Swiss Red Cross ✚

BASELINE STUDY

For

GRD II
(2016-2020)

Leogane

November 2016

Research Group

Socio-Digital

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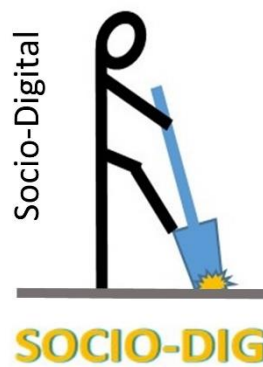
Acronynms

AAA	Agro Action Allemande
ASEC	Assemblée de Section Communale
BAC	Bureau Agricole Communal
CASEC	Conseil des Assemblées de Sections Communales
CCPC	Comité Communal de Protection Civile
CdB	Chaîne du Bonheur
CLPC	Comité Local de Protection Civile
CNSA	Coordination Nationale de Sécurité Alimentaire
CODEP	Coopérative de Développement de Cormier
COU	Centre d'Opération d'Urgence
COUD	Centre d'Opération d'Urgence Départemental
COUN	Centre d'Opération d'Urgence National
CRH	Croix Rouge Haïtienne
CRS	Croix Rouge Suisse
DIPECHO	Disaster Preparedness ECHO
DPC	Direction de la Protection Civile
ECHO	European Commission Humanitarian Office
EIC	Equipe d'Intervention Communautaire
GRD	Gestion des Risques et Désastres
NOAA	National Oceanic and Atmospheric Administration
OCB	Organisation Communautaire de Base
ODK	Open Data Kit
ONG	Organisation Non Gouvernementale
QGIS	Quantum GIS
SAP	Système d'Alerte Précoce
SIMEX	Simulation d'Exercice
SNGRD	Stratégie Nationale de Gestion des Risques et Désastres
WASH	Water Sanitation and Hygiene

Contents

1. INTRODUCTION

The survey upon which this report is based is both and Endline Survey for the Suisse Red Cross 2012-2016 GRDI risk management project and a baseline for the 2016-2020 GRDII project elaborating on disaster preparedness and introducing ecological components, including reforestation, seed provision and selection, and agricultural cultivation strategies. This report focuses on the Baseline for the new 2016-2020 survey. The target area is five Sections in the Commune of Leogane: Cormier, Fond Doie. Fonds-de-Boudin, Palmis-a-Vin, and Petit-Harpon.

2. METHODOLOGY

The survey design involved taking four points per commune and then interviewing forty household members at each point. Because there were 5 communes in the total survey, the total possible surveys was 800. Note that this was considerably more than the originally planned 350 surveys but was deemed important to get a representative understanding of the impact of the project. In

Table 2.1: Sample by Sex and Section			
Section	Female	Male	Total
Cormier	89	94	183
Fond_doie	29	28	57
Fonds_de_Boudin	48	51	99
Palmis-a-Vin	76	85	161
Petit_Harpon	155	142	297
Total	397	400	797

the case of Fonds-de-Boudin, there were significantly fewer surveys, this was a consequence of the scarcity of households at the points and permitted because of the three communes, Fond-Boudin has the fewest 2012-2016 interventions: 3 in Fond Boudin versus 5 to Cormier and 8 in Palmiste à Vin.

Figure 2.1: Maps of Selected Sample Points and Interview Sites
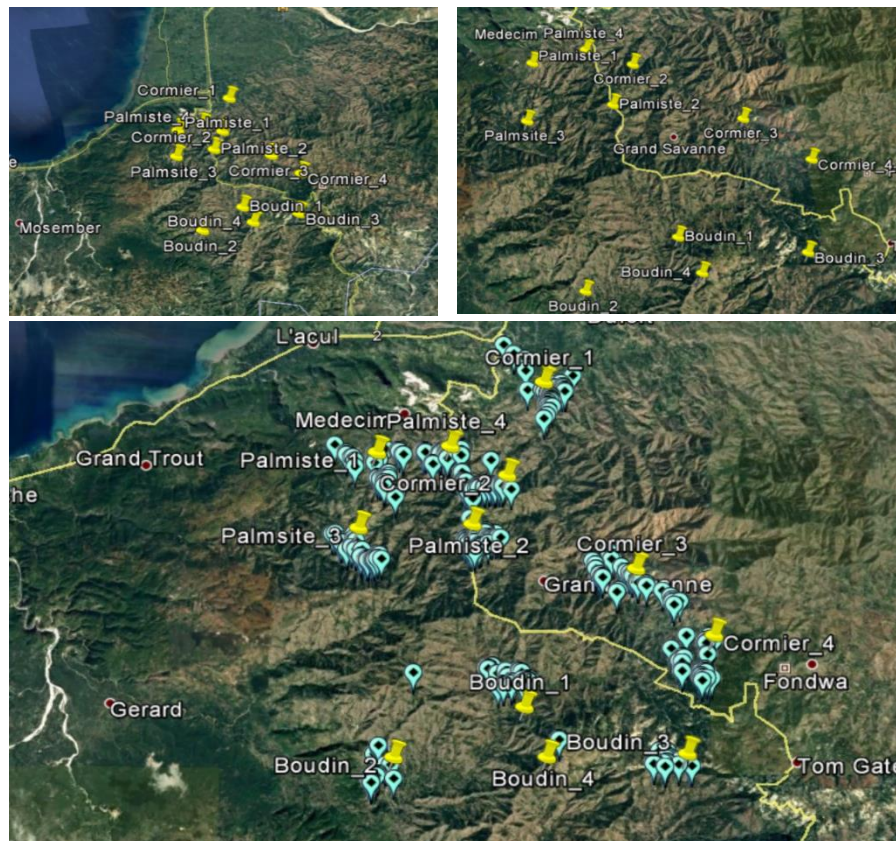
Sample Size, Gender and Section

Below is a description of the sample size, age and gender structure of respondents (Figures 2.1-2.2 and Tables 2.1). The selected respondents were very closely 50% female and 50% males., something that was held constant in all five Sections.   Beginning at age 21 -25 years, the age structure of respondents closely reflects the age structure of the population seen in Figure 3.1 on page 3. Eight-six percent of respondents self-identified as household head or spouse of household

Table 2.2: Relationship of Respondent to Household Head			
	Sex of Respondent		
Relationship	Female	Male	Total
Hd hshld	33%	37%	70%
Spouse	10%	5%	16%
Child	6%	7%	13%
Other	1%	1%	2%
Total	50%	50%	100%

Figure 2.2: Respondents by Sex and Age
(N=797)

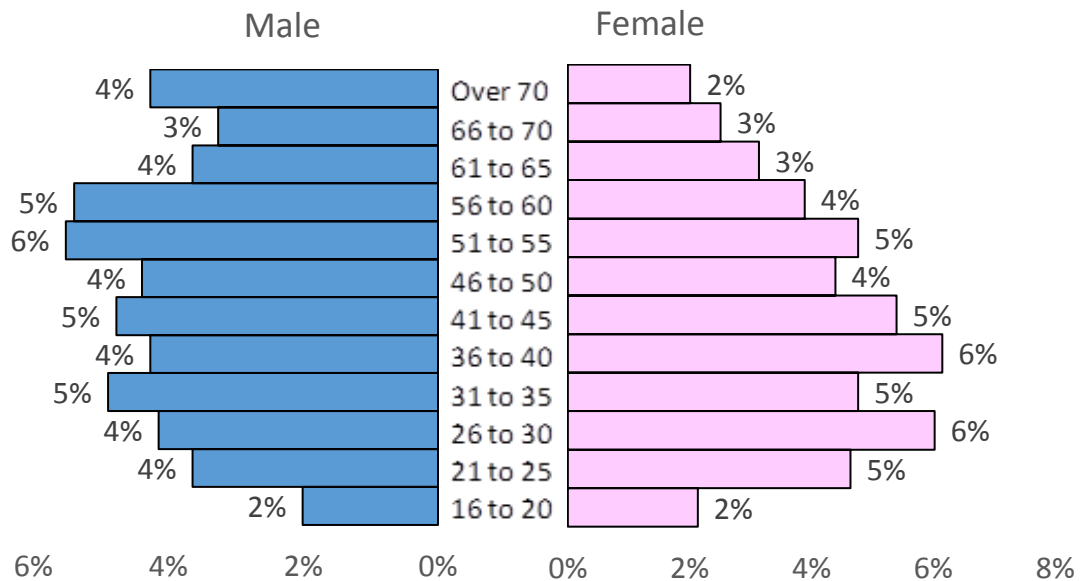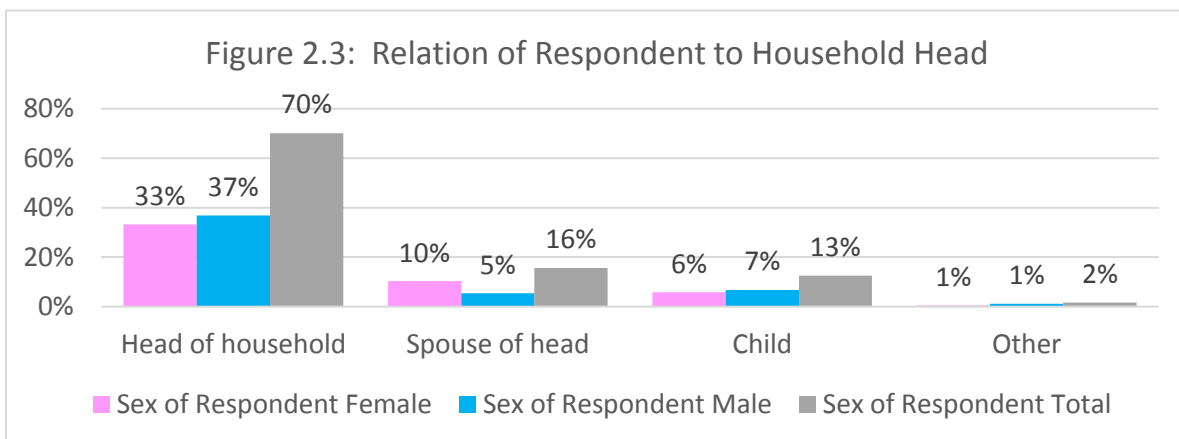Figure 2.2: Respondents by Sex and Age (N=797)

Figure 2.3: Relation of Respondent to Household Head

3. POPULATION STRUCTURE AND HOUSEHOLD SIZE

The Population pyramid for the project region is typical of Haiti (Figure 3.1). The Household size is a mean 4.7 with a median of 5.0 (see Figure 3.2)

Figure 3.1
Population Structure derived from Household Members
(females = 1,887; males = 1,934)

Age	Male	Female
Over 70	2%	1%
66 to 70	1%	1%
61 to 65	1%	1%
56 to 60	2%	2%
51 to 55	2%	2%
46 to 50	2%	3%
41 to 45	2%	2%
36 to 40	2%	3%
31 to 35	3%	3%
26 to 30	4%	4%
21 to 25	4%	4%
16 to 20	7%	6%
11 to 15	5%	6%
6 to 10	6%	5%
0 to 5	6%	7%

Figure 3.2: Household Size

Household size	Percent
1	6%
2	11%
3	14%
4	17%
5	18%
6	14%
7	7%
8	6%
9	3%
10	2%
11	1%
12	1%
13	0%
14	0%

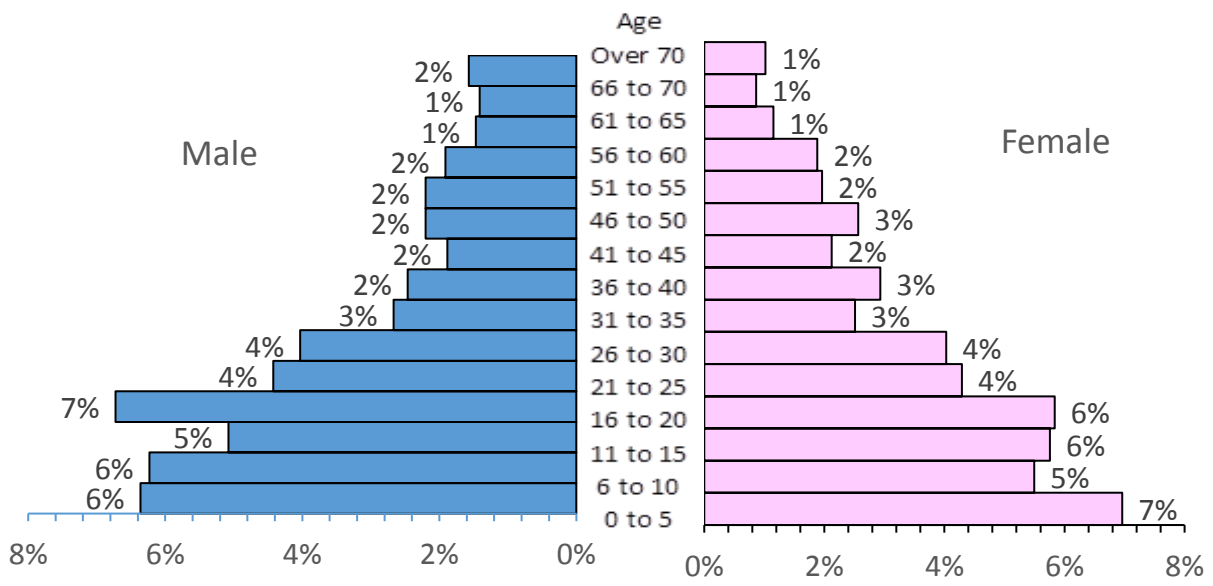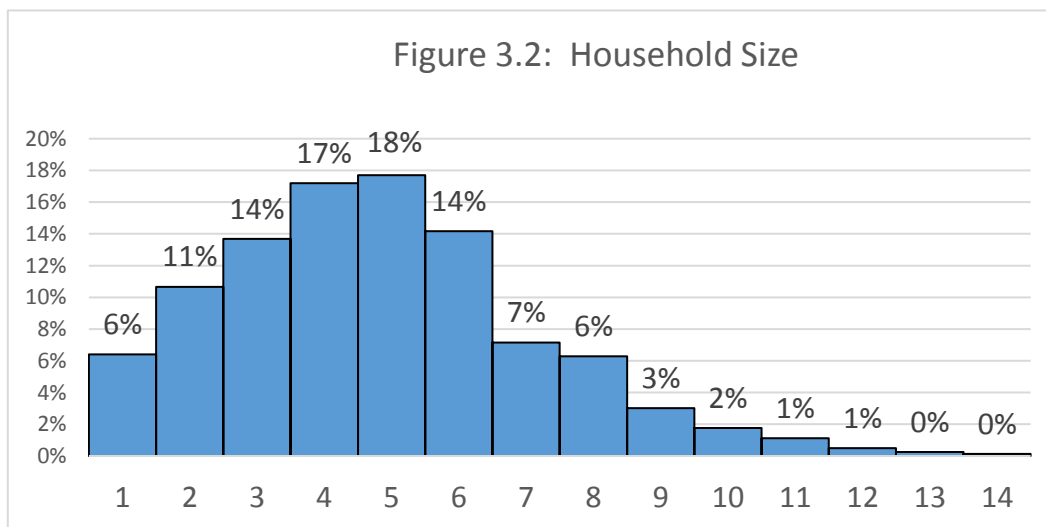## Household Structure

In the below figures, 'de facto household head' refers to whether or not there is a man and woman couple in the house as primary producers or if there is only a single man or single woman, i.e. not who people say is the household leader but who present (Figure 3.3). The reason that this method of categorizing household headship is preferable is because "household head" is a subjective category. One member of the household may say the father is head while another household member cites the mother. It is know from surveys elsewhere that when the question is posed to adults in the house males identify themselves as head of household twice as frequently as women in union cite their husbands.

Figure 3.3: De Facto Household Headship (based on presence of male and female in Union one of which is identified as Hshld Hd; N=797)
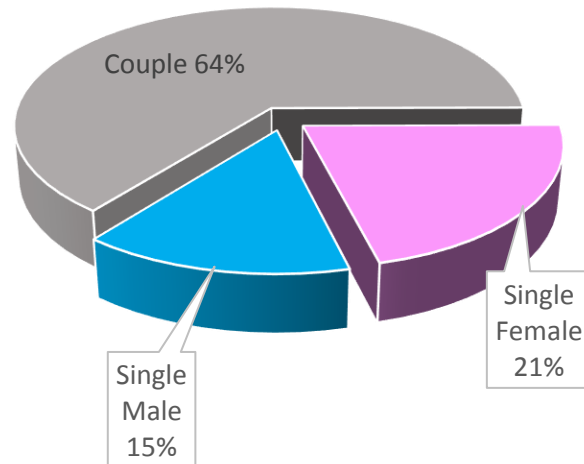
Vulnerable Household Members

Eleven percent of respondents reported someone is their house falling in a category of vulnerable person (Figure 3.4). About half of those people were elderly people (over 70 years) or pregnant women. The remainder were physically handicapped, mentally ill, blind of chronically ill (see Figure 3.5).
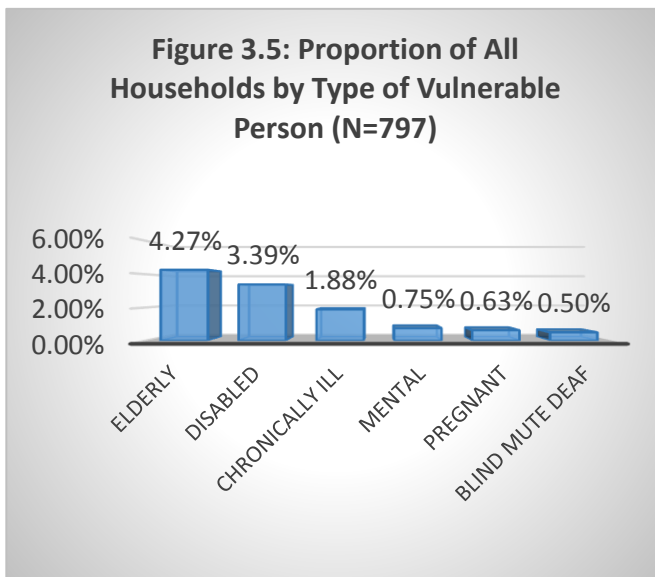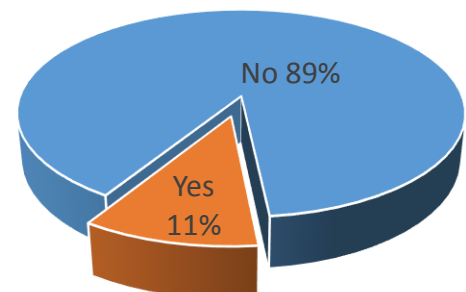

Figure 3.5: Proportion of All Households by Type of Vulnerable Person (N=797)

Figure 3.4: Vulnerable Person in the House (N=797)

Occupation

The main income generating activities for men was farming (78%) following by skilled labor (9%). For women it was trade (46%) following by Farming (Table 3.1).

Table 3.1: Main Occupation/Source of Income		
Source of Income	Male Work	Female Work
Farmer	78%	34%
Skilled worked	9%	1%
Trader	3%	46%
School Teacher	2%	1%
Artisan	1%	0%
Employed	1%	1%
Civil Servant	0%	0%
No work	4%	16%
Other	3%	2%

4. RISK MANAGEMENT

Natural Threats

The main threats identified by respondents are by far storms (68%) followed by drought (14%). However, it should be born in mind that this question was asked in the context of the a survey for the Red Cross, an institution that typically responds to acute disaster such as storms and earthquake-- something of which the respondents were aware. It may be that drought and other calamities are more costly to respondents (Table 4.1).

Table 4.1: Main Respondent Identified Natural Threats					
Biggest Natural Threat		Second Biggest Threat		Third Biggest Threat	
Storms	68%	Drought	19%	Other	8%
Drought	14%	Storms	8%	Blight & Pestilence	5%
Livestock epidemic	3%	Blight & Pestilence	5%	Drought	3%
Blight & Pestilence	3%	Livestock epidemic	5%	Storms	2%
Cholera	3%	Other	4%	Livestock epidemic	1%
None	2%	Cholera	3%	Subsidence	1%
Subsidence	2%	Subsidence	2%	Floods	1%
Floods	2%	Floods	1%	Epidemics	1%
Accidents on highway	2%	Accidents on highway	1%	Accidents on highway	1%
Other	1%	Epidemics	1%	Cholera	1%
Epidemics	1%	Earthquake	0%	None	0%
Earthquake	1%	Nothing	0%	Earthquake	0%
Do not know	0%				

Warning Systems

Radio and telephone were the most important sources of obtaining information on impending disaster (Figure 4.1). Only 18% of respondents reported knowing about alert flag colors (Figure 4.2). The known colors were Red (18%), Green (14%), Yellow (10%), Orange (10%) and other (2%). For the category "other", 9 respondents cited blue, 1 white, 3 black, and 1 pink (Figure 4.3).
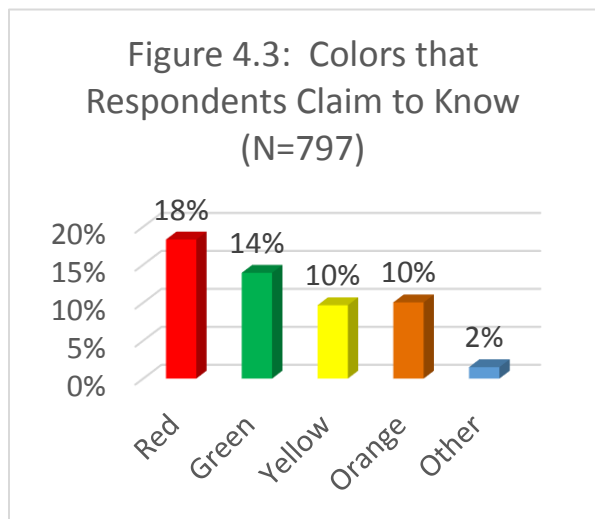
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Figure 4.1: Most Important Warning Systems

System	%
Radio	71.6%
Telephone	53.7%
Neighbors	35.9%
Weather	30.5%
EIC/EEK	6.6%
Authorities	4.1%
Church	3.8%
Other	1.0%
School	0.4%
Television	0.4%
Do not know	0.9%

Figure 4.2: Respondents Who Claim to Know Colors

Yes, 18%
No, 82%

Figure 4.3: Colors that Respondents Claim to Know (N=797)

Red 18%
Green 14%
Yellow 10%
Orange 10%
Other 2%
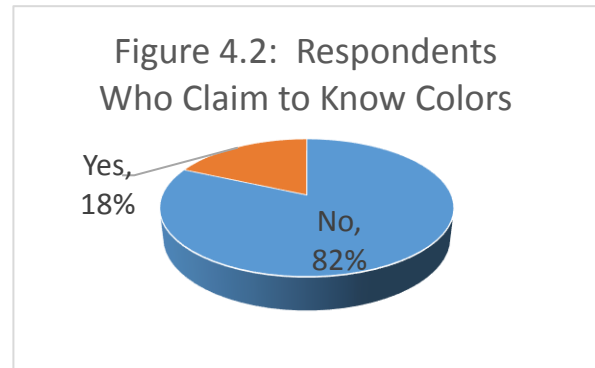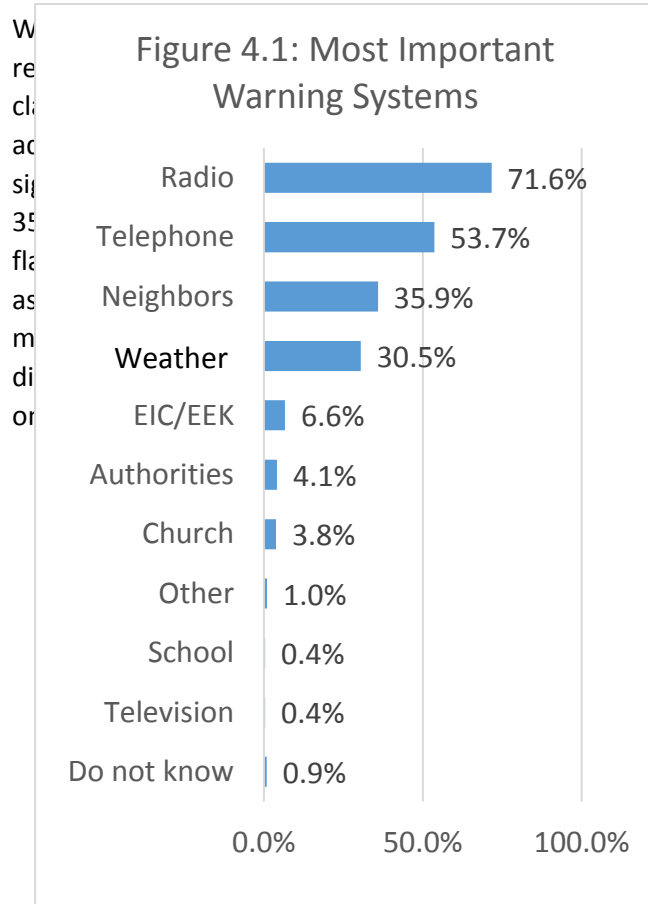
Figure 4.4: Respondent Explanations for What Red Means (n=146)

- Can go home: 9%
- Do not really know: 27%
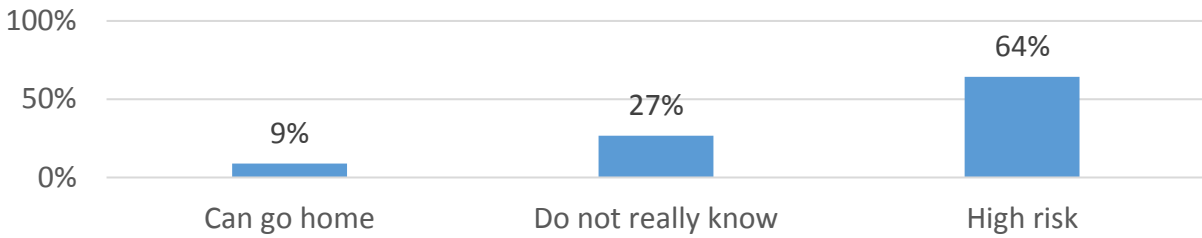- High risk: 64%

Figure 4.5: Respondent Explanations for What Green Means (n=111)

- Other: 1%
- High risk: 4%
- Can go home: 28%
- Low risk: 32%
- Do not really know: 35%
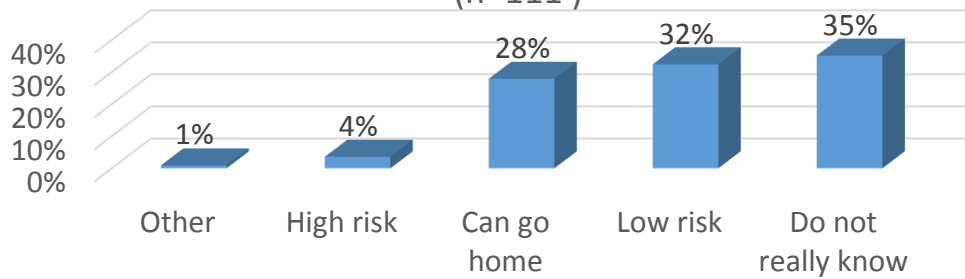
Figure 4.6: Respondent Selected Definitions for an "Orange Alert" (N=797)

- Other: 0%
- Calm: 3%
- Go to Meeting point: 4%
- Nothing: 4%
- Prepare home: 5%
- Listen radio: 6%
- Find ID: 8%
- Do not know: 80%
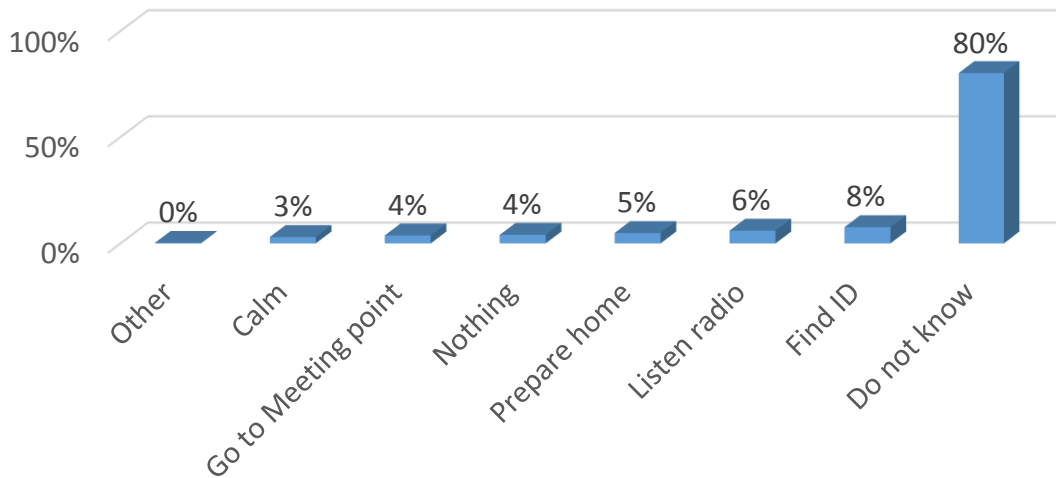
When asked where they learned about colors, 45% cited the radio and 45% cited the Red Cross. Another 19% mentioned Community meetings-- but were likely sponsored by the Red Cross or Civil Protection (Figure 4.7).
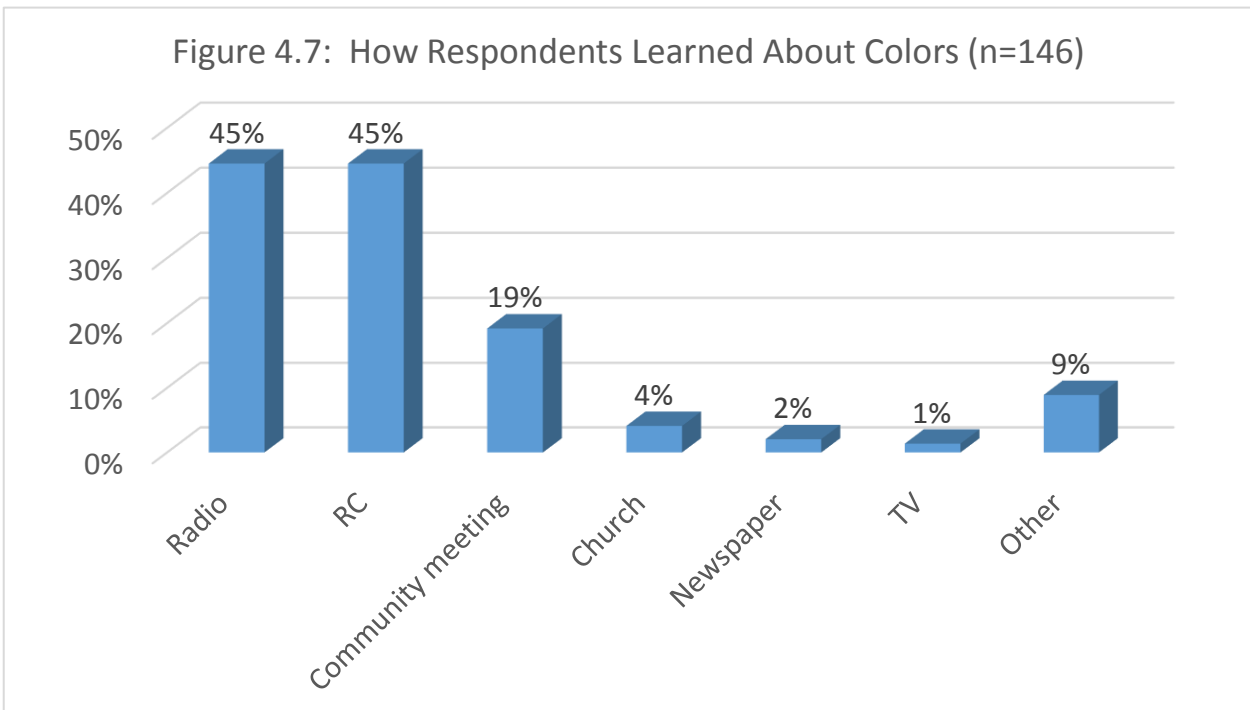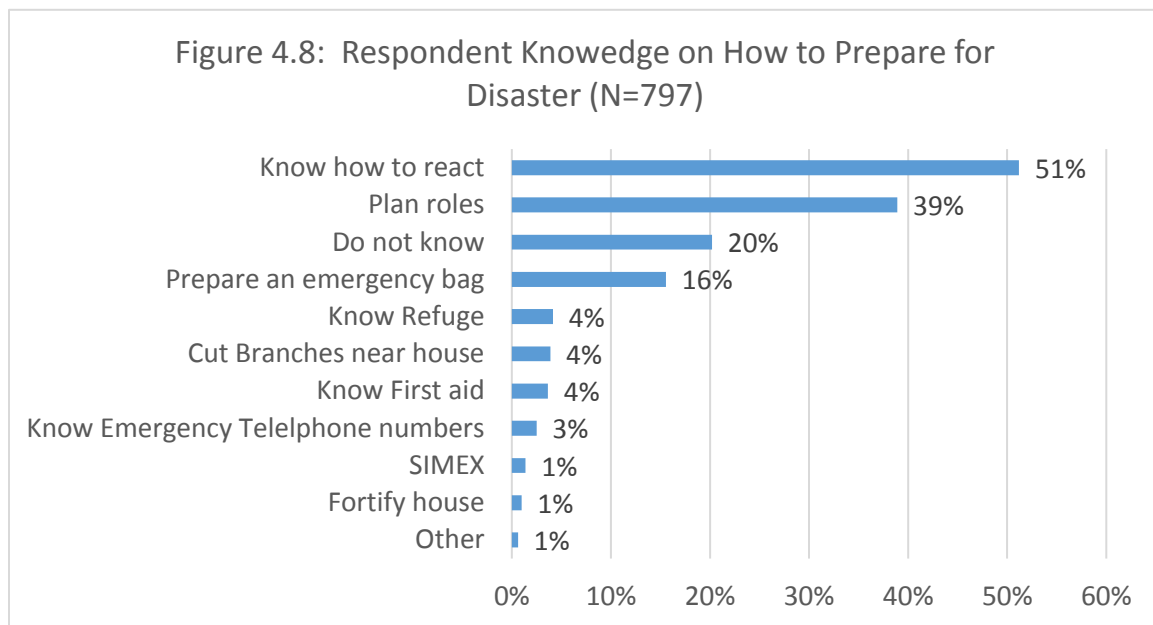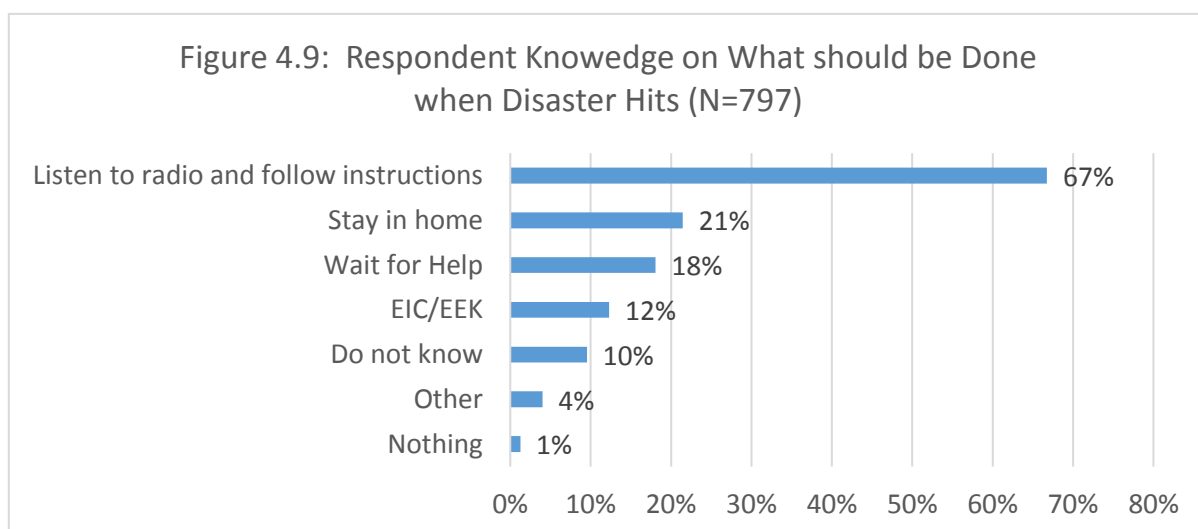
Figure 4.7: How Respondents Learned About Colors (n=146)

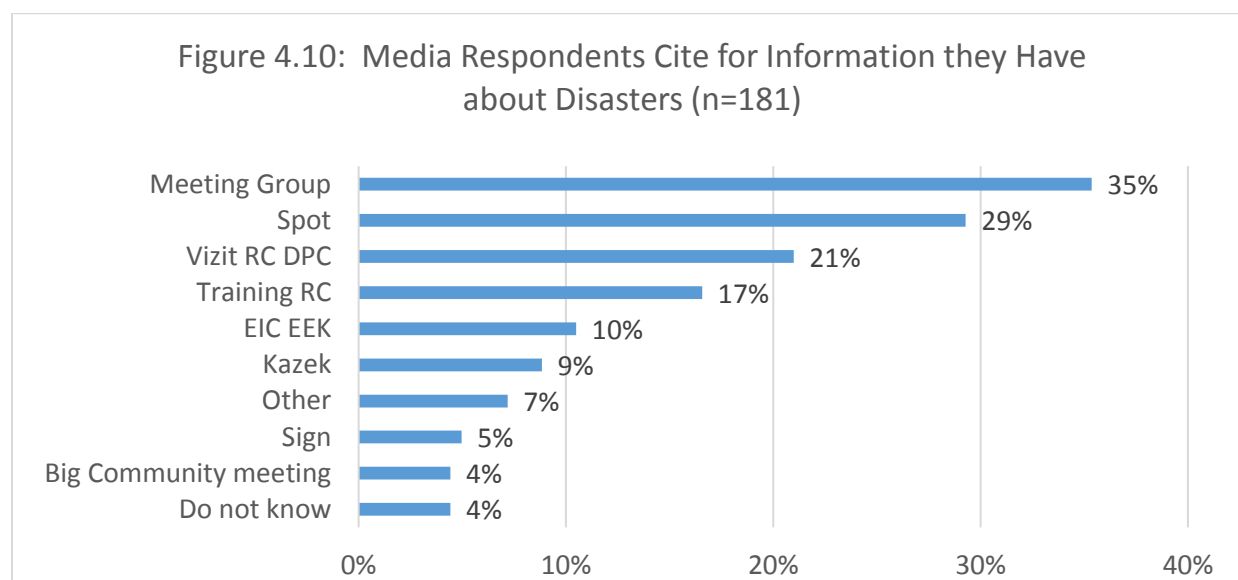| Table 4.2: Other Category for Where Learned about Colors	
Neighbor, friends, Family	6
Training	4
Reading	1
Internet	1
School	1

Knowledge about Disaster and Preparedness

When asked specifically about respondent knowledge in preparing for disaster, most respondents cited a generic 'know how to react' (51%) and 'plan roles.' (39%); 20% said they did not know, 16% cited prepare an emergency bag, a Red Cross recommendation (Figure 4.8). Less than 5% cited the remaining, Red Cross recommended preparation measures: Know location of a refuge (4%), Cur branches over house (4%), Know first aid (4%), Know emergency telephone numbers, perform simulation exercises (1%) and fortify house (1%).

Figure 4.8: Respondent Knowedge on How to Prepare for Disaster (N=797)

Category	Percentage
Know how to react	51%
Plan roles	39%
Do not know	20%
Prepare an emergency bag	16%
Know Refuge	4%
Cut Branches near house	4%
Know First aid	4%
Know Emergency Telelphone numbers	3%
SIMEX	1%
Fortify house	1%
Other	1%

Regarding what should be done when a disaster does strike, 67% said listen to the radio, 21% said stay home, and 18% said wait for help; 12% mentioned working with EIC teams (Figure 4.9).

Figure 4.9: Respondent Knowedge on What should be Done when Disaster Hits (N=797)

Category	Percentage
Listen to radio and follow instructions	67%
Stay in home	21%
Wait for Help	18%
EIC/EEK	12%
Do not know	10%
Other	4%
Nothing	1%

The most commonly cited source for learning about disaster was Disasters from Community Meetings at 35%, 29% from radio spots/advertisements, 21% directly from a Red Cross or Civil Protection workers, another 17% from training conducted by the Red Cross; 10% learned it from an EIC team (Figure 4.10).

Figure 4.10: Media Respondents Cite for Information they Have about Disasters (n=181)

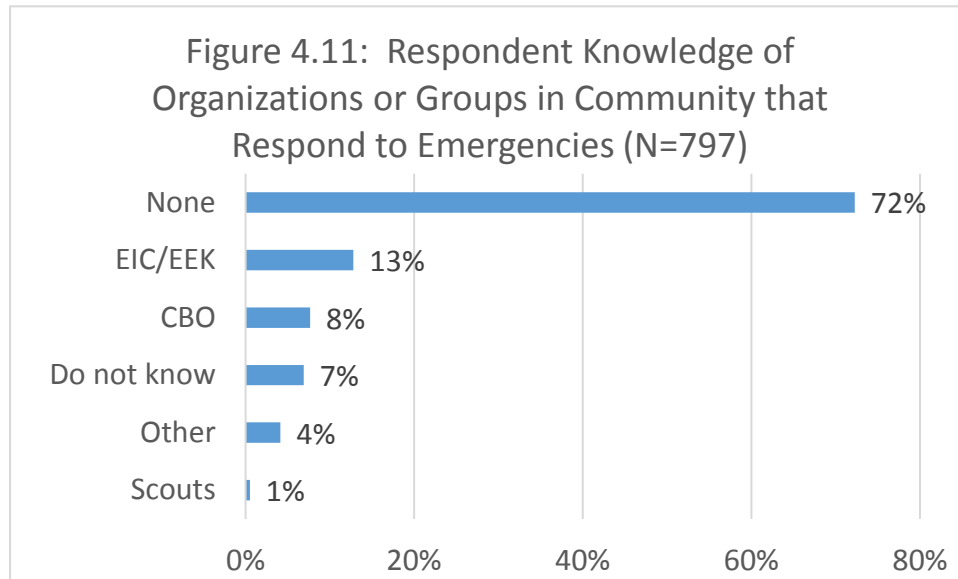| Source	Percentage
Meeting Group	35%
Spot	29%
Vizit RC DPC	21%
Training RC	17%
EIC EEK	10%
Kazek	9%
Other	7%
Sign	5%
Big Community meeting	4%
Do not know	4%

The most common exposure to a medium of information was to radio spots, something that 20 respondents (2%) cited as hearing more than once per week (Table 4.3). However, more people cited group meetings as a source of information on disasters. The most common frequency for the meetings was once per month.

Table 4.3: Respondent Reported Frequency of Exposure to Different Media for Disaster Information								
	Group meetings	Spot	RC visit	Training GRD	EIC/EEK	CASEC/ ASEC	Sign	Work
More than once per week	1	20	3	1	1	0	1	0
Once per week	5	12	4	1	3	0	1	0
Once per month	30	10	6	6	7	2	2	1
Every three months	10	4	4	5	0	3	3	1
Less than once per year	3	4	2	4	2	3	1	1
Once per year	15	3	19	13	6	7	1	5
Total	64	53	38	30	19	15	9	8

Organizations

When asked about knowledge of disaster relief organizations working in the community, 72% said there were none. The most cited organization were Red Cross and Civil Protection created and training EIC/EEK teams (Table 4.11)

Figure 4.11: Respondent Knowledge of Organizations or Groups in Community that Respond to Emergencies (N=797)

Category	Percentage
None	72%
EIC/EEK	13%
CBO	8%
Do not know	7%
Other	4%
Scouts	1%

Shelters

Fully 77% of respondents were not aware of an emergency shelter in their community. Another 2% said they did not know; 21% reported knowing of a shelter (Figure 4.12). The most common types of emergency shelters identified were Churches (53%), Red Cross Shelters (41%), Schools (34%) and other (34%)—(see Figure 4.13). Of the shelters that respondents did identify, 64% were accessible by vehicle, 85% had a latrine availability of water ranged from 36% in the case of Red Cross Shelters to 82% for the School Shelters and 63% for the Churches.

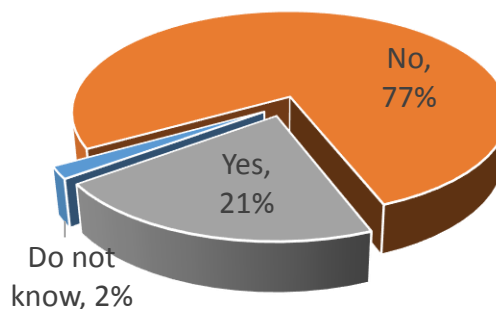Figure 4.12: Respondent Knows of a Refuge Shelter in the Community

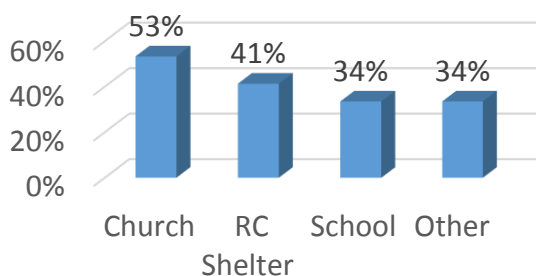Figure 4.13: Types of Shelter Respondents Report (n=167)

Table 4.5: School Shelter Infrastructure (n=56)			
Condition of road		Water source at	
Good	21%	Cistern	71%
Not so good	43%	None	18%
Terrible	2%	Spigot	9%
		Well	2%
Table 4.6: Church Shelter Infrastructure			
Good	49%	Cistern	39%
Not so good	47%	None	37%
Terrible	4%	Spigot	20%
		Well	3%
Table 4.7: Red Cross Shelter			
Good	5%	Cistern	25%
Not so good	86%	None	64%
Terrible	9%	Spigot	6%
		Well	6%

Table 4.4: Number of Refuges Respondents Identify in their Community by Type		
Type	Number	Count
School Refuges (n=56)	1	37
	2	14
	3	5
Church Refuges (n=89)	1	51
	2	23
	3	9
	4	2
	6	2
	7	2
Red Cross Refuges (n=69)	1	54
	2	15
Buildings Generic (n=2)	1	1
	2	1
Other (n=3)	1	3

Table 4.8: Shelter Vehicle Access			
Type of Building	Vehicle can reach closest school refuge	Latrine	Water Source
School	66%	96%	82%
Church	64%	92%	63%
RC	64%	78%	36%

Disaster and the Environment

When asked what can be done to better limit the occurrence and impact of disaster, the most commonly cited response was reforest (61%) followed distantly by Inform (34%).

Figure 4.14: What People Should do to Limit Impact on Environment and Prepare for Disaster (N=797)

Category	Percentage
Nothing	0%
CRH Prezans	1%
DPC	1%
EIC EEK	5%
Other	5%
Educate	8%
Do not know	11%
Strengthen local authority	19%
Protect springs	21%
Implement ag programs	23%
Refuge zones	23%
Knowledge/Training	23%
Designate and/or build evacuation routes	30%
Conservation of soil and water sources	33%
Inform	34%
Reforest	61%

5. AGRICULTURE

Most Important Crops

The four most important crops grown in the area, as defined by the question, 'what is the most important crop you plant' are Corn (24%), Pigeon Peas (21%), Black Beans and Peanuts (14%). Note that the preceding percentages are not whether the respondent plants the crops, but individuals citing these crops as most important.

Table 5.1: Top 10 Crops			
Crops	Total	Intercropped	Mono
Corn	24%	72%	28%
Pigeon peas	21%	76%	24%
Black beans	20%	51%	49%
Peanuts	14%	53%	47%
Bananas and plantains	7%	43%	57%
Manioc	5%	67%	33%
Sweet potatoes	4%	45%	55%
Black-eyed peas	1%	50%	50%
Millet	1%	25%	75%
Yam	1%	67%	33%

Pesticides

Frequency of Use

Pesticides are rarely used. Only 4% of respondents reported using them on any crop. Of the 30 respondents who reported using them the most common crops they used pesticides on were Cabbage, Black beans and Tomatoes, all cash crops destined for the market—versus *viv* which can be thought of as in large part survival or hunger crops that guarantee the household enough food to eat—such as Manioc, and Yam.

Figure 5.1: Uses Insecticide on At Least One Plant (N=797)

No, 96%

Yes, 4%
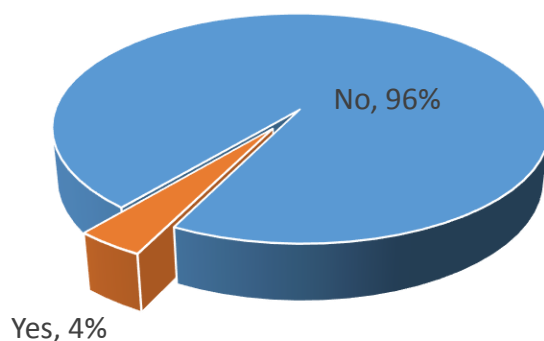
Table 5.2: Uses Chemical Pesticide (n=30)			
Crop	Count	Tree	Count
Cabbage	8	Avocado	4
Black beans	7	Orange	2
Tomatoes	6	Mango	3
Corn	4	Lime	2
Cherries	4	Papaya	3
Okra	2	Grapefruit	3
White beans	2	Corosol	2
Peanuts	2	Coconut	2
Hot pepper	2	Cherries	3
Eggplant	1		

Figure 5.2: Availability of Pesticide and Disposition to Use It
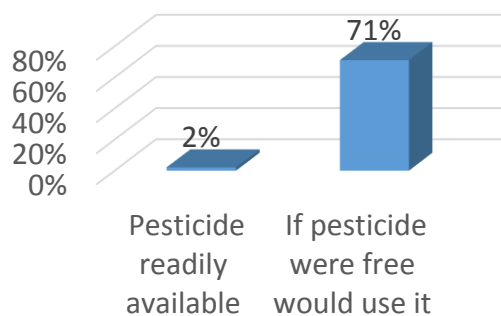
Disposition to Use

The most important factor determining whether respondent uses pesticides, is not health or environmental issues, but cost. When asked if they would use pesticide if it were free, 71% of respondents said yes.

Natural Pesticide

Only 6% of respondents reported knowing how to make natural pesticides. Of those 53 people, 19% (20) make it often. Only 1% of respondents reported sometimes purchasing natural pesticide. In short, there is no significant production nor marketing of natural pesticides in the area.

Figure 5.3: Knows how to make natural pesticide
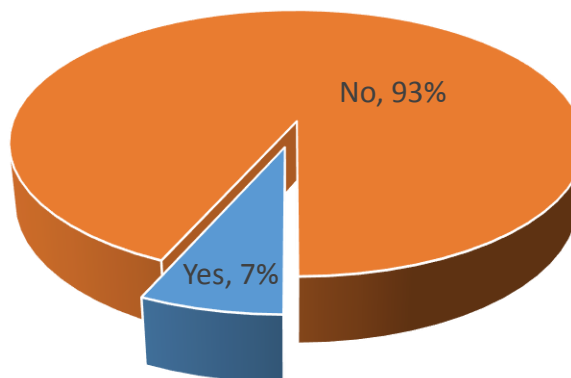
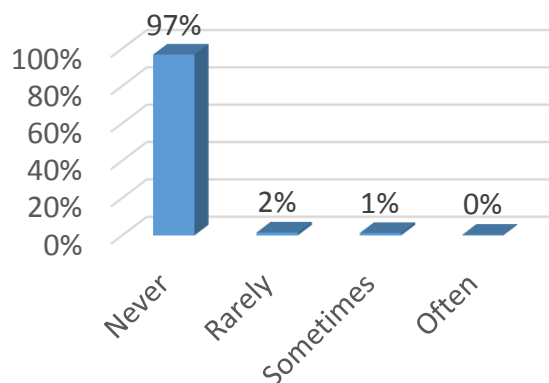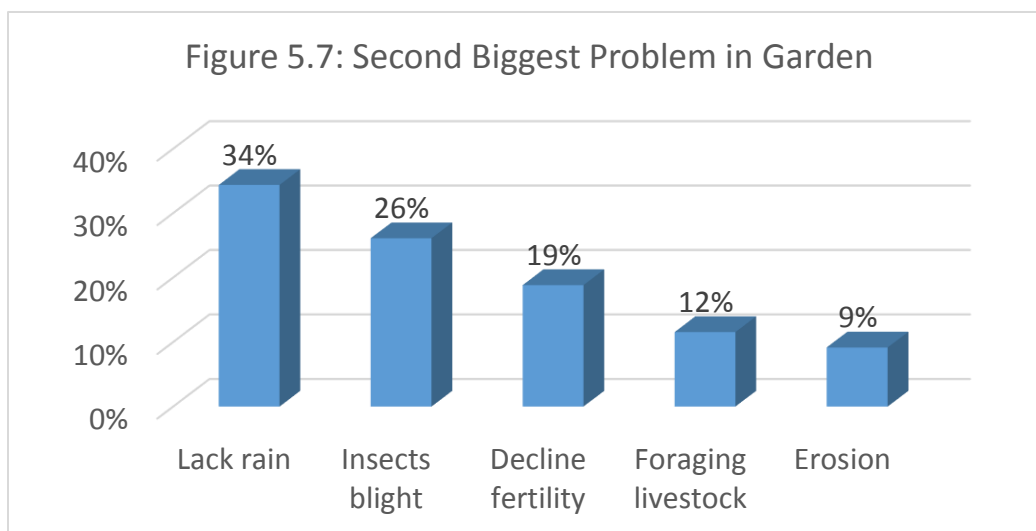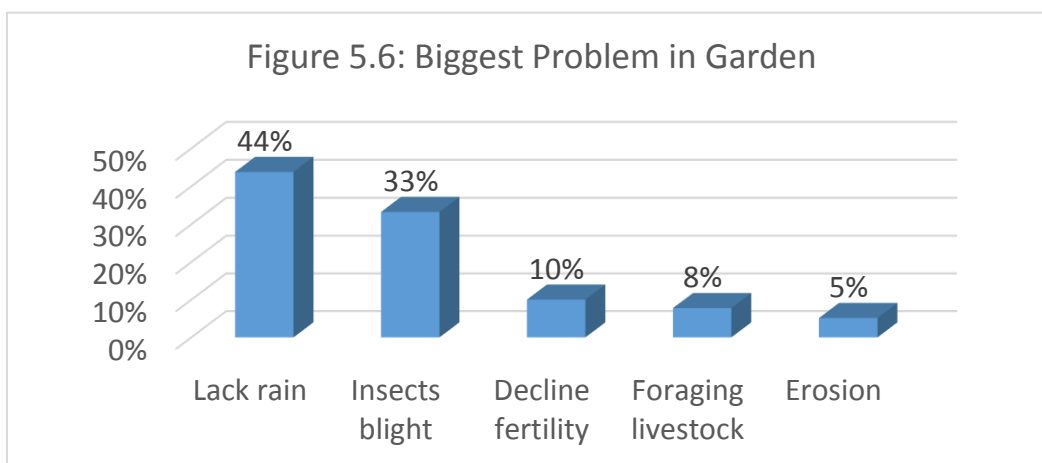## Figure 5.4: Frequency makes natural pesticide (n=53)
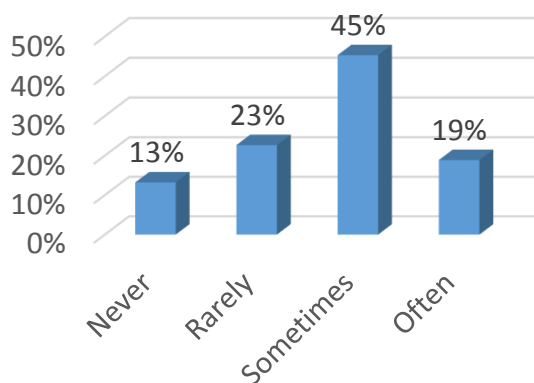
Figure 5.5: Frequency purchases natural pesticide (N=797)

Biggest Problems in Gardens

The biggest problems respondents reported with agriculture was lack of rain (44%) followed by insects and blight (33%). Those that did not chose these as the biggest problems chose them as the second biggest problems (see Table 5.3 and Figures 5.6 and 5.7).

Table 5.3: Biggest Problems in Garden			
Biggest Problem in Garden		Second Biggest Problem in Garden	
Lack rain	44%	Lack rain	34%
Insects blight	33%	Insects blight	26%
Decline fertility	10%	Decline fertility	19%
Foraging livestock	8%	Foraging livestock	12%
Erosion	5%	Erosion	9%

Figure 5.6: Biggest Problem in Garden

	Lack rain	Insects blight	Decline fertility	Foraging livestock	Erosion
	44%	33%	10%	8%	5%

Figure 5.7: Second Biggest Problem in Garden

|	Lack rain	Insects blight	Decline fertility	Foraging livestock	Erosion
	34%	26%	19%	12%	9%

Most Important Needs

Respondents reported the most important agricultural need as money (31%), followed by seeds (28%), tools (28%), and fertilizers (15%). Consistent with responses regarding pesticides, only 6% cited pesticides as the most important input (Figures 5.8). When asked about second most important agricultural need, respondents cited seeds (37%) and Tools (29%), suggesting that these are the two most critical ingredients for which farmers perceive a shortage, rather than money *per se*.

Figure 5.8: Most Important Agricultural Need (N=767)

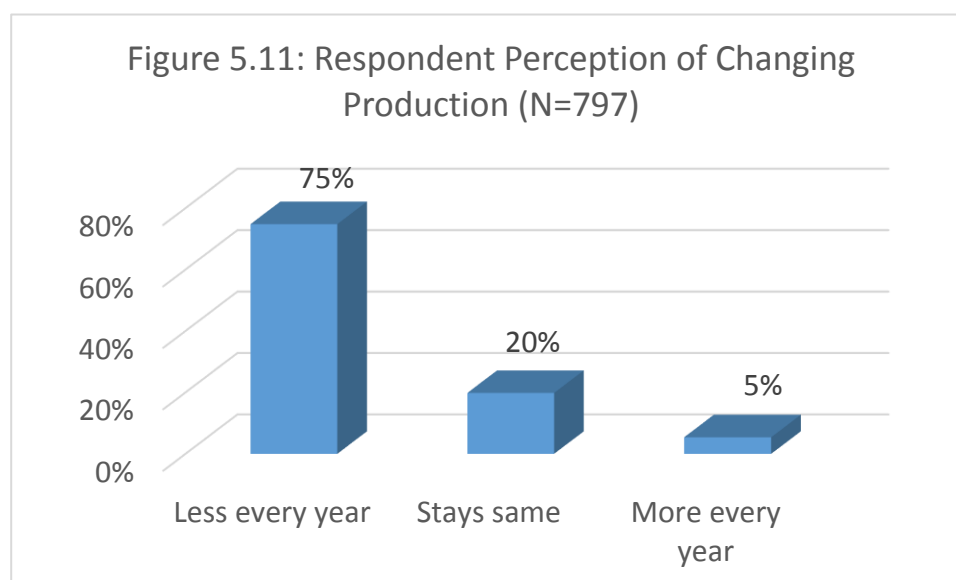Figure 5.9: Second Most Important Agricultural Need (N=797)
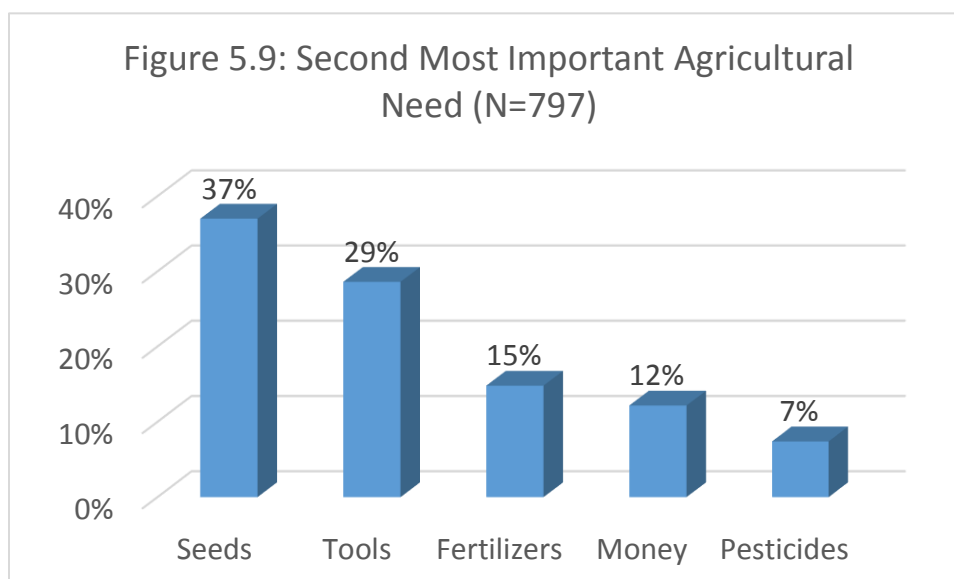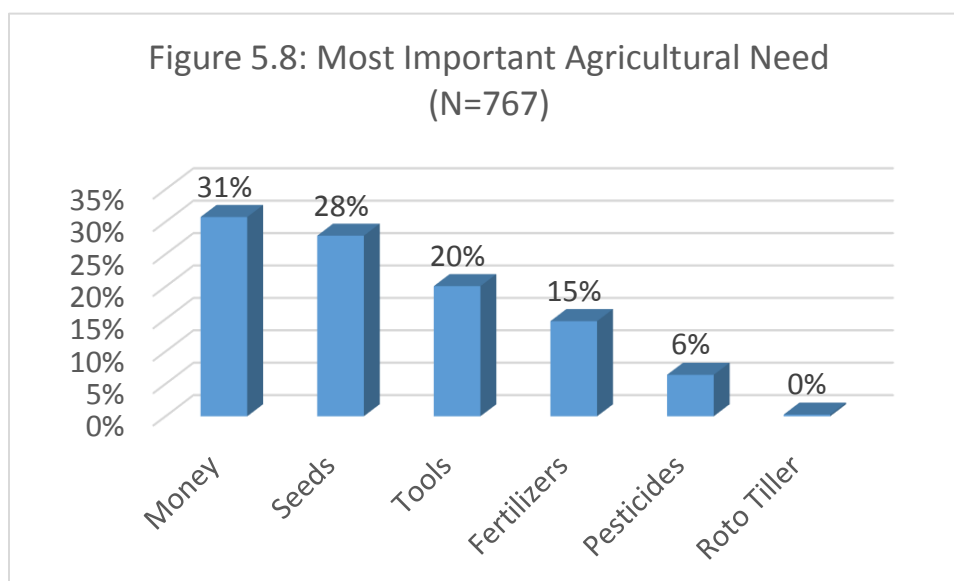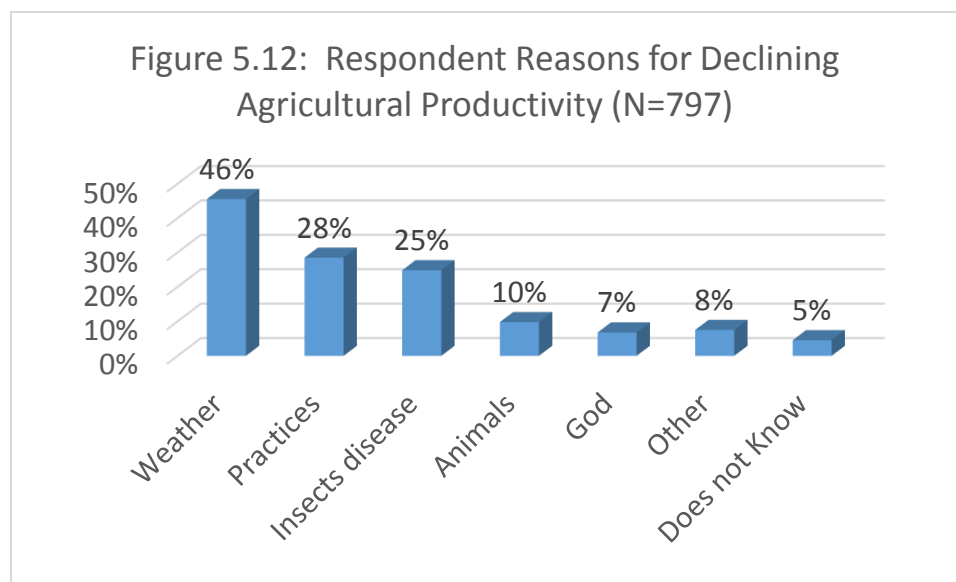
Conservation Strategies

Fully 49% of respondents reported having Living Plant Barriers in their gardens, 39% reported having contoured the land to prevent erosion; 35% have both and 39% have neither (Figure 5.10).

Figure 5.10: Living Barriers and Terraching on Property (N=797)
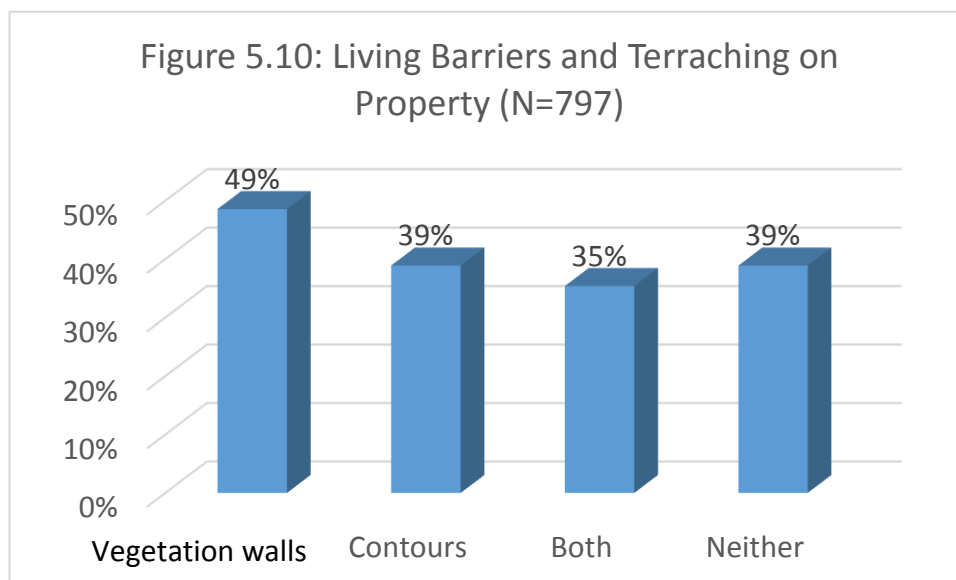
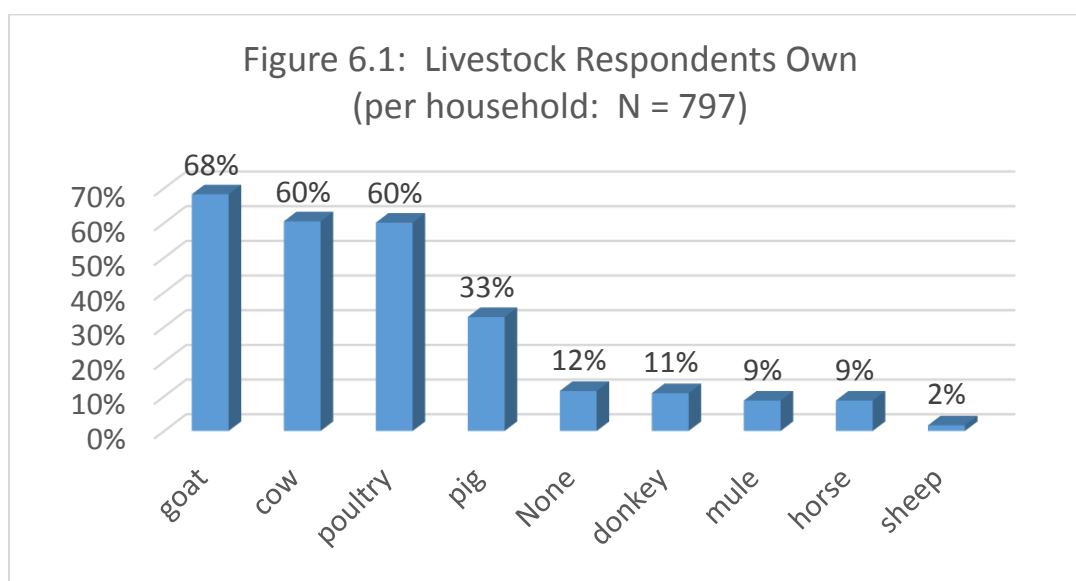## Perceptions of Changing Agricultural Productivity

Fully 75% of respondents perceived harvests as dwindling over the course of recent years (Figure 5.11). The most common explanations were weather (46%), bad agricultural practices that exhaust the soil and that lead to erosion (28%), and insects and disease (25%)—(Figure 5.12)

Figure 5.11: Respondent Perception of Changing Production (N=797)

Figure 5.12: Respondent Reasons for Declining Agricultural Productivity (N=797)
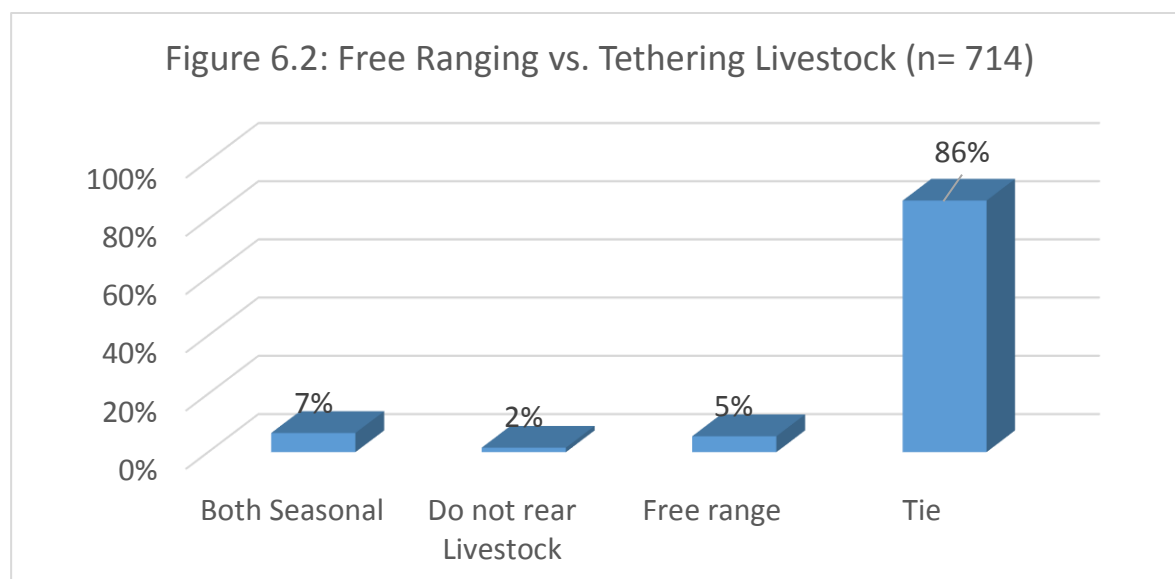
6. LIVESTOCK

Only 12% of respondents have no livestock (Figure 6.1). The most common animals are livestock destined to be sold for meat: goats (68%), cow (60%) and chicken (60%), and pig (33%). Far less common are pack animals--Donkey (11%), Mule (9%) and Horses (9%). The vast majority of respondents tether their livestock versus corralling it (Figure 6.2).

Figure 6.1: Livestock Respondents Own (per household: N = 797)

Figure 6.2: Free Ranging vs. Tethering Livestock (n= 714)

7. TREES

Planting and Preferences

Contrary to expectations, the most common tree respondents report having planted is not a fruit tree but one planted for high quality hardwood timber, specifically oak (30%). Mango is the second most common tree planted (17.4%), with Fransik and Blan mangos being far and away the most popular types of mango tree planted (Figure 7.1). The third most planted tree is Eucalyptis, also a tree planted for timber (Table 7.1). A full list of preferred tree types ('trees the respondent would most like to plant') divided by Fruit vs. Lumber is presented in Table 7.2. Development practitioners interested in providing trees should take note that lime and sour oranges are considered critical as a disinfectant and have a consistent market demand (Figure 7.2).

Table 7.1: Type of Tree Planted (N=797)							
Oak	30.0%	Orange	3.8%	Kenep	0.6%	Mahogany (local)	0.7%
Mango	17.4%	Bread Fruit	1.8%	Abricot	0.4%	Mangrove	0.3%
Eucalyptus	9.5%	Acacia	1.3%	Leucaena	0.5%	Pea Tree	0.1%
Avocado	8.6%	Papaya	1.3%	Mesquite	0.3%	Neem	0.1%
Coconut	5.9%	Lime	1.0%	Mahogany (Imp)	0.3%	Almond	0.1%
Grapefruit	4.7%	Ash	0.8%	Cacao	0.3%	Other	5.2%
Cedar	3.9%	Coffee	0.7%	Carousel	0.3%		

Table 7.2: Preferred Fruit and Timber Types			
Fruit		Lumber	
Mango	69.1%	Oak	94.2%
Avocado	55.3%	Cedar	59.5%
Orange	47.8%	Mahogany (local)	22.5%
Grapefruit	40.0%	Ash	19.7%
Coconut	33.0%	Mangrove	13.9%
Lime	26.0%	Mahogany (foreign)	11.8%
Papaya	16.9%	Eucalyptus	8.4%
Breadfruit	16.7%	Other	5.1%
Cherry	11.3%	Taveno	4.3%
Abricot	9.8%	Nago Wood	3.1%
Coffee	8.2%	Acacia	2.8%
Carousel	8.0%	Neem	2.5%
Kenep	6.9%	Leucaena	2.2%
Cacao	6.1%	Palm	0.9%
Mandarin	5.1%	None	0.9%
Tamarin	2.6%	Cuban Pine	0.9%
Almond	1.9%	Mesquite	0.3%
Pistachio	1.6%	Turpentine tree	0.1%
Sapotille	1.1%		
Guava	1.0%		
Carambola	0.8%		
Kayemite	0.4%		

Figure 7.1: Preferred Types of Mango (n=551)

Kawot 2%
Other 8%
Pennsik 10%
Jean Marie 14%
Konn 15%
Batis 21%
Blan 75%
Fransik 92%
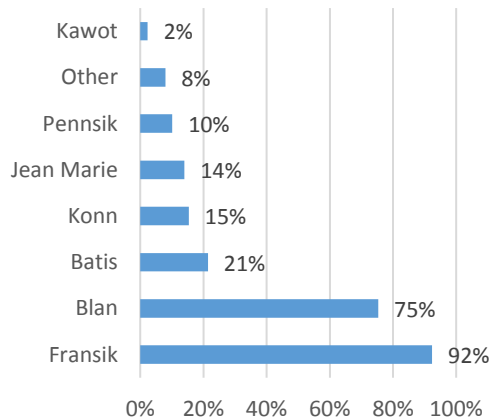
Figure 7.2: Preferred Types of Orange Trees (n=481)

Both 37%
Sweet 40%
Sour 6%
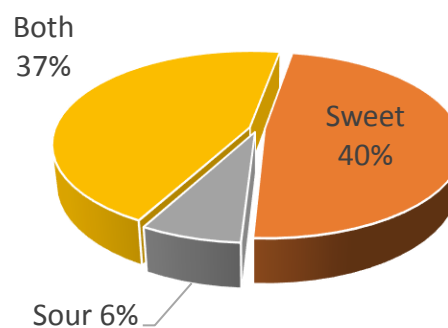
Despite that far more respondents report having most recently planted a non-fruit bearing almost tree twice as frequently as mangos, respondents overwhelming indicated a preference for fruit trees. Fully 51% of respondents said they preferred fruit trees vs. 3% that preferred timber: 45% appreciated both equally (Figure 7.3).

Figure 7.3: Preference for Tree Type (N=797)
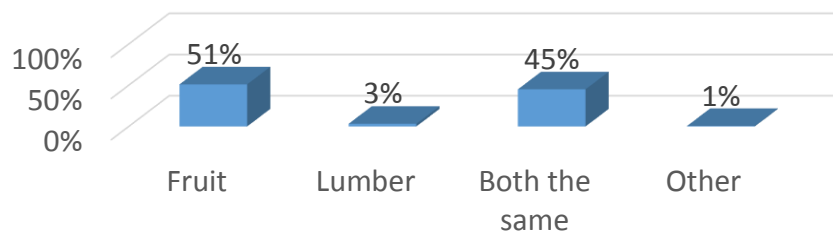
It should be noted that many respondents do not actively plant trees, but they do encourage and care for saplings that sprout on their own. While 46% of respondents said they typically plant trees, 17% said the simply tend volunteers (trees that sprout on their own) and 36% reported doing both planting and selectively tending volunteers (Figure 7.2)

Figure 7.2: Planting Trees vs. Caring for Volunteers (N=797)
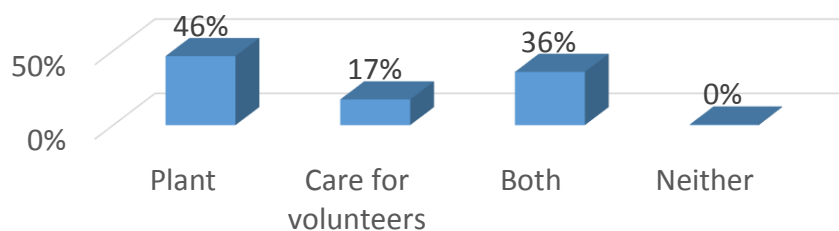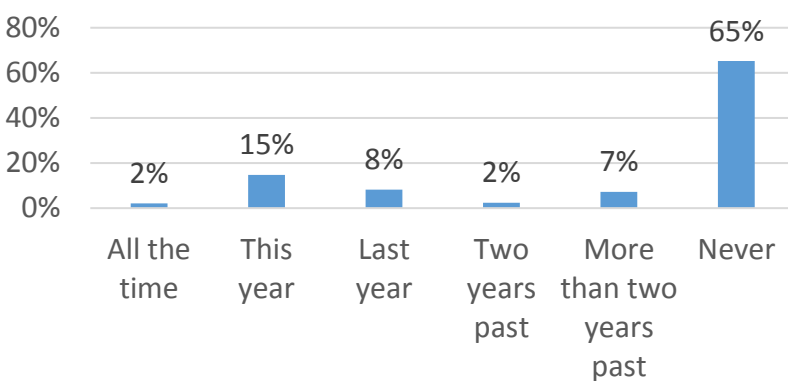

### Figure 7.3: Last Time Respondent Made Charcoal (N = 797)

Charcoal

Frequency of Making Charcoal
Fully 65% of respondents report never having made charcoal; 2% are fulltime charcoal makers; and the rest of respondents fall somewhere in between (Figure 7.3).

Reasons for Making Charcoal

An assumption in drawing up the questionnaire was that, based on studies elsewhere, many people in rural Haiti make charcoal during times of crisis. It has been called the social security net of rural Haiti. Consistent with this assumption, of the 277 individuals who reported making charcoal, explained that the last time they did so was because of Hunger; 4% for drought; 4% to obtain money deal with shortfalls brought on by a storm. Notable is that the second most import reason--albeit at 15% far behind 'Hunger'-- was to pay school tuition for children. Another 10% explained that it was for family in Port-au-Prince, something that often means to help children in school who need supplies, not least of all cooking fuel. Also notable is that in 6% of cases, the tree was considered old and/or might fall.

Figure 7.4: Reason Respondent Last Made Charcoal (n=277)
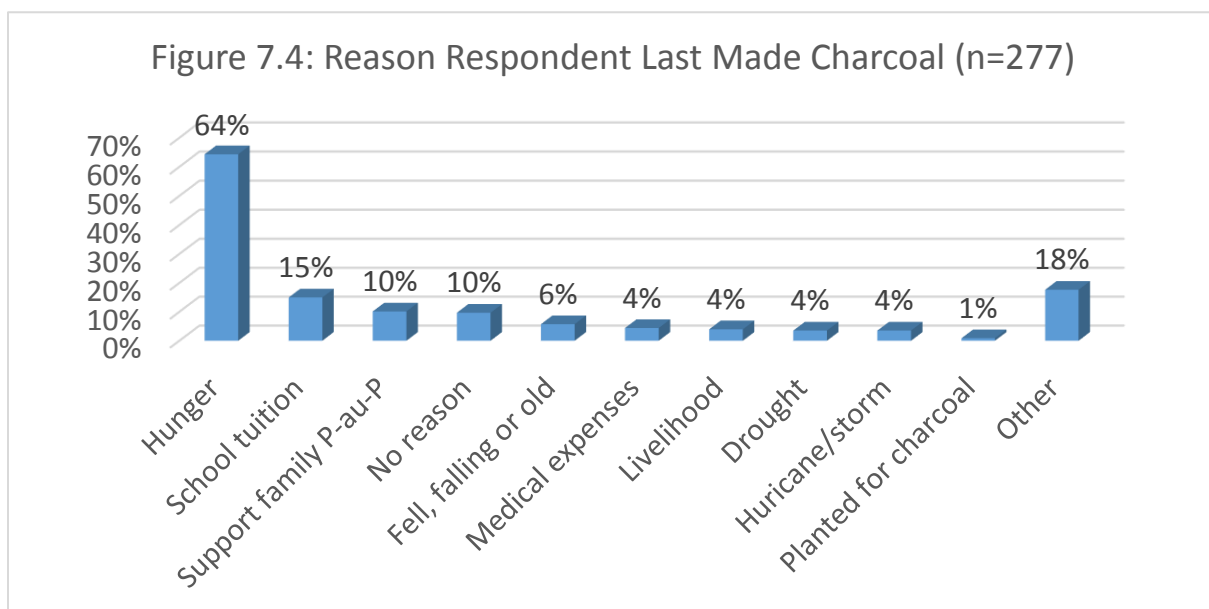
Types of Trees Used to Make Charcoal

The most common type of trees used to make charcoal the last time the respondent did so closely approximate those most frequently planted (Table 7.3: note that respondents could have used more than one type of tree last time they made charcoal resulting in the percentages in Table 7.3 adding up to greater than 100%)

Figure 7.3: Types of Trees that Respondents Use Last Time they Made Charcoal					
Eucalyptus	47%	Mahogany	4%	Coconut	1%
Mango	43%	Ash	3%	Cacao	1%
Acacia	17%	Cedar	3%	Campech	4%
Neem	13%	Abricot	2%	Sapotaceae	4%
Mesquite	7%	Grapefruit	2%	Monben	3%
Kenep	6%	Mangrove	1%	Inga vera W	3%
Oak	6%	Almond	1%	Mapou	1%
Luceana	5%	Cayemite	1%	Other	7%
Avocado	4%	Guava	1%		
Mahogany (local)	4%	Orange	1%		

Land Tenure for Charcoal Making, Planting for Charcoal, and Cutting Strategies

Fully 96% of respondents reported that the last time they cut trees to make charcoal it was on their own land (Figure 7.5). Only 10% reported ever having planted trees with the intention of making charcoal (Figure 7.6); 13% report having a stand of trees that they manage for making charcoal, a significant finding given that charcoal is a renewable and highly marketable resource (see Figure 7.7); also highly significant in this regard is that 91% of respondents report that when making charcoal they leave the main truck of the tree, suggesting that rather than simply destroying the tree most farmers are in fact attempting to manage the trees (7.8).

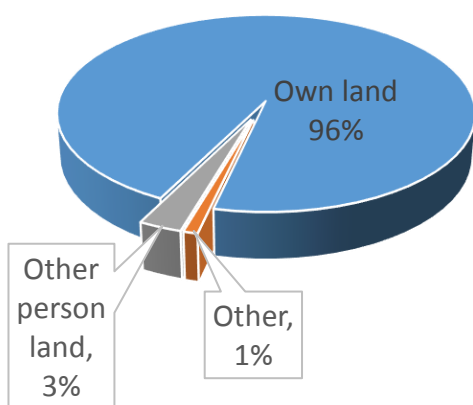Figure 7.5: Land Tenure of Trees for Charcoal (n=103)

Own land
96%

Other person land,
3%

Other,
1%

Figure 7.6: Has planted trees with intention of making charcoal (N=797)
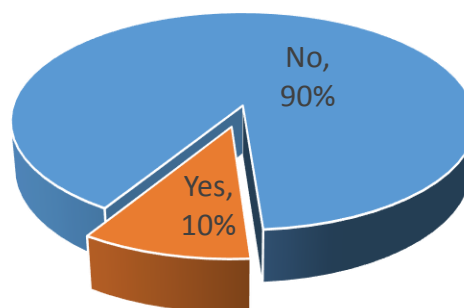
No,
90%

Yes,
10%

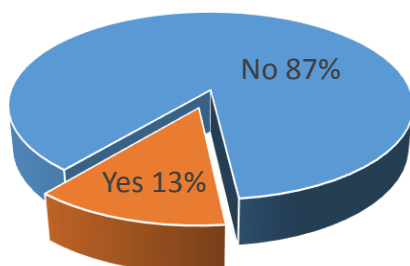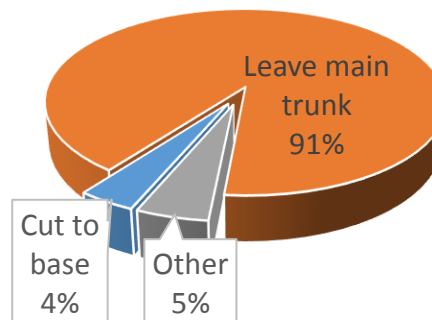Figure 7.7: Has a stand of trees that manages for charcoal (N = 797)

No 87%

Yes 13%

Figure 7.8: Cutting Strategy (n=103)

Leave main trunk
91%

Cut to base
4%

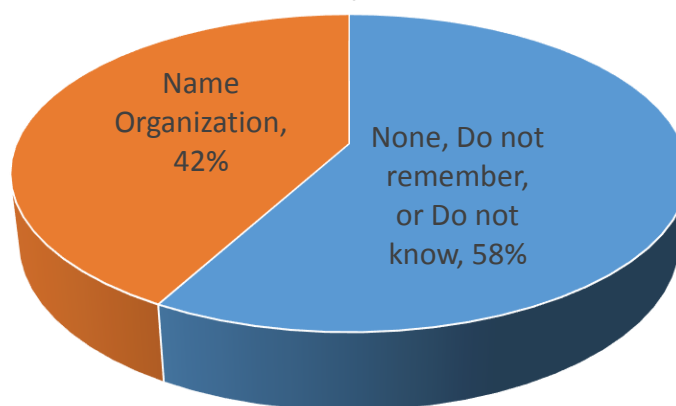Other
5%

Reason Trees Are Important

When asked what Is the main importance of trees, 91% of respondents cited soil conservation, 75% that they 'attract rain', 70% that they protect springs, 63% that they are a good source of money, and 55% mentioned trees purify the air (Figure 7.8).

Figure 7.8: Respondent Selected Choices for Importance of Trees (N=797)
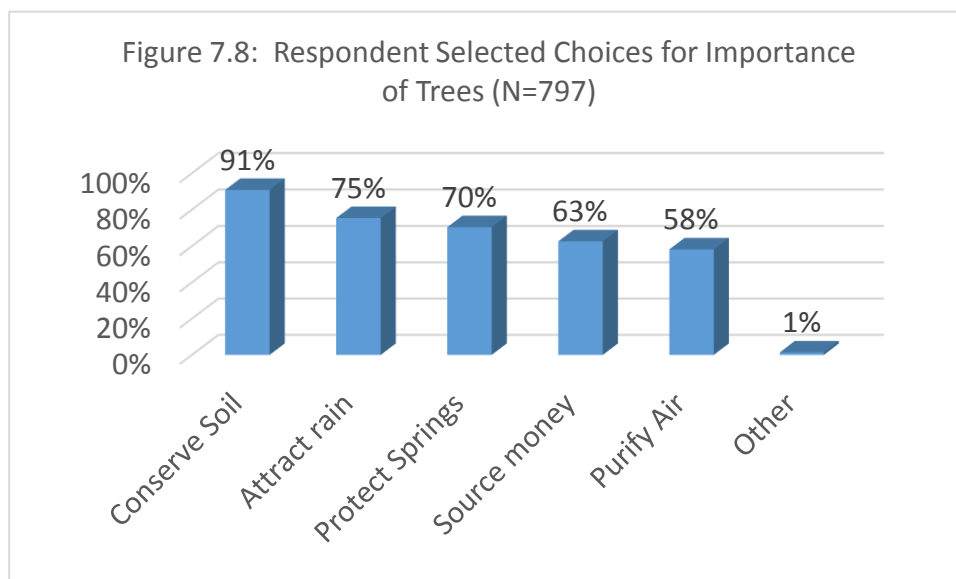
Organizations that Have Tree Nurseries

When asked about locally operant organizations that have tree nurseries, 42% respondents said they knew of at least one (Figure 7.9). Those 335 respondents mentioned 52 different organizations (Table 7.4).

Figure 7.9: Respondent Identification of Organizations with Tree Nursery in their Community (N = 797)

Name Organization, 42%

None, Do not remember, or Do not know, 58%

Table 7.4: Organizations Respondents Identify as Managing Tree Nurseries in their Community					
CODEP	93	Amkpl	2	Kay fre tanis	1
Croix rouge	63	Kay fre	2	MOKAVE	1
Otab	23	Kodette	2	Mon calves	1
Apf	18	Odep	2	Ogigret	1
Caritas	16	OJDREP	2	Oganizasyon michel	1
Floresta	14	Ojicpc	2	ogsnizasyon Kodek	1
APMKL	8	Oganizasyon posib	2	Ommbl	1
Eic	5	Ojidrep	2	Opelade	1
Rekochal	5	Afv	1	Pdf	1
Fao	5	Agonom odne	1	Ppk	1
Refe late avek 5 etwal	5	Agpp	1	Recrocharles	1
APDF	3	APEF	1	Saint antoine	1
Apdms	3	APLKM	1	Samartaine	1
Otak	3	Cadel	1	Ti foun	1
SEV	3	FVB	1	WolWinyo	1
OPA	3	Gpfb	1		
Ekos	1	Ipak	1		
Free sent terez	1	Kadel	1		

8. HERBAL REMEDIES

Knowledge

A final category investigated was practice and source of knowledge regarding of herbal remedies. Of the 797 respondents, 313 (39%) reported that someone in their home is proficient at making herbal remedies (Figure 8.1). Of those people, 84% reported having learned of the remedies from another person 4% reported learning from the Red Cross, and 2% from another NGO or CBO.

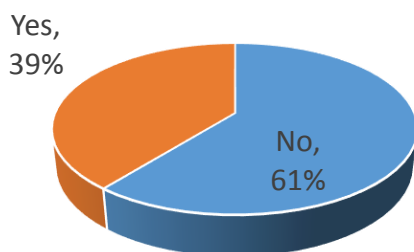Figure 8.1: Respondent with Someone on their Home Proficient at Making Herbal Home Remedies (N=797)

Yes, 39%

No, 61%

Figure 8.2: Source of Knowledge (n = 313)

84%   4%   1%   1%   11%

Other person   RedCross   CBO   NGO   Other