

## EMERGENCY MARKET MAPPING AND ANALYSIS: THE MARKET FOR AGRICULTURAL LABOR IN SUD-EST DEPARTMENT OF HAITI

microREPORT #165

### **APRIL 2010**

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### **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

### **EXECUTIVE SUMMARY**

This assessment analyzes the market system for agricultural labor in the Sud-Est (Southeast) department of Haiti in March-April 2010, several months after the January 12 earthquake in Haiti. Casual or low-skilled labor is a main source of revenue throughout the Sud-Est department, and poorer families are more likely to rely on labor as a key livelihood strategy. Therefore, interventions to stimulate or avoid harming the labor markets will have a beneficial impact on most households in the target population, and particularly on poorer families. The market for agricultural labor was selected due to the importance of agriculture to the Sud-Est economy, accounting for 26-55 percent of income in the area.<sup>2</sup>

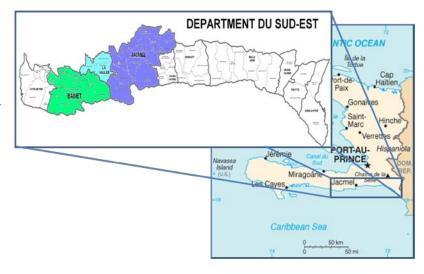
This report describes the baseline and affected situation of the agricultural labor market system and analyzes the likely impact of various interventions aimed at meeting households' basic needs. Recommended interventions include immediate cash-for-work projects to replace lost income for rural households; immediate interventions to ensure farmers have sufficient seeds and inputs to plant successfully; and longer-term interventions to stimulate rural employment opportunities and strengthen the agricultural sector.

### **SECTION I. EMERGENCY CONTEXT**

On January 12, 2010 a magnitude 7.0 earthquake struck Haiti, with the epicenter approximately 15 km west of Portau-Prince. As of March, 222,653 people were estimated to have died in the surrounding areas, with an additional 310,000 wounded.<sup>3</sup> More than 511,000 people subsequently left the Port-au-Prince area for elsewhere in Haiti, and an estimated 1.2 million are living in tents or camps.<sup>4</sup> Since the original earthquake, Haiti has experienced frequent aftershocks. A massive humanitarian response has included distribution of food (an estimated 26,500 metric tons in the first two months) and non-food items, medical services and others.

The Port-au-Prince area and the Ouest (West) and Sud-Est regions were among the hardest hit. This assessment focused on the Sud-Est department, with fieldwork conducted in the *communes* (counties) of Jacmel, La Vallée and Bainet. The Sud-Est department covers slightly more than 2,000 square kilometers, includes a population of around 575,000 – just under 6 percent of Haiti's population.<sup>5</sup> Its capital is Jacmel.

Although 90 percent of earthquake deaths occurred in the areas around Port-au-Prince,<sup>6</sup> the Sud-Est department suffered more than 400 dead and 196,670 affected in some way by



the earthquake (nearly 40 percent of Sud-Est residents). The number of displaced persons in Sud-Est is estimated at more than 50,000, with high estimates of 75,000 to 125,000. For the three communes studied in this report, 7,621

<sup>&</sup>lt;sup>1</sup> FEWSNET Haiti Livelihoods Profile 2005, reiterated in 2010 Haiti brief.

<sup>&</sup>lt;sup>2</sup> FEWS NET 2010 estimate.

<sup>&</sup>lt;sup>3</sup> Estimates vary.

<sup>&</sup>lt;sup>4</sup> OCHA map 15 February 2010.

<sup>&</sup>lt;sup>5</sup> 2009 estimate from ISHI (Haitian Institute of Statistics and Information); other estimates range around 550,000.

<sup>&</sup>lt;sup>6</sup> Source: Haiti National Risk and Disaster Management System (SNGRD), report 5 March 2010.

houses were estimated to have been destroyed with another 30,478 damaged.<sup>7</sup>

USAID estimates that 50-60 percent of houses in the Jacmel area were destroyed,<sup>8</sup> although in La Vallée and Bainet, fewer buildings appeared damaged by the quake. More than 21,000 people in the Sud-Est region were estimated to be living in spontaneous campgrounds or in structures other than their normal housing, often because they were afraid to sleep inside for fear of another earthquake.

Around 90 percent of people arriving from Port-au-Prince are staying with friends and family; most plan to return to Port-au-Prince at some point (and some have already done so). There are relatively few organized camps in Sud-Est; the largest is in Pinchinat with an estimated 6,000 inhabitants. A number of NGOs and international agencies are active in the region.

In addition to effects from the earthquake, this region is prone to hurricane damage; the hurricane season is June to November, with most hurricanes occurring in September. The area includes various geo-livelihood zones, including dry agriculture/fishing; agriculture/pastoralism, and humid mountain agriculture in the northern parts of the region. Pre-earthquake, Jacmel was known as a center for the arts and tourism. The organizations that collaborated on this assessment all had ongoing operations in the Sud-Est region, although with different programming specializations.

### **SECTION 2. EMMA METHODOLOGY**

EMMA (Emergency Market Mapping and Analysis) is a rapid market analysis designed to be used in the short-term aftermath of a sudden-onset crisis. Its rationale is that a better understanding of the most critical markets in an emergency situation enables decision makers (donors, NGOs, government, other humanitarian actors) to consider a broader range of responses. It is not intended to replace emergency needs assessments, more thorough household economic analyses such as the Household Economy Analysis (HEA), or full market assessments, but rather adds to the body of knowledge in the post-crisis period by providing timely information about the structure and functioning of key markets in the short term so that immediate programming can be based on market knowledge.

The Sud-Est region EMMA team in Haiti was composed of eight persons, including employees of four agencies (ACDI/VOCA, Save the Children, Diakonie, and CROSE) and two lead analysts contracted by ACDI/VOCA. One team leader was a specialist in enterprise development and microfinance; the other had many years of experience working in Haiti and conducting field analyses. Six of the team members were Haitian; several had experience on past EMMA assessments. One half-day of classroom training was provided; by the second day, the team was in the field. The assessment methodology included study of existing data and previous market analyses and interviews with farmers, workers and other key informants (e.g. agronomists, local government officials).

### **SECTION 3. THE TARGET POPULATION**

The Sud-Est department includes coastal areas, plains, and mountains and valleys inland. Although the types of crops planted vary according to the terrain, altitude, and irrigation, agriculture and livestock are the major source of income (some 26-55 percent of total income) in one way or another for the large majority of households – either growing, selling or related labor. <sup>10</sup> In coastal areas, fishing is also an important activity. Commerce and charcoal production comprise the other major income sources.

Main livelihood strategies differ between the department capital, Jacmel, and the more rural areas of Sud-Est. In

<sup>&</sup>lt;sup>7</sup> Ibid (SNGRD report 5 March 2010).

<sup>&</sup>lt;sup>8</sup> Map, "USG Humanitarian Assistance to Haiti for the Earthquake." USAID.

<sup>&</sup>lt;sup>9</sup> FEWSNET Livelihoods Analysis 2005.

<sup>&</sup>lt;sup>10</sup> FEWS NET 2010 estimate.

Jacmel, reported primary sources of income were salaried labor (about 20 percent of households), trade, the service industry, and informal labor.<sup>11</sup> In much of the rest of Sud-Est, agriculture (which includes agricultural labor and selling produce) is the main source of income for the majority of rural households in Sud-Est.<sup>12</sup> Both poorer and wealthier households engage in crop production and livestock raising, the poor are more likely to also engage in labor (either informal or as a skilled laborer).<sup>13</sup> Except for the very poorest, most households either own land or have access to land to work (for example through sharecropping arrangements).

Diverse livelihood strategies are common throughout the area, especially for poorer families, and often cross geographical zones. It is estimated that most households have 4-6 sources of income; agriculture, livestock rearing, commerce, specialized skills, and when times necessitate, charcoal production and migration. For example, a business owner in a Sud-Est town also owns a produce garden in the rural areas. Families often have plots both in the valleys and the mountains to grow different crops. It is also possible that in one family, a man will be responsible for crop production while his wife sells their produce and other goods in the market. Many households raise small and large livestock (goats, cattle, pigs), either their own or in a sharecropping-type arrangement. 14 Most families will own just one or two cattle and no more than half a dozen goats. When necessary, households produce and sell charcoal. Around a third of households in Jacmel, and fewer in rural areas, receive some sort of remittances, whether domestic (from Port-au-Prince), from the Dominican Republic or elsewhere.

Table 1: Gender Division of Labor in Haiti

Task	Male	Female
Housework	*	****
Cooking	*	****
Childcare	*	****
Carry water	*	****
Sell produce	*	****
Sell livestock	**	****
Harvest crops	**	****
Plant crops	***	***
Tend livestock	****	**
Prepare and weed gardens	****	**
Porter (paid)	****	**
Charcoal production	*****	
Fishing	*****	
Wage labor migration to DR	****	*
Source: Schwartz 2000. More	e stars indica	te higher

In both Jacmel town and rural areas, gender is a major

determinant of engagement in different agricultural tasks and labor opportunities. Much of the paid agriculture labor is traditionally done by men. Although women are responsible for much planting and harvesting on their family plots, and engage in other livelihood activities such as commerce, they tend not to do paid labor in the fields. Planting, weeding, harvesting and tending animals all tend to be the responsibility of men, as shown in the chart on this page.

Regular risks to livelihood security in Sud-Est include the hurricane season (particularly near the coast) as well as extensive erosion, deforestation and erratic rainfall, which affect crop production. <sup>15</sup> There are main roads connecting the eastern and western ends of the Sud-Est department (Côtes de Fer and Thiotte) to Port-au-Prince, as well as a good road from Jacmel to the capital. Roads from one area of Sud-Est to the next, however, are often of poor quality and liable to flooding during hurricane season or other blockages. Income tends to be highest from October to December, falling in the early months of the year and lowest in April and May before a June harvest season.

Due to these risks and fluctuations, Sud-Est households employ a variety of coping mechanisms. Households save up in good times (often by buying livestock or investing the money in petty commerce) and spend down their reserves when needed. Producing and selling charcoal is a common fallback strategy, for example when harvests are bad.

<sup>&</sup>lt;sup>11</sup> Emergency Food Security Assessment p. 7, citing WFP November 2009 survey.

<sup>&</sup>lt;sup>12</sup> Emergency Food Security Assessment p. 7, citing World Food Program November 2009 survey.

<sup>&</sup>lt;sup>13</sup> FEWSNET Haiti Livelihoods Profile 2005 – excepting middle-class professional employees, e.g. teachers.

<sup>&</sup>lt;sup>14</sup> A disease hit last year that wiped out much of the pig population, hurting rural incomes and savings in livestock.

<sup>&</sup>lt;sup>15</sup> FEWSNET Haiti Livelihoods Profile 2005.

Selling or eating livestock is another strategy; households also adjust food intake, by omitting meat and oil or eating starchy staples such as plantains and yams. Temporary labor migration to other parts of Haiti or to the Dominican Republic is also common. All of these coping strategies were evident in the post-earthquake context.

The Sud-Est department (and all of Haiti) is a cash economy, even in remote areas. Even with agriculture as a major economic activity for most households, families in all income levels purchase most of their food. This varies by geographic zone, and rural families get more of their food from their own production, but on average Sud-Est residents purchase perhaps two-thirds of their food. The poorest spent nearly three quarters of their income on food. Pre-earthquake, approximately 5 percent of Sud-Est rural households experienced severe food insecurity, while 15 percent were moderately food insecure, compared with national rates of 6 and 19 percent respectively.

Rural incomes vary widely by economic class and by season, but interviewees indicated that pre-earthquake, typical income for a household was about 100 gourdes (about \$2.50) per working adult per day. Thus, a typical two-adult household would have daily income of around 200 gourdes or \$5 a day. 18 Median household income in the city of Jacmel is higher – about 350 gourdes per day.

Table 2: Livelihood Analysis, Baseline and Affected (Small Sample)

Per Month:	Ru	ral	Urban		
	Baseline	Affected	Baseline	Affected	
Income	2000-8000 HTG	1000-4000 HTG	6000-9000 HTG	4000-8000 HTG	
Expenditures	1500-6000 HTG	800-6000 HTG	5000-7000 HTG	2000-5000 HTG	

Approximate exchange: 40 gourdes to the US dollar, 54 gourdes to the euro, and 60 gourdes to the British pound.

Initial estimates indicate that the average drop in income after the earthquake, based on a small sample, ranges from around 20-50 percent. The corresponding drop in expenses is approximately 10-50 percent. This is in part because families are 'saving' money by not paying expensive school fees while schools are closed. Health care, usually quite costly, was provided for free in many areas. Some households have seen their expenditures shrink because they do not need to make business investments (e.g. buying clothing for resale) for enterprises that are no longer profitable. Others now spend more on transportation as they look further afield for work. The decrease in food expenditures ranges from 10-45 percent, usually cutting consumption of meat, beans, oil and luxuries. This was offset by increased consumption of one's own produce – often starchy crops (yams, manioc, millet) and fruits. However, this tendency to forgo proteins is troubling from a long-term nutritional perspective. As the economy recovers, it will be important to ensure that incomes continue to match households' basic needs.

A variety of crops are grown in Sud-Est, including beans, corn, millet, sweet potatoes, yams, manioc, pumpkin, squash, as well as fruit trees including plantains, coconuts and oranges. The timing of planting and harvest seasons also varies with the terrain, whether in mountainous areas or in the valley and plains. It is important to note that for many crops, the planting season is more labor-intensive than the harvest season.

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<sup>&</sup>lt;sup>16</sup> Emergency Food Security Assessment 2010; FEWSNET Livelihoods Profile 2005; USAID FEWSNET Haiti Crop Production/Consumption Map. A small sample of rural households purchased 20-60 percent of their food.

<sup>&</sup>lt;sup>17</sup> Emergency Food Security Assessment 2010.

<sup>&</sup>lt;sup>18</sup> Wealthier rural households earn far more – 500 gourdes/working day or more.

<sup>&</sup>lt;sup>19</sup> Some sectors, of course, have benefited from the 'relief boom' – transportation, phone-card sales, NGO work, and some hospitality businesses.

<sup>&</sup>lt;sup>20</sup> This is obviously in the long run not a savings.

Table 3: Seasonal Calendar for Sud-Est Department, Haiti

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Demand for local agricultural labor												
Domestic labor rates highest in the mountains												
Rainy Seasons												
Hurricanes/Cyclones						worst						
Hungry Season												
Remittances												
Bean and Corn Planting	low			high	lands			pla	ins			high
Bean and Corn Harvesting		highl	ands				high	lands			plains	
Unskilled labor migration to Port-au-Prince												
Temporary migration to DR for sugarcane												
Yams, cassava, etc in wetter mountainous areas	year - round											
Yams for dryer areas in Sud-Est	plant						har	vest				plant
Education/Schooling												
Holidays	Easter		_						Xmas			

### **SECTION 4. CRITICAL MARKET SYSTEMS**

Critical market systems are those that "played, play, or could play a major role in ensuring survival and/or protecting livelihoods of the target population" in an emergency context. ACDI/VOCA convened a meeting of agencies active in the Sud-Est region, including Save the Children, Diakonie (a German NGO), CROSE (a regional NGO), Medair, World Food Program, MINUSTAH (the UN Haitian Stabilization Mission), the UN Shelter Cluster, and the Haitian Ministry of Agriculture. In all, fourteen markets were proposed, including staple foods such as rice, beans and plantains; various labor markets; construction tools and materials (cement, etc); and agricultural inputs. These were rated by the degree to which they were affected by the earthquake or the emergency response; the market's importance to survival or livelihoods; the feasibility of implementing a related response; and agencies' mandates to intervene in this sector.

Three market systems were prioritized: beans, labor markets and construction materials. Due to human resource and time limitations, two markets were selected: the beans market and the agricultural labor market. The geographical area for fieldwork was set at the communes of Jacmel, Bainet, and La Vallée. This report addresses the market system for agricultural labor.

### RATIONALE FOR SELECTION OF AGRICULTURAL LABOR SYSTEM

A 2005 livelihoods assessment found that labor (usually casual or unskilled) is a main source of revenue for all of the geographical/livelihoods zones in Sud-Est department, and that poor and very poor families earned a proportionally greater share of their income from labor – up to 80 percent or even more for the very poor.<sup>22</sup> Therefore, interventions to stimulate or avoid harming the labor markets will have a beneficial impact on most households in the target population, and particularly on poorer families. The market for agricultural labor was selected primarily because of the great importance of agriculture to the Sud-Est economy. In the humid, mountainous areas of Sud-Est, "agriculture represents the biggest source of employment," and very poor households might earn up to 60 percent of their income from agricultural labor during planting and harvest times.<sup>23</sup> Agricultural production in total accounts for 26-55 percent of income in Sud-Est department.<sup>24</sup> Additionally, many planned cash-for-work projects (reforestation, anti-erosion earthworks) draw on agricultural skills and have the potential to displace agricultural employers if designed without knowledge of agricultural labor markets.

Key Analytical Question: What is the best way to help affected households in Sud-Est department meet basic needs while not harming the market for agricultural labor?

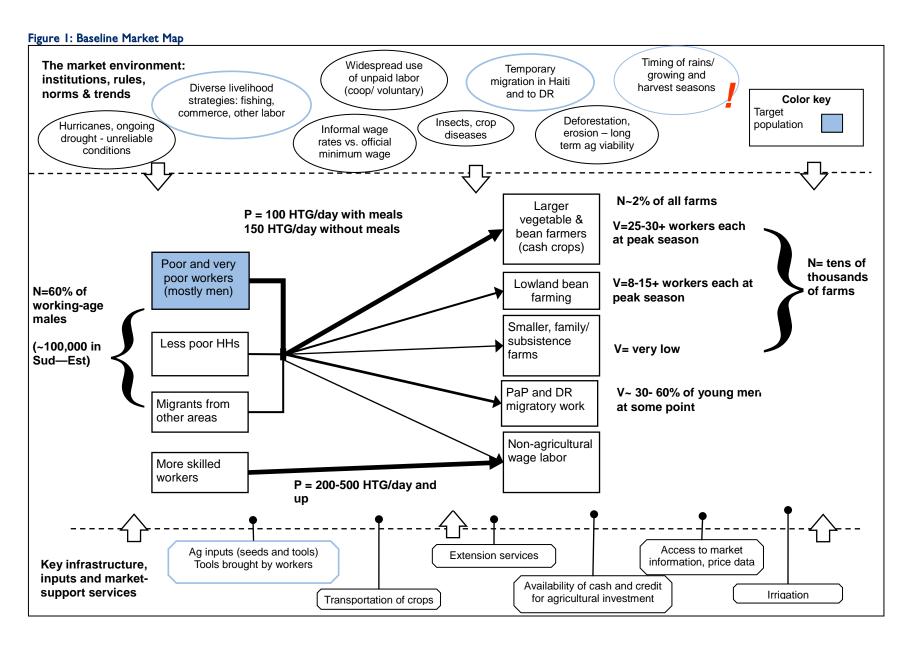
<sup>&</sup>lt;sup>21</sup> EMMA Toolkit, p. 46.

<sup>&</sup>lt;sup>22</sup> FEWSNET Haiti Livelihoods Profile 2005. Zones 3, 5 and 6 are present in Sud-Est.

<sup>&</sup>lt;sup>23</sup> FEWSNET Haiti Livelihoods Profile.

<sup>&</sup>lt;sup>24</sup> FEWS NET 2010 estimate.

### SECTION 5. AGRICULTURAL LABOR MARKET-SYSTEM MAPS



### **PRICES**

Prevailing wage rates for agricultural labor are as follows. These were highly consistent across the areas surveyed:

Table 4: Wage Rates for Agricultural Labor

Rate	Time Worked	Extras
50 gourdes ~ \$1.25	Half day (6-11am or 7am-noon)	Breakfast included
75 gourdes ~ \$1.88	Two-thirds of a day	Breakfast and lunch included
100 gourdes ~ 2.50	Whole day (6-7am until 3-4pm)	Breakfast and lunch included
150 gourdes ~ \$3.75	Whole day	No meals provided

Farmers can also hire agricultural workers on a fixed-price basis to carry out specific tasks.

### MARKET ENVIRONMENT

The unpredictability of rains means that the demand for labor is similarly unpredictable. Farmers in most areas cannot begin planting until after the rains start, or else the crops will die in the hot, dry soil. This results in high seasonal variations; for crops such as beans, there is a large labor surplus in the weeks before the rains begin, followed by an immediate spike in demand and a labor shortage for several weeks. Deforestation and erosion undermine the long-term viability of agriculture, including agricultural labor, as a livelihood strategy.

There are several important factors affecting labor organization. First, as noted earlier, most people in Sud-Est have a number of livelihood strategies. This means almost nobody engages purely in agricultural labor as their only source of income, which implies that working as an agricultural laborer has an obvious opportunity cost: all laborers could be doing something else, so availability of work, wages and skill levels are important. (Nearly all agricultural work can be considered low-skilled.) One common alternative is to move to Port-au-Prince (sometimes temporarily, sometimes permanently) or to the Dominican Republic (usually temporarily) to find work there, often in agriculture, construction, tourism or domestic work. Some of these alternative sources of employment are shown in the market chain map.

Additionally, much agricultural labor in Sud-Est is done by means other than paid labor. Different types of non-wage agricultural labor arrangements include cooperative agreements, such as reciprocal work groups (each member of the group is owed labor and in turn labors on others' land); sharecropping arrangements; voluntary assistance on neighbors' and friends' plots; and others. Planting and harvesting are most often accomplished through one of these arrangements, whereas soil preparation, fertilization and weeding are more often carried out by paid workers. These arrangements are not discussed in detail in this report because they do not directly provide income, although there is an opportunity cost (as well as a benefit) to participating or not participating in these non-wage agreements.

### KEY MARKET ACTORS

The key actors in the agricultural labor market are, on the one hand, the rural workers who constitute labor supply (most of whom own or sharecrop their own plots as well, and are not full-time laborers) and on the other side, the farmers who hire labor.<sup>25</sup> Paid wage labor is more common among farmers growing crops that require rapid planting and harvest, such as certain vegetables and beans. These crops generate enough cash to be worth the investment of paid labor (as well as of more intensive fertilization, transport, etc). Larger farms (a small minority of all farms) are

<sup>&</sup>lt;sup>25</sup> No reliable, current estimate of the number of farms in Sud-Est. The 1971 census counted 616,700 farms in the country – even with a significant decrease Sud-Est's proportion would be 10-30,000 farms, most of which are quite small.

also more likely to hire paid labor, as the need for workers exceeds their network of family members, friends and clients. Smaller family farms are less likely to hire workers, and hire few workers when they do. For example, one family with two plots said that the most men ever hired at one time was eight, whereas a wealthier landowner said that during peak planting seasons, he might hire 25-30 men. Workers tend to be hired by the day or half-day.

Although labor is a part of the livelihood strategies of most households in Sud-Est, generally speaking, the poorer a household is, the higher a percentage of income it derives from labor (excepting middle-class skilled workers, such as teachers). As noted earlier, women tend not to be hired agricultural laborers, although they do most harvesting (except for difficult crops such as tubers) as well as some planting and weeding in their own gardens and on relatives' plots.<sup>26</sup>

Although it may be misleading to speak of 'unemployment' given the large informal sector in Haiti and the fact that labor is usually one of many income sources for households, unemployment and underemployment are generally acknowledged to be pervasive in Haiti. When agricultural labor supply exceeds demand in Sud-Est department (as it often does), many rural workers usually try to find more lucrative work in other sectors (in commerce, construction, driving motorbike taxis, etc). Temporary migration to Port-au-Prince or to the Dominican Republic serves an important function in absorbing excess supply and providing household income. Estimates vary widely, but a decade ago, perhaps 20-30 percent of men in Sud-Est might go to the Dominican Republic at some point in their lives. This has been increasing steadily. Key informants reported that informal migration to the Dominican Republic is very common, particularly for those living in the eastern part of Sud-Est closer to the border (Thiotte, Anse-à-Pitres). In 2008, farmers in Thiotte reported difficulty finding enough workers because laborers are attracted to higher wages across the border and agricultural production suffers as a result.<sup>27</sup>

### KEY SERVICES AND INFRASTRUCTURE

Key services critical to agriculture and therefore agricultural labor include seeds (provided by farmers) and tools (brought by workers); credit; transportation; and access to market and price information. The majority of farmers irrigate land by hauling buckets from nearby springs or rivers (only about 2 percent of arable land is irrigated by canal). Financial services in Haiti are quite limited, and appropriate financial products for agriculture are uncommon.<sup>28</sup>

<sup>&</sup>lt;sup>26</sup> Based on preliminary analysis of this issue, this does not seem to necessarily be a case of women's *exclusion* from agricultural wage labor. Women seem to prefer working in commerce (indeed it may often be more lucrative), although women will work in agriculturally-related cash-for-work projects.

<sup>&</sup>lt;sup>27</sup> ACDI/VOCA staff, June 2008 rapid rural assessment. Informal migration is often handled by 'bucons' (middlemen) who arrange payments to border officials. However, it is not without risks; with wages paid at the end of the month, some Haitians have worked and not been paid, leaving them with little recourse.

<sup>&</sup>lt;sup>28</sup> Financial service providers include cooperatives, microfinance institutions, and moneylenders, though few services have loan terms and timing that align with agricultural timelines.

Figure 2: Agricultural Labor Market System Two Months After Haiti Earthquake The market environment: Deforestation, Symbol Key Widespread use institutions, rules, erosion - long Insects, crop Diverse livelihood of unpaid labor norms & trends term ag viability diseases Critical issue strategies: fishing, (coop/ voluntary) commerce, other labor Temporary Major disruption Hurricanes, ongoing Late rain/delayed migration in Haiti Informal wage drought- unreliable planting season rates vs. official and to DR Partial disruption conditions minimum wage Larger vegetable & bean farmers (cash P = 100 HTG/day with meals crops) 150 HTG/day without meals Poor and very poor workers (mostly men) Lowland bean farming V= lower Less poor HHs Smaller, family/ subsistence farms Migrants from PaP migratory work other areas N~ P = 200 HTG/dayPersons from 29,000+ V~ up to 30% of DR migratory work Cash- and Port-au-Prince workingyoung men and 5% of Food- for work age IDPs) young women now programs Non-agricultural wage More skilled workers P = 200-500 + HTG/dayAg inputs (seeds and tools) Access to market Availability of cash and credit for Seeds provided by NGOs information, price data Key infrastructure, agricultural investment inputs and marketsupport services Transportation of crops Extension services Irrigation

### **PRICES**

Wages for agricultural labor – 100-150 gourdes per day – seem to have stayed the same post-earthquake, perhaps because these are culturally entrenched. The official minimum wage in Jacmel is 200 gourdes or approximately \$5 a day, which NGOs organizing cash-for-work projects in the town of Jacmel have agreed to pay.<sup>29</sup> If extended to rural areas (this is currently open to flexibility), the rate would be far more attractive than the informal wages paid for agricultural labor, potentially drawing agricultural laborers away from the fields at key times.

### MARKET ENVIRONMENT

Late rains this year mean that farmers, as of the EMMA team's fieldwork conducted in late March and early April, had not begun planting seasons for some crops, and therefore agricultural laborers could not accurately predict when farmers would be hiring.

Many planned cash-for-work programs (see "Market Chain Actors") are considering environmentally-themed projects, such as reforestation and anti-erosion barriers. Given that the agricultural sector is now even more vulnerable than before, addressing environmental concerns is a critical issue for ensuring the resiliency and profitability of agricultural (and therefore of agricultural employment).

### MARKET CHAIN ACTORS

Larger farmers who are the normal agricultural employers have been economically hit by the earthquake. This has a double impact on labor. First, farmers have less money to pay wage labor, making it harder to prepare the land for planting crops in time as the rains begin. Second, farmers are less able to buy seeds and other inputs (although several agencies have significant seed-distribution programs for some crops), which means they may plant fewer crops than normal, resulting in less need for labor. Farmers are relying as much as they can on unpaid help from relatives and friends, and women who do not normally do certain tasks may step in.

Following the earthquake, at least 50,000 or more people left Port-au-Prince for the Sud-Est region; most are staying with relatives or friends. They tend to be younger, often students or young women with children. These individuals tend to be well-educated and often look down upon performing manual or agricultural labor, even though they have few alternatives for earning a livelihood (indeed, some have already returned to Port-au-Prince because of the lack of employment opportunities in Sud-Est). Most of these internally displaced persons (IDPs) rely on help from family and friends to get by, and in return contribute to the household economy (e.g. helping in family gardens). Many of these people sent money to their families in Sud-Est while they lived and worked in Port-au-Prince, so their return represents a double economic hit for their families: a lost income source and an increase in expenditures.

Interestingly, key informants note that while farming tasks such as planting and tilling might be unseemly to IDPs from the capital, cash-for-work projects such as "reforestation" or "soil erosion barriers" are acceptable, because they have a certain cachet of being progressive and environmentally responsible. This is despite the fact that the physical work (e.g. planting a tree sapling versus planting crops) is very similar. Therefore, IDPs may be attracted to cash-forwork programming though they are quite unlikely to do agricultural wage labor.

Additionally, several NGOs and international agencies have already begun cash-for-work programs in Jacmel, and more for-work programs (cash and food) are planned for rural areas beginning in April 2010. These are indicated with a dotted line on the affected map. Although there are a large number of cash-for-work activities in Haiti, these are mostly concentrated in Port-au-Prince and other areas such as Ouest, Artibonite, and Sud departments.

<sup>&</sup>lt;sup>29</sup> ACDI/VOCA staff; Early Recovery cluster.

Table 5: Current and Planned Food- and Cash-for-Work projects in Sud-Est Department, Haiti

Agency	No. employees	Location	Type of work
ACDI/VOCA	2,000/month	Thiotte, La Vallee, Bainet,	Hurricane mitigation,
		Cotes-de-Fer	reforestation, road repairs,
			debris removal, ag
			infrastructure
Food for the	[not known]	Siloé	Rubble removal
Hungry			
Jacmel Mayor's	779	Jacmel (town)	Debris removal, waste mgmt
Office			
Plan	[not known]	Jacmel	
Save the Children	2000 planned, of which	Evenly split between	
	1,290 current – could	towns and rural areas	
	increase considerably		
UNDP	[not known]		
Welthungerhilfe	600	Jacmel (town)	Construction
World Food	[not known]		
Program			

<sup>\*</sup>Data from organization staff and the Early Recovery cluster "Who What Where" database, accessed 15 April 2010.

Other usual employers of unskilled and low-skilled individuals have been seriously affected by the earthquake. For example, despite the obvious opportunities in the construction sector, reconstruction has not started due to a number of factors. (See Feb 2010 EMMA report on construction labor for more details.) This means that the normal seasonal surpluses in agricultural labor have been exacerbated. Migration to the Dominican Republic (usually unofficial) was already growing pre-earthquake, and has increased significantly as Dominican demand for labor was unharmed by the earthquake. Some estimates suggest that as many as 20-30 percent of young men and 5 percent of young women have gone across the border.

### KEY SERVICES AND INFRASTRUCTURE

A drop in income and assets region-wide, coupled with the lack of appropriate agricultural financial services, mean that many farmers do not have the cash to buy seeds and other inputs and are therefore unlikely to hire as many workers as usual. This means not only a demand-side disruption in the agricultural labor market but also a potential supply disruption later on in the year for many crops.<sup>30</sup> This can lead to a downward spiral of under-planting, causing lower labor demand, which in turn causes a drop in income both for those who work as agricultural laborers as well as for farmers come harvest season, leading finally to potential food price increases and increased food insecurity. (See 2010 Sud-Est Beans EMMA assessment for more information.)

Several international agencies are currently engaging in seed distribution activities, purchased from farmers in 'seed multiplier' programs, so this will help to mitigate this effect. For example, ACDI/VOCA provided certified seed for beans and tubers, as well as cash, to 6,000 farmers in the region. However, it is not known if the quantity of seeds distributed is equal to the need in this region.

<sup>&</sup>lt;sup>30</sup> See the 2010 Haiti Sud-Est Region Beans EMMA Assessment for more information and suggested interventions.

### SECTION 6. KEY FINDINGS: GAP AND MARKET ANALYSIS RESULTS

**Key Analytical Question:** What is the best way to help affected households meet their basic needs while not harming the market for agricultural labor?

Table 6: Income Gap Analysis

Post-Earthquake Income Gap for Sud-Est Households <sup>31</sup>						
Population Median Monthly Average Income Loss						
		Income / Household				
Pre-Earthquake	550,000 - 575,000	2000-8000 HTG rural	2,200 HTG per household per			
	(~110-115k HHs)	6000-9000 HTG urban	month (~\$6.05 million)			
Post-Earthquake	600,000 - 625,000	1500-6000 HTG rural	Reported lost income ranged			
	(same no. of HHs)	4000-8000 HTG urban	from 0 to 4,400 gourdes/month.			

Because of the frequency of economic crises in Haiti, the January 12 earthquake cannot be treated as a one-time catastrophe causing stark before-and-after differences in expenditure and consumption. Households in Sud-Est had already developed an array of coping strategies, such as consuming more homegrown produce such as starchy tubers, and spending down cash and asset reserves. This results in a gradual decline of quality of life, rather than a large, sudden drop. Therefore, it is difficult to quantify the exact gap of meeting basic needs, and more effective to examine normal versus affected income levels. Restoring normal income levels should result in a similarly gradual increase in quality of life (e.g. starting to purchase more nutritious foods) and a buildup in savings to mitigate the impact of the next crisis.

### MARKET ANALYSIS: PAST, PRESENT AND FUTURE PERFORMANCE

In the pre-earthquake environment, the agricultural labor market was characterized by an oversupply of labor most of the year, except for the planting season and the harvest season, when demand meets or even outstrips supply. Very few households therefore rely on agricultural labor as a main source of income, rather they engage in some agricultural labor during peak seasons, and rely on other types of labor, commerce, sale of produce, and other strategies to generate income. Households also save up during flush times and spend down their reserves in lean times.

Currently, labor demand is down since farmers do not have as much cash/assets on hand to buy the same amount of seeds, other inputs and labor as they usually would. This is a critical issue, not only for the labor market, but because if not addressed it can lead to a downward spiral of under-planting, undersupply of labor, smaller harvests, smaller incomes for farmers and workers, and decreased food security due to lower supply, which affects subsequent seasons.

In addition, labor supply is up, due to the influx of people from Port-au-Prince and the drop in demand for other, more lucrative types of labor (such as construction). Labor prices (i.e. wages) are unchanged, perhaps because these are culturally entrenched or because they are quite low in the first place and not able to drop much further.

The future performance of the agricultural labor market is likely to continue to be one of general oversupply. Given the influx of IDPs and preexisting underemployment, as well as IDPs' aversion to agricultural labor, even a vigorous cash-for-work program seems unlikely to create a shortage of agricultural laborers. The wage rate, if set at the 200 gourdes/day Jacmel rate, will certainly draw workers receiving 100-150 gourdes/day for farm work. However, if rural rates are set just below or near these rates, and particularly if a half-day work day is used during planting and harvest

<sup>&</sup>lt;sup>31</sup> Estimates of pre-earthquake population and the number of IDPs still remaining in Sud-Est vary. Since most displaced persons from Port-au-Prince are staying with relatives and friends, number of households is stable but more people per household – thus greater need for income. Income estimates are based on self-reported household data and secondary sources, thus complete accuracy cannot be obtained. Some households reported stable incomes.

season, workers could engage in critical land-preparation and planting work in the morning and go to a cash-for-work site in the afternoon (or vice versa).

Based on study of the beans market in Sud-Est and informal market observations, in general there does not seem to be a supply shortage for most basic goods. This means that a cash-based intervention is unlikely to result in shortages or price inflation. For most staple produce, the Sud-Est regional markets are relatively well integrated with the main market in Port-au-Prince.<sup>32</sup>

### FOR FURTHER STUDY

- Possibilities for longer-term interventions that can create sustainable, long-term employment opportunities in Sud-Est, beyond short-term interventions such as cash-for-work (such as alternative fuel production from agricultural waste products). Exploring such possibilities is included in the Recommendations section of this report.
- Assessment of the other major agricultural value chains in Sud-Est (beyond the beans market explored in a companion EMMA report, April 2010), such as corn and yams, to see how these might be promoted to stimulate employment, and to confirm that there are not shortages in local markets of these goods that could be exacerbated with a cash intervention.

### SECTION 7. MAIN RECOMMENDATIONS AND CONCLUSIONS

The vast majority of interviewees indicated a preference for cash-based assistance. A few interviewees suggested that in-kind (i.e. food)-based assistance would be appropriate, but with caveats: only if phased out by the beginning of a main harvest season in June, and if the food was procured from local Sud-Est retailers as much as possible. Others indicated that a mix of cash- and in-kind payment would be acceptable, with the majority of payment being cash.

Those asked about the types of projects that would be preferred suggested soil conservation and anti-erosion earthworks; road improvements; reforestation and other types of projects that would have spillover effects for the community and the economy. 33 Several informants specifically requested that short-term employment opportunities be provided in the more rural zones, not just in the larger towns. Two informants also suggested that cash-for-work or food-for-work interventions be designed in such a way that they do not undermine or compete with church and community volunteer programs that are common in Sud-Est. Therefore, community members should play an active role in the design of the cash-for-work interventions to address this program design issue.

The EMMA team proposes the following actions, split into addressing three major issues:

### To help agricultural producers afford inputs and labor in this growing season:

- Distributing quality (certified/germination-rate tested) seeds and other inputs in order to prevent farmers
  from under-planting this season and causing the 'downward spiral' of underproduction and shrinking
  incomes discussed earlier.
- In the longer term, a functioning seed system should be supported to provide quality seeds at affordable prices.

<sup>&</sup>lt;sup>32</sup> Based on FEWS NET price data, 2005-2010. Prices for locally produced goods such as maize are less likely to track Port-au-Prince prices, but for imported commonly used goods such as pasta and rice, Jacmel prices rise and fall predictably based on Port-au-Prince prices.

<sup>&</sup>lt;sup>33</sup> However, these are usually the projects that international agencies fund, so it is likely that at least some respondents provided the answers they thought interviewers wanted to hear.

• Consider providing assets to larger farmers – conditional cash grants or commercial-rate loans – to help provide an immediate boost and liquidity to farmers.

## To help affected households regain lost income while not displacing regular employment in the immediate term:

- Provide cash-for-work in areas easily accessible to rural workers. This can be done even during the labor-intensive planting season (particularly April) so long as half-day employment is provided during this time (e.g. cash-for-work in the morning and planting employment in the afternoon).34 This should be done with the express purpose of increasing households' buying power in the short term (3-12 months) to make up for the gap caused by lower labor demand. A cash intervention should also have spillover effects in jump-starting the selling and trading that drives much of the Haitian economy.
- Be aware of targeting considerations for cash-for-work. Past for-work programs were perceived as liable to elite capture, as people thought that political figures arranged for spots to be given to their supporters. Cash-for-work programs can be targeted to displaced persons form Port-au-Prince, so long as this is done in a manner that does not cause resentment among the host community. Targeting women may also be a good idea, as women are not in the typical pool of agricultural laborers; however this should be done with sensitivity to women's household and other livelihood activities (e.g. planting and harvesting their own and others' land in unpaid arrangements; commerce and petty trade; childcare and other household duties), for example by offering half-day work arrangements.
- Set wage rate for cash-for-work in rural areas so that it does not compete with the 100-150 gourdes/day rate paid for agricultural labor, and to ensure targeting of poorer households.
- If food-for-work must be done, it should be limited as much as possible: i.e. by only providing food up until the harvest season starts in June; providing payment partly in cash and partly in food; or by purchasing food locally (from retailers rather than farmers, in order to avoid harming the rest of the market chains for staple foods).
- Provide unconditional cash grants to the most vulnerable, i.e. those households without any able-bodied workers, at least for the next several months and with a clear exit strategy.
- Continued monitoring of prices of staple foods (e.g. through FEWS NET) and NFIs, particularly through
  major harvest seasons, and monitoring income levels through the end of 2010 or beyond (particularly income
  from non-cash-project sources) to ensure that interventions do not cause unintended consequences, e.g.
  driving up prices through inflation or creating shortages.

### To stimulate agricultural employment in the medium and longer term:

Exploration of viable alternative rural/agricultural employment opportunities, for example processing
agricultural waste for alternative fuels. This would require a separate, in-depth viability analysis of any
activities to be promoted.

<sup>&</sup>lt;sup>34</sup> The half-day work day, or timing around the planting and harvesting seasons, is particularly important because planting and harvesting are usually carried out through the unpaid arrangements described earlier in this report. Given the community importance of these arrangements, it would not be advisable to create paid opportunities that might entice some to forgo typical cooperative arrangements.

- Partnering with existing financial institutions, or establishing new facilities if necessary, to provide agricultural
  financial services on a sustainable basis. This includes not only credit (with appropriate loan terms that
  respond to growing and harvest cycles) but also more sophisticated offerings such as crop insurance.35
- Disaster risk reduction interventions across agricultural value chains, especially those that are most susceptible to damage from the 2010 hurricane season.

For the full table of response recommendations please see the Annexes.

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<sup>&</sup>lt;sup>35</sup> Opportunity International and others have good examples of simple crop insurance products based, for example, on rainfall, to minimize the cost of verifying damage. This strategy would require a nationwide or international partner to spread risk, as all farmers in Sud-Est are essentially vulnerable to the same shocks.

### **ANNEX I. RESPONSE RECOMMENDATIONS TABLE**

Response Activities	Key Risks and Assumptions	Timing Issues	Likely Effect on Market System and Target Groups	Possible Indicators
Unconditional cash transfers for the most vulnerable.	Careful and transparent targeting criteria. Need a clear exit/transition strategy.	Next 3-12 months.	No effect on labor market as most vulnerable are unable to work, but should help reinvigorate demand for basic food and NFIs, and meet gap in basic needs.	-HH income levels, trending towards normal -Prices of staple foods through harvest season.
Cash-for-work (timed and structured so as not to harm planting and harvest activities).	Careful, transparent targeting criteria. Activities selected with community support. Wage rates must not exceed customary wages.	Next 3-12 months. Design to not draw away from planting and harvest.	Along with cash transfers, should meet gap in lost income, ensuring households can meet basic needs (and hopefully stimulating markets for staple foods and basic NFIs). Activities that contribute to environmental resiliency will help long-term viability of agriculture.	Number of beneficiaries; amount of wages paid; monitoring of prices and quantities for staples over next 3-12 months.
Distributing (continuing distribution of) quality (certified, germination- tested) seeds, ideally through local purchase programs, seed loan/seed multiplier programs, etc.	Need to target growers who cannot otherwise access seeds. Distribution selected because there are almost no private-sector purveyors of quality seeds. However, distributions do take away business from market actors (retailers and Saras) who sell low-quality grain to plant. This may in fact be desired, but the resulting resentment must be addressed.	Must happen immediately to have effect.	Will free up limited farmer cash to pay workers, avoiding further drop in employment. In the short to medium term, working with farmer associations to produce and multiply seed is more sustainable than straight distributions. In the long term, a private-sector seed system is more sustainable and can stimulate agricultural employment by stabilizing agricultural value chains. (See April 2010 Haiti Sud-Est beans EMMA report for more details.)	Quantity of seeds distributed as percentage of estimated unmet need for seeds; number of mandays hired for farmers as compared to last year or 'normal' year.

Cuanta an lasas	Conious tongeting	Cuadia	\\/:II = novido formores	Datas of sood
Grants or loans	Serious targeting	Credit	Will provide farmers	Rates of seed
to larger	issues – resentment	would be a	with liquidity to buy	purchase and
farmers.	is likely for non-	better	seeds and pay farmers,	labor hiring as
	participants.	option but	which should help to	compared to
		would be	normalize agricultural	baseline years.
	For cash grants,	very difficult	employment and	
	would need to have	to set up	(perhaps more	Repayment rates
	clear expectations	successfully	importantly) ensure that	if credit is
	and follow-up.	in the very	fields are not under-	provided.
	Both options have	short term.	planted due to a lack of	
	implications for	Cash grants	assets to buy seeds, labor	
	longer-term financial	could be	and other inputs.	
	services which must	given		
	be taken into	immediately.		
	consideration.		_	
Stimulation of	Requires closer	Can begin in	Economic access to	Establishment of
existing financial	examination of	next several	agricultural inputs can	institution or
institutions, or	financial landscape in	months,	help to smooth the	partnership; new
establishment of	Haiti and possible	with longer-	demand for agricultural	financial products
new facilities, to	product offerings.	term effects	labor (farmers will not	launched; client
provide		(several	be unable to hire	numbers.
agricultural		years)	workers or buy seeds	
finance (credit,			because of cash flow).	
insurance).				
Stimulation of	Requires extensive	Can begin	Stimulating other rural	Numbers of new
alternative rural	examination to	exploration	employment	businesses
employment	ensure all promoted	of	opportunities can	established;
opportunities.	activities are viable	possibilities	provide a more attractive	amount of income
	and can be	immediately	alternative to migration	generated; income
	competitive.	as resources	to Port-au-Prince or the	and consumption
	Possibilities might	allow;	Dominican Republic and	smoothing
	include, for example,	programmin	can serve as alternate	(minimizing
	bee-keeping,	g would take	employment for when	seasonal
	improved livestock,	several	agricultural labor is not	fluctuations).
	high-value agricultural	years.	demanded. Would need	
	products (e.g.		to design as an indirect	
	essential oils)		intervention (i.e. NGOs	
	alternative fuel		should not directly	
	production,		employ people for such	
	handicrafts, etc.		projects).	

Preparation for	Possibilities include	As soon as	Can help agricultural	Crop harvest
responses for	helping farmers or	possible.	market chains mitigate	sizes compared to
2010 hurricane	Saras conserve	Hurricane	effects of disaster, which	previous years;
season.	surplus harvest	season	provides farmers more	prices for key
	properly; promoting	starts June	income, helping to keep	crops.
	community savings	but worst in	labor demand normal.	
	groups as a safety net;	September.		
	disaster mitigation			
	activities carried out			
	through cash-for-			
	work; flood-resistant			
	crops; examination of			
	likely effects of			
	hurricanes.			

### **ANNEX 2. RESOURCES USED**

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Interview with Delegué for Jacmel commune, 3/26/10

Interviews with households in rural Jacmel commune, 3/23/10 - 3/31/10

Interviews with households and farmers in La Vallée and Bainet, 3/29/10

Interview with key informant for artisanal sector, Jacmel, 3/24/10

Interview with key informant for fishing sector, Jacmel, 3/24/10 (?)

Interview with large farmer/agricultural employer, rural Jacmel, 3/29/10

Interview with mid-size farming household, rural Jacmel, 3/29/10

Interview with Ministry of Agriculture representative, Jacmel, 3/24/10

Interview with government secretariat, Jacmel, 3/23/10

Interviews with seven individuals/households in Jacmel, 3/26/10 - 3/30/10.

Interviews with six households in rural Sud-Est, 4/20/10-4/21/10.

Informal interviews/group discussions with NGO staff including agronomists, livelihoods experts:

- Gerry Delphin, ACDI/VOCA
- Emmet Murphy, ACDI/VOCA
- Kara Gaye, ACDI/VOCA
- Colo Marie Rosemonde, ACDI/VOCA
- Molière Peronneau, Save the Children
- Pierre-Louis Georges, ACDI/VOCA
- Jude Pierre Marie Basquiat, ACDI/VOCA
- Gardy Letang, Diakonie
- Gary Bonhomme, CROSE
- Multiple staff, World Food Program