienced each shock. Values marked in red have the highest occurrence among this sub-group.

Table 24. Coping Mechanisms, by Community

Coping Mechanisms	Community				
	Akwidaa	Anlo Beach	Dixcove	New Town	All
	Count	Count	Count	Count	Count
Work harder	73	46	114	75	308
Reduced consumption	34	18	31	28	111
Borrow from relative	26	13	27	18	84
Did nothing	17	15	33	13	78
Use savings	14	8	34	15	71
Borrow from moneylender	21	3	19	15	58
Borrow from non-relatives	9	11	13	10	43

Data are number of sample households that have used each coping mechanism. Values in red are those used most frequently in each sub-group (top 3).

Table 25. Five Most Common Coping Mechanisms, by Income Tercile by Community

	Coping Mechanisms	Per capita income tercile			
		I	II	III	All
		%	%	%	%
Akwidaa	Work harder	50.0	77.4	90.3	73.7
	Reduced consumption	26.7	29.0	48.4	34.3
	Borrow from relative	20.0	16.1	45.2	26.3
	Borrow from moneylender	26.7	25.8	9.7	21.2
	Did nothing	16.7	25.8	12.9	17.2
Anlo Beach	Work harder	52.2	33.3	56.0	53.5
	Reduced consumption	4.3	4.8	44.0	20.9
	Did nothing	17.4	23.8	20.0	17.4
	Borrow from relative	21.7	9.5	16.0	15.1
	Borrow from non-relatives	13.0	9.5	12.0	12.8
Dixcove	Work harder	82.2	61.4	84.4	76.0
	Use savings	20.0	25.0	20.0	22.7
	Did nothing	37.8	18.2	11.1	22.0
	Reduced consumption	17.8	15.9	31.1	20.7
	Borrow from relative	11.1	11.4	31.1	18.0
New Town	Work harder	60.6	70.0	90.6	75.0
	Reduced consumption	12.1	16.7	56.3	28.0
	Borrow from relative	21.2	0.0	31.3	18.0
	Use savings	0.0	16.7	31.3	15.0
	Borrow from moneylender	30.3	10.0	3.1	15.0
All	Work harder	63.6	64.6	81.1	70.8
	Reduced consumption	15.9	18.9	42.4	25.5
	Borrow from relative	16.7	11.0	31.1	19.3
	Did nothing	22.0	23.6	11.4	17.9
	Use savings	6.1	20.5	19.7	16.3

Data are community-level percentages of sample households that have experienced each shock. Values in red are those used most frequently in each sub-group (top 3).

Nutrition

Table 26. Food Consumption and Shortage, by Community

Human Asset		Community				
		Akwida	Anlo Beach	Dixcove	New Town	All
	N	*100*	*94*	*153*	*100*	*447*
Mean number of meals per day	Mean	2.56	2.66	2.77	2.69	2.68
	St.dev.	0.52	0.48	0.47	0.58	0.51
	Median	3.00	3.00	3.00	3.00	3.00
Mean number of snacks per day	Mean	0.34	0.62	0.73	0.37	0.54
	St.dev.	0.68	0.91	1.00	0.80	0.89
	Median	0.00	0.00	0.00	0.00	0.00
Mean number of meals with fish in last 7 days	Mean	15.27	14.71	15.42	14.75	15.09
	St.dev.	4.01	4.01	4.67	5.08	4.50
	Median	14.00	14.00	14.00	14.00	14.00
Mean number of meals with meat in last 7 days	Mean	0.47	0.92	0.39	0.66	0.58
	St.dev.	1.74	1.47	1.54	1.86	1.66
	Median	0.00	0.00	0.00	0.00	0.00
Mean number of meals with chicken/poultry in last 7 days	Mean	0.61	0.93	0.62	0.77	0.71
	St.dev.	1.98	1.64	2.28	2.12	2.06
	Median	0.00	0.00	0.00	0.00	0.00
Mean number of meals without animal proteins in last 7 days	Mean	1.49	2.48	2.72	2.89	2.43
	St.dev.	2.74	3.24	3.32	4.48	3.51
	Median	0.00	0.00	0.00	0.00	0.00
Mean number of days HH had insufficient food in last 30 days because could not afford it	Mean	3.03	1.95	2.60	5.14	3.14
	St.dev.	5.38	4.98	4.60	4.96	5.06
	Median	0.00	0.00	0.00	4.00	0.00
HHs that had insufficient food in last year because could not afford it	%	51.0	37.0	51.0	80.0	54.6
Mean frequency HH had insufficient food in last year because could not afford it	N	51	34	78	80	243
	Mean	1.57	1.53	1.33	1.48	1.46
	St.dev.	0.94	0.99	0.80	0.86	0.88
	Median	1.00	1.00	1.00	1.00	1.00
HHs that had adult skip meals in last year because could not afford to buy enough food	%	30.0	19.6	38.6	62.0	38.0
Mean frequency of adult skipping meals	N	30	18	59	62	169
	Mean	1.83	2.11	1.54	2.05	1.84
	St.dev.	1.02	0.83	0.84	0.88	0.91
	Median	1.00	2.00	1.00	2.00	2.00
HH that are unable to afford fish at certain times of year	%	58.0	34.8	47.7	79.0	54.4

Data are community-level averages

Mean frequency HH had insufficient food in last 30 days has a range between (with 1 least frequent and 4 most frequent) and is the mean for those that indicated they had insufficient food only

Mean frequency of skipping meals has a range between (with 1 least frequent and 4 most frequent) and is the mean for those that indicated they had insufficient food only

Table 27. Sources of Fish and Fish and Food Shortage, by Community

Community	Most common sources of fish (% of HH)	Most common times of the year households do not eat fish (% of HH)	Most common times of year with food shortage
Akwidaa	Bought from fisherman (43.0%) Caught by HH member (23.0%) Bought from fish monger (23.0%)	June (24.4%) July (22.2%) May (16.7%)	June (22.0%) July (19.0%) May (13.0%)
Anlo Beach	Bought from fisherman (52.1%) Caught by HH member (40.2%)	June (28.1%) July (22.8%) May (19.3%)	June (14.9%) July (11.7%) May (7.4%)
Dixcove	Caught by HH member (34.6%) Bought from fisherman (32.0%)	March (15.5%) June (15.5%) February (14.7%) July (12.9%)	March (11.1%) June (9.2%) July (8.5%) May (7.2%)
New Town	Bought from fisherman (41.4%) Bought from fish trader (24.2%)	April (34.7%) March (19.0%) May (12.9%)	April (50.0%) March (23.0%) May (21.0%)
All	Bought from fisherman (40.8%) Caught by HH member (29.5%)	June (15.9%) April (15.6%) May (14.1%) March (13.4%)	April (14.3%) June (14.1%) May (11.6%) July (11.0%)

Figure 1. Most Common Months of the Year HHs Do Not Eat Fish or Have Food Shortage, by Community

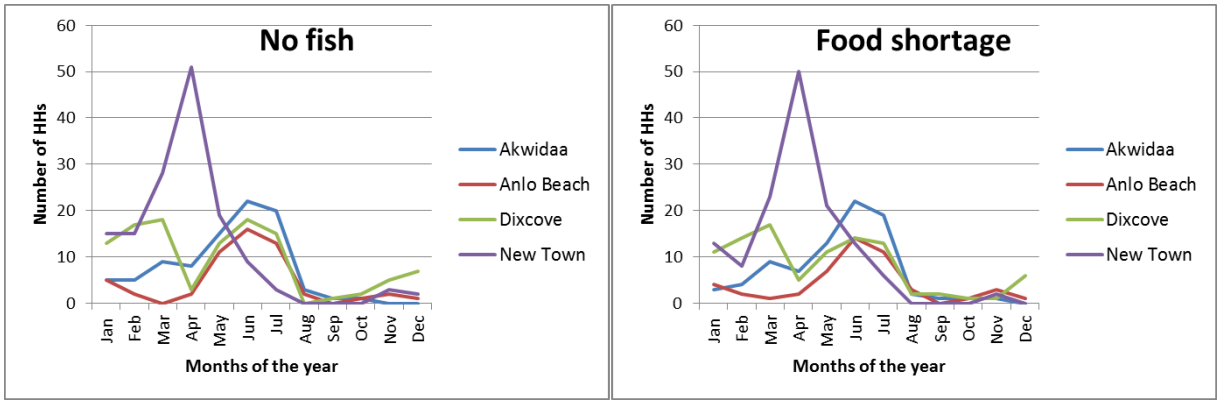


Table 28. Top 5 of Most Common Fish Species Consumed, by Community

Fish Species	Community									
	Akwidaa		Anlo Beach		Dixcove		New Town		All	
	7d	Year	7d	Year	7d	Year	7d	Year	7d	Year
Tunas	0.98	0.97	0.13	0.19	0.90	0.95	0.20	0.33	0.75	0.88
Sardines & related fish	0.11	0.35	0.34	0.38	0.13	0.39	0.38	0.71	0.24	0.46
Tilapias	0.00	0.00	0.39	0.40	0.00	0.00	0.52	0.49	0.20	0.20
Shrimp	0.02	0.02	0.56	0.65	0.01	0.04	0.00	0.06	0.13	0.17
Large hairtail	0.02	0.05	0.49	0.51	0.00	0.00	0.00	0.01	0.11	0.12
Cassava fish	0.02	0.07	0.30	0.27	0.03	0.04	0.05	0.06	0.09	0.10
Threadfin	0.08	0.10	0.00	0.00	0.07	0.10	0.17	0.21	0.08	0.10
Anchovy	0.02	0.04	0.22	0.24	0.01	0.01	0.07	0.27	0.07	0.12
Barracuda	0.10	0.17	0.04	0.02	0.01	0.06	0.13	0.17	0.06	0.10
Crabs	0.04	0.04	0.17	0.11	0.00	0.00	0.04	0.02	0.05	0.04
Swordfish/Sailfish	0.00	0.00	0.01	0.01	0.12	0.23	0.01	0.02	0.04	0.09
Grunts/Burritos	0.01	0.01	0.02	0.00	0.00	0.01	0.16	0.17	0.04	0.04
Mackerel	0.02	0.08	0.03	0.09	0.04	0.12	0.04	0.04	0.03	0.09
Sea breams	0.00	0.00	0.00	0.00	0.06	0.09	0.00	0.00	0.02	0.03

Data are shares of sample households that most commonly consume this type of fish in the last 7 days and throughout the year. Values in red are the top 5 of most commonly consumed species for each sub-group

Livelihoods activities

Primary and Secondary Occupations

Table 29. Primary and Secondary Occupations of HH Members, by Gender and Community (%)

	Akwidaa			Anlo Beach			Dixcove			New Town			All		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Farming	28	36	33	25	12	18	6	7	6	14	11	12	17	16	17
Livestock rearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fishing	12	1	6	29	1	13	25	0	11	10	0	4	20	1	9
Fish trading	0	0	0	2	1	1	0	4	2	0	2	1	0	2	1
Fish processing	1	7	4	0	21	12	1	23	13	0	16	10	0	17	10
Formal employment	3	2	2	8	3	5	4	3	3	8	3	5	5	3	4
Casual employment	6	2	3	12	10	11	14	6	9	8	2	4	10	5	7
Small business/ petty trading	7	19	14	8	22	16	6	24	16	10	25	18	8	22	16
Other	9	3	5	3	2	3	6	3	4	4	2	3	6	3	4
Student	36	25	30	26	28	27	34	23	28	41	30	35	34	26	30
Unemployed	7	14	11	6	10	8	11	16	13	9	16	13	8	14	12
Underage	2	3	2	2	0	1	1	0	0	0	1	1	1	1	1
Retired	3	2	2	1	3	2	1	1	1	2	1	2	2	2	2
Disabled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Data are the percentage of men and women that have indicated this as their primary or secondary occupation. This includes all resident adults, children and those going to school. Marked in red is top 3 by sub-group (excluding student, unemployed, retired, underage and disabled categories). Note that women make up 66% of the total sample.

Agriculture

Table 30. Land Ownership and Main Crops Grown, by Community

Crops	Community				All
	Akwidaa	Anlo Beach	Dixcove	New Town	
	%	%	%	%	**%**
Cassava	62.6	52.1	9.2	27.0	34.1
Oil palm	32.3	2.1	9.8	5.0	12.1
Maize	8.1	39.4	2.0	2.0	11.2
Coconut	7.1	5.3	1.3	15.0	6.5
Plantain	8.1	4.3	2.6	4.0	4.5
Pepper	14.1	0.0	1.3	0.0	3.6
Other crops	36.4	3.2	5.2	6.0	11.9
Left all land fallow	4.0	1.1	2.6	2.0	2.5
Not growing crops	15.2	39.4	79.7	60.0	52.5
Area size (ha)	1.25	0.51	0.29	0.45	0.76

Data shown are percentage of households that grow this type of crop. "Left all land fallow" indicates the percentage of households that normally do agriculture (and have land available) but have left the land fallow in the last 12 months. Values in red are the top 3 of most commonly grown crops for each sub-group. Percentages do not add up to 100% because households may grow more than one type of crop. Area size is the size of area owned calculated only for those households owning land.

Animal Products

Table 31. Producing Animal Products for Home Consumption or Sale

Animal Products	Community				All
	Akwidaa	Anlo Beach	Dixcove	New Town	
	%	%	%	%	**%**
Eggs	13.0	14.9	7.8	5.0	9.8
Meat	1.0	13.8	4.6	7.0	6.3
Selling animal products	3.0	2.1	5.9	0.0	3.1
Animal products used for home consumption (% of total product)	87.1(14)	89.0(20)	60.9(16)	89.9(9)	81.1(59)
No use of animal products	33.0	48.9	28.1	22.0	32.2
No livestock	53.0	27.7	60.8	69.0	53.9

Share of animal product used for home consumption is the mean for those households that have indicated they use livestock products (N). Percentages do not add up to 100% because some households use both eggs and meat.

Fishing

Table 32. Fishing Calendar, by Community

	Activity	Month of the year											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Akwidaa	Fishing	1.76	1.85	1.34	1.22	0.98	0.84	1.14	2.50	2.49	2.02	1.93	1.98
	Fish processing	1.75	1.85	1.35	1.24	1.01	0.87	1.16	2.48	2.52	2.05	1.92	1.94
	Casual labour	1.75	1.82	1.31	1.25	1.00	0.90	1.18	2.48	2.44	1.98	1.87	1.90
	Equipment making	2.08	1.99	2.33	2.44	2.56	2.49	2.37	1.54	1.48	1.85	1.90	1.84
	Average	**1.83**	**1.87**	**1.57**	**1.52**	**1.37**	**1.26**	**1.45**	**2.26**	**2.24**	**1.98**	**1.90**	**1.92**
Anlo Beach	Fishing	1.61	1.51	1.32	1.23	0.96	1.03	1.18	2.30	2.46	2.46	2.48	2.41
	Fish processing	1.60	1.52	1.29	1.20	0.95	1.06	1.25	2.23	2.42	2.42	2.49	2.43
	Casual labour	1.59	1.43	1.25	1.19	0.97	1.06	1.25	2.17	2.36	2.35	2.45	2.30
	Equipment making	2.31	2.46	2.45	2.40	2.40	2.23	2.18	1.82	1.85	1.75	1.82	1.92
	Average	**1.75**	**1.70**	**1.53**	**1.46**	**1.26**	**1.30**	**1.43**	**2.15**	**2.30**	**2.27**	**2.34**	**2.29**
Dixcove	Fishing	1.67	1.52	1.49	1.44	1.41	1.38	1.76	2.97	2.74	2.20	1.90	1.82
	Fish processing	1.66	1.53	1.48	1.48	1.45	1.42	1.73	2.94	2.74	2.19	1.87	1.80
	Casual labour	1.59	1.44	1.43	1.53	1.51	1.52	1.72	2.84	2.66	2.12	1.77	1.71
	Equipment making	1.93	2.02	2.05	2.09	2.14	2.19	2.29	1.35	1.39	1.58	1.97	1.99
	Average	**1.70**	**1.61**	**1.60**	**1.61**	**1.61**	**1.60**	**1.86**	**2.57**	**2.42**	**2.04**	**1.88**	**1.82**
New Town	Fishing	1.15	1.10	0.99	0.81	1.10	1.50	1.95	2.94	2.38	1.96	1.63	1.61
	Fish processing	1.12	1.03	0.97	0.80	1.02	1.45	1.91	2.86	2.33	1.94	1.61	1.60
	Casual labour	1.13	1.08	1.03	0.87	1.15	1.61	1.93	2.76	2.13	1.72	1.40	1.40
	Equipment making	1.83	1.78	1.76	1.85	1.82	1.95	1.82	1.28	1.33	1.45	1.77	1.77
	Average	**1.29**	**1.23**	**1.17**	**1.05**	**1.25**	**1.62**	**1.91**	**2.51**	**2.07**	**1.78**	**1.60**	**1.59**
All	Fishing	1.55	1.49	1.31	1.20	1.15	1.22	1.55	2.72	2.54	2.16	1.96	1.93
	Fish processing	1.54	1.47	1.29	1.21	1.15	1.24	1.55	2.67	2.53	2.15	1.95	1.91
	Casual labour	1.51	1.43	1.27	1.24	1.21	1.32	1.57	2.61	2.42	2.03	1.83	1.79
	Equipment making	2.01	2.04	2.12	2.17	2.21	2.21	2.17	1.47	1.48	1.65	1.88	1.89
	Average	**1.64**	**1.59**	**1.48**	**1.43**	**1.40**	**1.47**	**1.69**	**2.40**	**2.27**	**2.01**	**1.91**	**1.88**

Values are means of perceptions of fishing activities intensity in the community. The scale ranges from 0 (no activity) to 3 (highest activity). Values indicated in red is where mean intensity is high (>2) and in blue where intensity is medium (1.5-2)

Figure 2. Fishing calendar, by Community

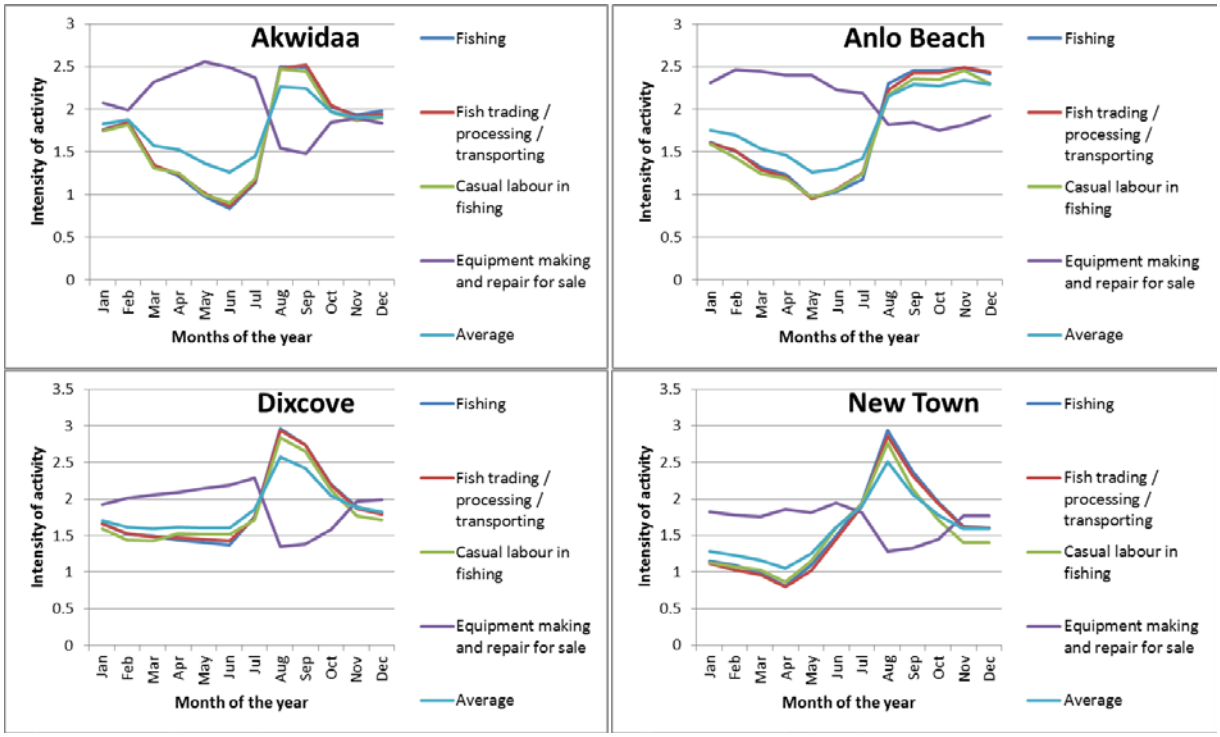
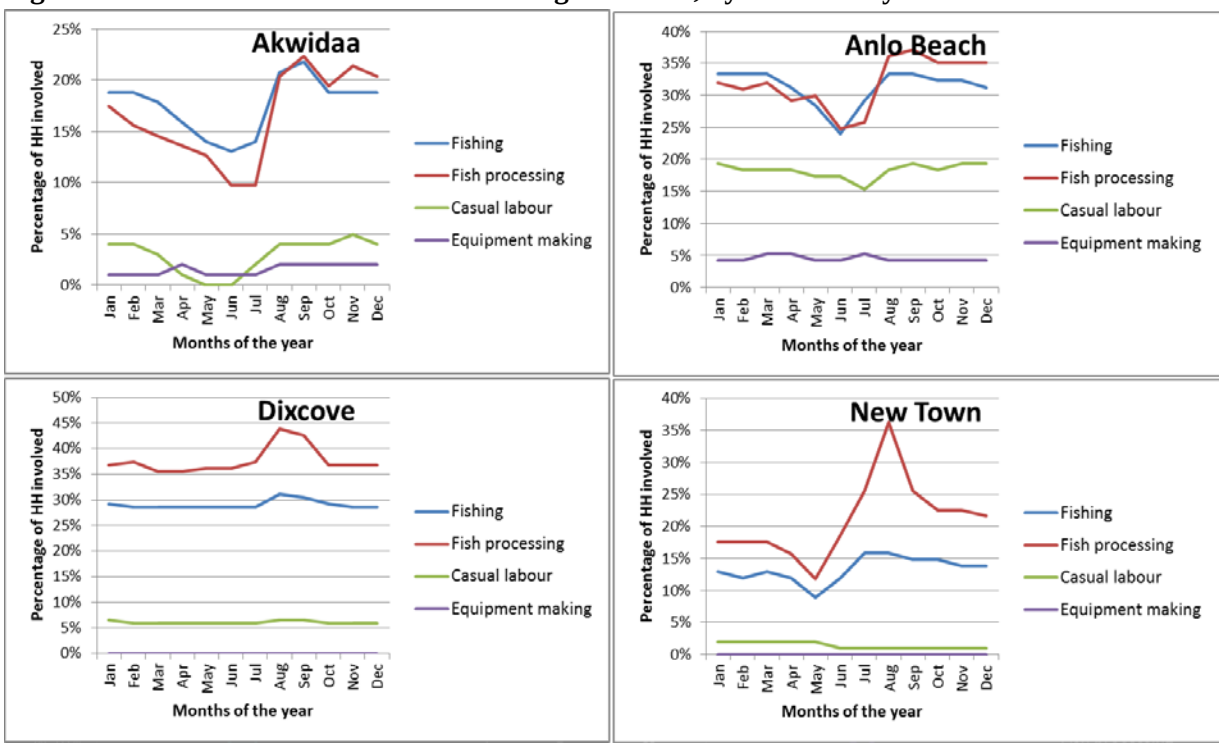


Table 33. Calendar of Involvement in Fishing Activities, by Community

	Activity	Month of the year (% HH involved)												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Tot
Akwidaa	Fishing	18.8	18.8	17.8	15.8	14.0	13.0	14.0	20.8	21.8	18.8	18.8	18.8	21.8
	Fish processing	18.0	16.0	15.0	14.0	13.0	10.0	10.0	21.0	23.0	20.0	22.0	21.0	24.0
	Casual labour	4.0	4.0	3.0	1.0	0.0	0.0	2.0	4.0	4.0	4.0	5.0	4.0	5.0
	Equipment making	1.0	1.0	1.0	2.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0
	All	27.0	26.0	24.0	22.0	16.2	14.1	16.2	30.0	33.0	29.0	31.0	29.0	35.0
Anlo Beach	Fishing	32.6	32.6	32.6	30.5	27.7	23.2	28.4	32.6	32.6	31.6	31.6	30.5	33.7
	Fish processing	32.6	31.6	32.6	29.8	30.5	25.3	26.3	36.8	37.9	35.8	35.8	35.8	38.9
	Casual labour	20.0	18.9	18.9	18.9	17.9	17.9	15.8	18.9	20.0	18.9	20.0	20.0	20.0
	Equipment making	4.2	4.2	5.3	5.3	4.2	4.2	5.3	4.2	4.2	4.2	4.2	4.2	5.3
	All	56.4	55.3	56.4	53.2	54.3	46.8	47.9	60.6	62.8	59.6	59.6	58.5	63.8
Dixcove	Fishing	29.4	28.8	28.8	28.8	28.8	28.8	28.8	31.4	30.7	29.4	28.8	28.8	32.0
	Fish processing	37.3	37.9	35.9	35.9	36.6	36.6	37.9	44.4	43.1	37.3	37.3	37.3	45.1
	Casual labour	6.6	5.9	5.9	5.9	5.9	5.9	5.9	6.6	6.6	5.9	5.9	5.9	6.6
	Equipment making	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	49.3	50.0	48.0	48.0	48.7	48.7	50.7	57.9	55.9	50.0	49.3	49.3	58.6
New Town	Fishing	12.9	11.9	12.9	11.9	8.9	11.9	15.8	15.8	14.9	14.9	13.9	13.9	15.8
	Fish processing	17.8	17.8	17.8	15.8	11.9	18.8	25.7	36.6	25.7	22.8	22.8	21.8	36.6
	Casual labour	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
	Equipment making	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All	22.0	21.0	22.0	19.0	15.0	24.0	30.0	40.0	28.0	26.0	25.0	24.0	39.4
All	Fishing	24.0	23.6	23.6	22.4	20.8	20.3	22.5	25.8	25.6	24.2	23.8	23.6	26.4
	Fish processing	27.6	27.2	26.5	25.2	24.5	24.3	26.5	35.9	33.6	29.8	30.3	29.8	37.2
	Casual labour	7.8	7.4	7.1	6.7	6.3	6.0	6.0	7.4	7.6	7.1	7.6	7.4	8.0
	Equipment making	1.1	1.1	1.3	1.6	1.1	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.6
	All	39.7	39.2	38.6	36.8	35.1	35.1	37.8	48.2	46.0	41.9	41.9	41.0	50.1

Data are the percentage of households involved in each activity in each month. The column "Tot" indicates the percentage of households that at any time in the year is involved in this activity. Values indicated in values in blue are 20% and higher and those in red are 40% and higher.

Figure 3. Calendar of Involvement in Fishing Activities, by Community



Other Income

Table 34. Other Sources of Income, by Community

Income Source	Community				
	Akwidaa	Anlo Beach	Dixcove	New Town	All
	Count	Count	Count	Count	Count
Hawking, petty trading	18	12	45	41	116
Small-scale business	18	18	36	21	93
Casual work	11	20	21	8	60
Formal employment	9	13	7	8	37
Contribution from husband (not in HH)	4	9	2	1	16
Gifts from children / relatives	2	3	4	1	10
Gifts from non-relatives	2	1	0	0	3
Pension / Social security (SSNIT)	0	1	1	0	2
Large scale business (owner)	1	0	0	0	1
Leasing out land, boats/ other property	1	0	0	0	1
Hunting	1	0	0	0	1

Data are the counts of households that earn an income from each other income source. Note: Small-scale business includes mining, electrician, mechanic, tailor etc.

Constructing Livelihoods

Subsistence

Table 35. Output Share Selected Crops and Livestock Consumed at Home, by Community

Product		Community				
		Akwidaa	Anlo Beach	Dixcove	New Town	All
		%	%	%	%	%
Fish	N	23	31	50	16	120
	Mean	14.8	35.7	23.0	38.5	26.8
	St.dev.	15.3	30.7	26.6	34.6	28.2
	Median	13.7	27.0	10.1	32.1	19.7
Animal product	N	14	22	17	8	61
	Mean	94.7	93.3	82.9	75.0	88.3
	St.dev.	19.9	22.8	24.0	30.1	24.0
	Median	100.0	100.0	100.0	80.5	100.0
Crops	N	70	52	22	33	177
	Mean	29.7	58.4	19.1	41.1	38.9
	St.dev.	38.3	43.2	35.3	46.5	43.1
	Median	2.5	78.2	0.0	11.6	14.3

Based on imputed values. Mean and median proportions apply only to households producing each output listed.

Table 36. Share of Own Consumption in Total Income by Income Tercile, by Community

		Per capita income tercile			
		I	II	III	All
		%	%	%	%
Akwidaa	Fish	0.0	8.2	13.3	8.6
	Animal Product	22.0	2.1	0.0	5.1
	Crops	18.1	18.1	3.6	12.4
	All subsistence	40.1	28.3	17.4	26.3
Anlo Beach	Fish	0.0	11.0	26.9	17.7
	Animal Product	5.8	5.7	0.1	3.4
	Crops	36.8	17.8	2.1	15.8
	All subsistence	42.7	34.5	29.2	36.9
Dixcove	Fish	11.1	12.2	4.0	8.6
	Animal Product	7.3	1.0	0.1	1.8
	Crops	1.2	2.4	0.0	1.1
	All subsistence	19.6	15.5	4.1	11.5
New Town	Fish	0.0	9.7	16.8	10.9
	Animal Product	0.0	0.1	0.1	0.1
	Crops	47.0	16.5	0.7	15.5
	All subsistence	47.0	26.6	17.6	26.6
All	Fish	1.3	10.7	14.7	11.1
	Animal Product	7.6	2.5	0.1	2.5
	Crops	27.7	9.7	1.4	10.0
	All subsistence	36.7	22.8	16.3	23.7

Total net value of household subsistence as proportion of total net household income excluding fish processing. Data summed across all sample households

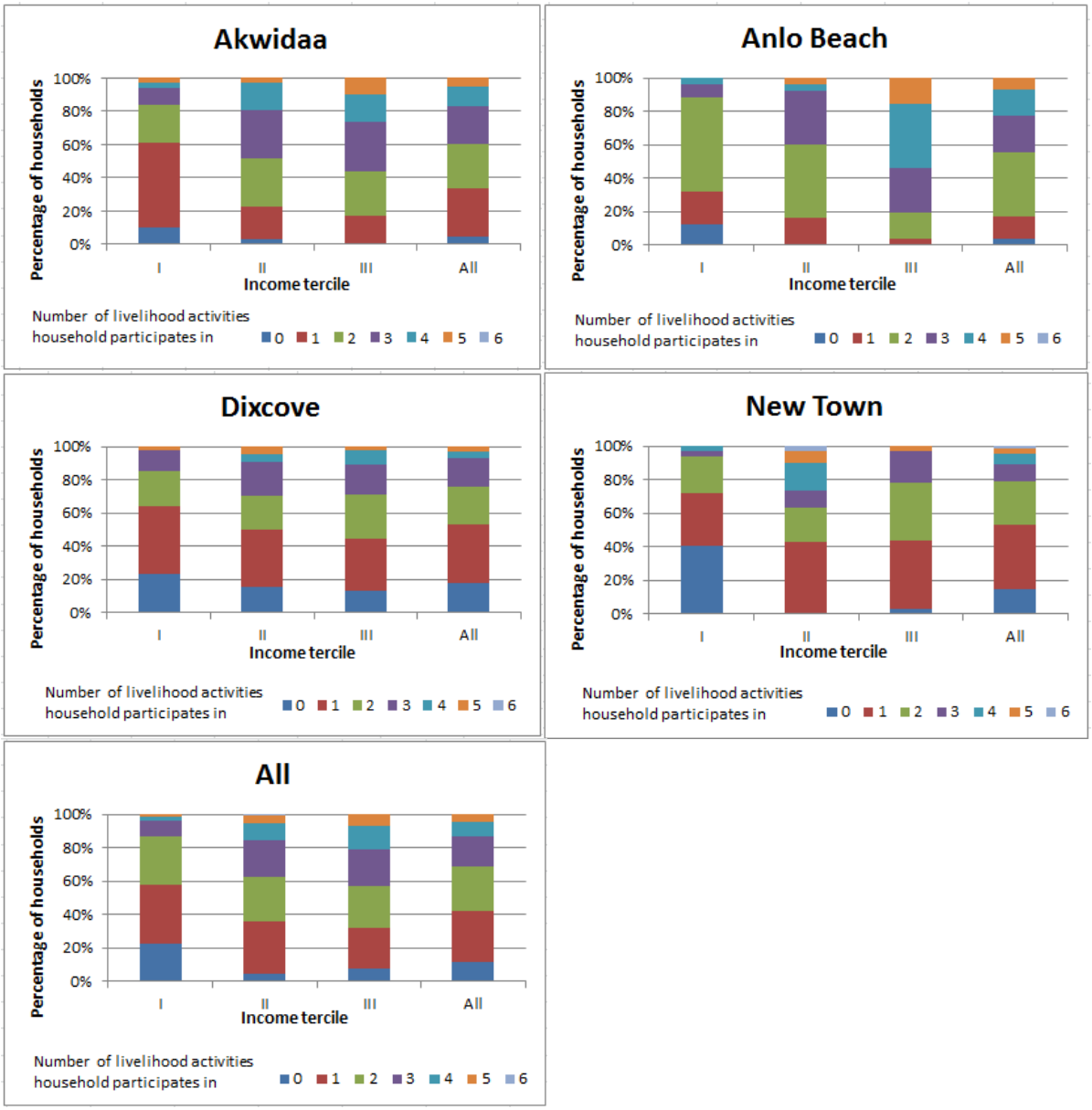
Livelihood Activities

Table 37. Number of Livelihood Activities per Household by Income Tercile, by Community

	Total no. of activities	Per capita income tercile			
		I	II	III	All
		%	%	%	%
Akwidaa	0	9.7	3.2	0.0	4.4
	1	51.6	19.4	16.7	29.4
	2	22.6	29.0	26.7	26.1
	3	9.7	29.0	30.0	22.8
	4	3.2	16.1	16.7	12.0
	5	3.2	3.2	10.0	5.4
	6	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0
Anlo Beach	0	12.0	0.0	0.0	4.0
	1	20.0	16.0	3.9	13.2
	2	56.0	44.0	15.4	38.2
	3	8.0	32.0	26.9	22.4
	4	4.0	4.0	38.5	15.8
	5	0.0	4.0	15.4	6.6
	6	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0
Dixcove	0	23.4	15.9	13.3	17.7
	1	40.4	34.1	31.1	35.3
	2	21.3	20.5	26.7	22.8
	3	12.8	20.9	17.4	16.9
	4	0.0	4.6	8.9	4.4
	5	2.1	4.6	2.2	2.9
	6	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0
New Town	0	40.6	0.0	3.1	14.9
	1	31.3	43.3	40.6	38.3
	2	21.9	20.0	34.4	25.5
	3	3.1	10.0	18.8	10.6
	4	3.1	16.7	0.0	6.4
	5	0.0	6.7	3.1	3.2
	6	0.0	3.3	0.0	1.1
	Total	100.0	100.0	100.0	100.0
All	0	22.2	4.6	7.6	11.5
	1	35.6	31.1	24.3	30.3
	2	28.9	27.3	25.0	27.1
	3	9.6	22.0	22.0	17.8
	4	2.2	9.9	14.4	8.8
	5	1.5	4.6	6.8	4.3
	6	0.0	0.8	0.0	0.3
	Total	100.0	100.0	100.0	100.0

Data are percentages of sample households. On basis of: crop growing, livestock keeping, animal products, fishing, fishing related, financing of fishing, petty trading, small business (carpentry, masonry, tailoring, hairdresser etc.), formal employment, casual work, large business, leasing out of property, all counted as 1 if anyone in the household participates.

Figure 4. Number of Livelihood Activities per Household by Income Tercile, by Community



Income Portfolios and Per Capita Incomes

Table 38. Income Portfolios by Income Tercile, by Community

	Activity	Per capita income tercile I	II	III	All
Akwidaa	Crops	53.3	42.1	5.0	29.4
	Livestock	20.0	6.2	0.1	6.4
	Fishing	0.0	8.2	44.9	21.4
	Fishing Related	0.0	5.9	0.0	2.4
	Non-farm	20.0	29.7	49.6	35.8
	Transfers	6.7	7.9	0.4	4.6
	Total	100.0	100.0	100.0	100.0
	Total income (Ghana Cedi)	*103.7*	*1642.0*	*15292.8*	*5679.5*
Anlo Beach	Crops	25.2	30.4	2.8	17.5
	Livestock	27.8	7.2	0.5	9.4
	Fishing	0.0	9.2	43.7	24.8
	Fishing Related	0.9	9.2	4.5	4.9
	Non-farm	23.9	27.1	45.3	30.9
	Transfers	22.2	17.0	3.2	12.6
	Total	100.0	100.0	100.0	100.0
	Total income (Ghana Cedi)	*202.6*	*2413.6*	*11358.2*	*5305.8*
Dixcove	Crops	8.1	2.3	0.1	2.5
	Livestock	22.6	2.6	0.2	5.5
	Fishing	16.7	33.5	35.9	31.1
	Fishing Related	0.0	3.3	1.9	2.9
	Non-farm	48.2	55.7	59.2	54.2
	Transfers	4.3	2.5	2.8	3.8
	Total	100.0	100.0	100.0	100.0
	Total income (Ghana Cedi)	*247.9*	*2579.3*	*12747.8*	*5052.2*
New Town	Crops	35.7	26.9	1.4	17.8
	Livestock	7.1	2.1	0.0	2.1
	Fishing	0.0	3.2	29.8	13.8
	Fishing Related	0.0	2.2	0.2	1.0
	Non-farm	42.9	64.4	68.7	62.2
	Transfers	14.3	1.1	0.0	3.1
	Total	100.0	100.0	100.0	100.0
	Total income (Ghana Cedi)	*105.8*	*1415.7*	*9570.1*	*3668.8*
All	Crops	35.0	18.8	2.0	15.2
	Livestock	19.2	4.7	0.2	5.8
	Fishing	1.3	17.7	39.1	23.7
	Fishing Related	0.2	4.6	1.7	2.8
	Non-farm	32.9	48.1	55.3	46.8
	Transfers	11.4	6.2	1.7	5.7
	Total	100.0	100.0	100.0	100.0
	Total income (Ghana Cedi)	*155.9*	*2042.4*	*12429.2*	*4921.3*

Percentage data refer to total incomes summed across all sample household. Data exclude fish processing income.

Table 39. Mean Annual Household Income by Income Tercile, by Community (Ghana Cedi)

Community		Per capita income tercile			
		I	II	III	All
Akwidaa	N	31	31	31	93
	Mean	103.73	1642.04	15292.76	5679.51
	St.dev.	234.20	1653.86	14246.99	10686.72
	Median	0.00	806.40	10558.00	933.75
Anlo Beach	N	25	25	26	81
	Mean	202.63	2413.60	11358.23	5305.78
	St.dev.	406.33	2003.39	7500.54	6995.82
	Median	60.00	1596.48	9220.55	2406.00
Dixcove	N	47	44	46	142
	Mean	247.86	2579.35	12747.78	5052.21
	St.dev.	393.45	2518.75	10343.14	8103.69
	Median	0.00	2128.50	9102.00	1839.00
New Town	N	33	30	32	96
	Mean	105.84	1415.74	9570.12	3668.84
	St.dev.	235.26	1149.83	9205.65	6779.43
	Median	0.00	1118.67	6873.57	1087.20
All	N	136	132	134	412
	Mean	155.95	2042.43	12429.15	4921.32
	St.dev.	297.90	1958.59	10719.23	8293.06
	Median	5.00	1418.00	8996.10	1482.00

Table 40. Mean Annual Per Capita Income by Income Tercile, by Community (Ghana Cedi)

Community		Per capita income tercile			
		I	II	III	All
Akwidaa	N	31	31	31	93
	Mean	13.70	245.19	3043.83	1100.91
	St.dev.	25.80	186.15	3081.49	2241.64
	Median	0.00	186.75	1845.00	186.75
Anlo Beach	N	25	25	26	81
	Mean	29.24	427.38	2751.38	1417.98
	St.dev.	25.44	215.58	2447.92	3020.80
	Median	34.29	481.20	2004.90	573.61
Dixcove	N	47	44	46	142
	Mean	39.39	437.37	3058.72	1155.38
	St.dev.	61.62	200.80	3369.61	2331.19
	Median	0.00	395.00	2136.69	381.75
New Town	N	33	30	32	96
	Mean	14.57	210.92	2702.75	971.84
	St.dev.	30.45	120.96	3316.35	2261.40
	Median	0.00	188.06	1688.00	156.75
All	N	136	132	134	412
	Mean	21.52	345.88	2929.67	1151.95
	St.dev.	35.68	227.47	3106.10	2443.26
	Median	1.00	317.56	1934.47	314.78

Livelihoods identity

Table 41. Willingness to Change Primary Occupation by Income Tercile, by Community

		Per capita income tercile			
		I	II	III	All
		%	%	%	%
Akwidaa	Willingness to learn a new LLH activity	80.6	64.5	74.2	74.0
	Change of occupation if HH won lottery	50.0	45.2	45.2	49.5
Anlo Beach	Willingness to learn a new LLH activity	84.0	80.0	76.9	79.8
	Change of occupation if HH won lottery	64.0	41.7	61.5	54.8
Dixcove	Willingness to learn a new LLH activity	66.0	59.1	80.4	69.3
	Change of occupation if HH won lottery	60.9	56.8	56.5	57.2
New Town	Willingness to learn a new LLH activity	57.6	76.7	81.3	72.0
	Change of occupation if HH won lottery	46.9	50.0	59.4	51.5
All	Willingness to learn a new LLH activity	69.1	71.2	77.6	73.2
	Change of occupation if HH won lottery	56.4	51.1	53.0	53.7

Data are percentage of households that said yes

Table 42. Reasons for Willingness or Unwillingness to Learn a New Occupation

NO	**YES**
• Too old or weak to learn a new livelihood • Would not want to change livelihood completely but add an activity • Need to take care of children • Don't know what else to do / There is no other work available • No time • Already invested in learning present livelihood • Don't want to learn a new job • Going for education • Already have several occupations • Have done this work all my life • I like my present occupation • I don't have enough money to think about other livelihood • This is the only thing I know how to do	• Current occupation no longer profitable • Current occupation not earning enough • Don't like present occupation • Fish is seasonal • Health consequences of present job • Hope for constant salary • Hope for more money • In need of money • Not enough fish • Not enough income from present occupation • Would like permanent / stable job • Present occupation is difficult • Present occupation is labour intensive • Would like to start own business / be own boss • Am suffering • Am tired of present job • To help my family • To help myself • To improve my life • To support present occupation • Am too capital dependent • Am too weak for present occupation • Am presently unemployed • Want to be good at my job • Would like to do a specific other job (e.g. hairdressing, catering) • Would like to acquire a trade • Would want to be educated

Table 43. Count of Occupations to Change to, Specified, by Gender of Respondent

Activity		Gender of respondent		All
		Male	Female	Total
Farming / fishing related	Aquaculture	0	1	1
	Farming	0	3	3
	Fish mongering / processing	3	7	10
	Fishing / watsa fishing	2	0	2
	Rearing of livestock	2	1	3
Formal employment	Accounting	1	0	1
	Criminal Investigation Department (CID)	1	0	1
	Fire service personnel	0	1	1
	Company worker	3	2	5
	Nursing	0	2	2
	Oil and gas company work	1	1	2
	Radio presenter	1	0	1
	Rubber planting	1	0	1
	School feeding program	1	0	1
	Security-man (Watchman)	1	0	1
	Seller of premix	0	1	1
	Teaching	1	0	1
	Waitress (at the resorts nearby)	0	1	1
	Zoil	4	6	10
Self-employment (Business)	(Petty) trading / provision store	8	46	54
	Bakery (bread / cake / pastry)	0	16	16
	Boat Driving	1	0	1
	Bulldozer operator	1	0	1
	Carpentry	23	3	26
	Catering	1	7	8
	Coconut oil producer	0	1	1
	Cold store keeper	1	0	1
	Computer related work	1	1	2
	Construction	3	0	3
	Decoration	0	1	1
	Doctor	1	0	1
	Drinking bar or chop bar	1	0	1
	Driver (car/taxi)	17	4	21
	Driver of heavy duty vehicle	3	2	5
	Drug store operation	1	0	1
	Electrician	8	6	14
	Fitter	3	1	4
	Food vendor	0	4	4
	Hairdressing	13	63	76
	Masonry	18	5	23
	Mechanic	17	5	22
	Operation of a grinding mill	1	0	1
	Perfume making	0	1	1
	Shoemaking	0	1	1
	Small scale mining (Galamsey)	3	1	4
	Soap and detergent making	0	3	3
	Steel bending	1	0	1
	Stuffing chair making	1	0	1
	Tailoring / dressmaking / seamstress	16	78	94
	Tie and dye	0	7	7
	Welding	1	0	1
	Wholesaler	0	4	4
Don't know	Don't know	1	3	4

The total number does not equal the number of households because some households specified more than one occupation. Note that some respondents indicated they may not be willing to change their occupation because of old age but other household members might be willing with occupations indicated. Marked in red is top 5 by sub-group. Note that out of all sample households 34% is male and 66% is female.