FOOD SECURITY ASSESSMENT IN SELECT VILLAGES OF BOGALE TOWNSHIP - JUNE' 09

Background

In February 2009, WFP carried out a food security assessment in Bogale and Laputta. Based on the findings it was recommended that: WFP continue its emergency operations in areas within Bogale and Laputta townships beyond April 2009 but to extend no later than November 2009. However it was urged that the 'mix' of assistance programs be re-organized.

While pockets of food insecurity still existed it was clear that progress had also been made and hence there was a need to shift focus gradually from emergency operations to recovery and reduce dependency. Thus the February' 09 report urged for reduction in general food assistance and an increase in Food-for-Work activities.

In May' 2009, some partners working in the southern part of Bogalay mentioned that, the harvest were good and food availability was no longer a problem. There had been no data to suggest this prior to May'09, within WFP or from external agencies. While the situation had been improving (a fact reported by WFP) household food insecurity was still a major problem. Hence it was decided to undertake another survey in select villages as identified by WFP's partners. The main purpose of this report is to ascertain

1. If the state of agriculture and food security is indeed as healthy as suggested, and
2. If there is a role for food assistance now and if indeed food assistance and its continuance in the near future will be detrimental

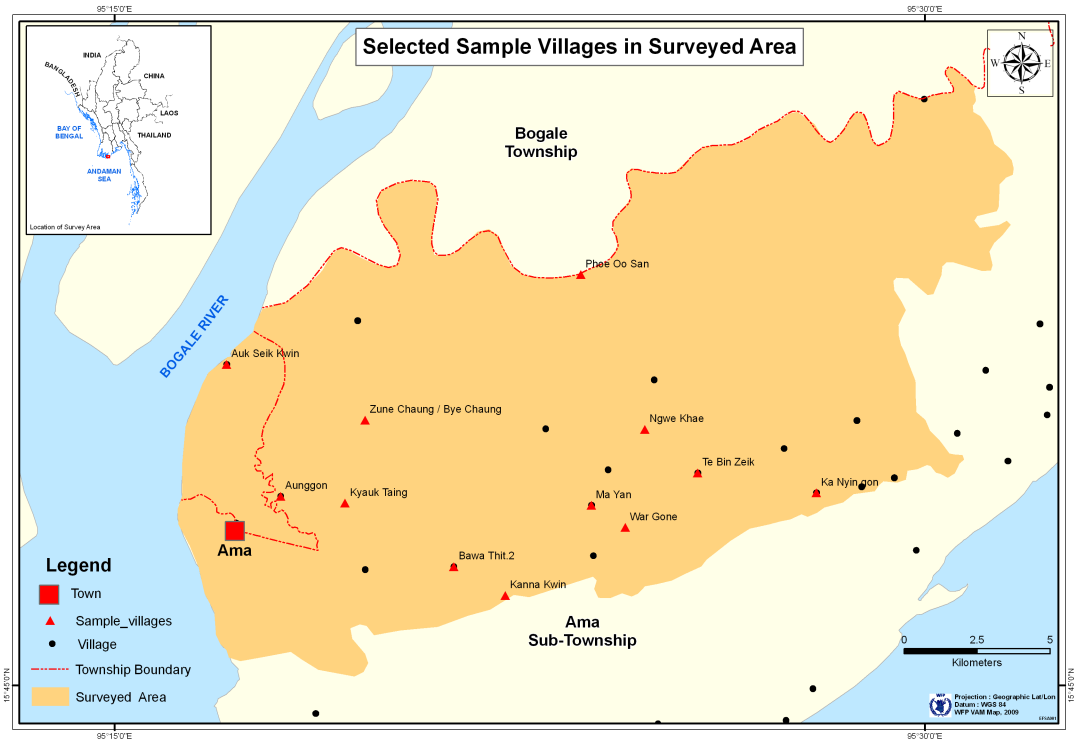
Note: Non-food assistance as an intervention has been actively supported and propagated by WFP. WFP strongly recommended (and continues to do so) activities such as assets replenishment, seed distribution, extension etc. Thus the purpose of this report is to simply determine if there is a role and need for food assistance (targeted and otherwise) in the sampled villages at this point in time.

It should also be noted that data was collected during the lean season and this will naturally have an adverse effect on the performance of food security indicators. However given that feedback from partners reported an very high food availability and general food security situation; the exact impact of the lean season on the data can be ignored for this report.

This assessment is a WFP report with colloboration from Samiratan's Purse and Solidarités. The VAM unit of WFP extends their thanks for the help and cooperation.

Sampling

A sample of 160 HHs was deemed representative for the area (95% confidence interval, 10 % precision, design effect 2 and refusal rate 10%). The final sample collected included 180 HHs. Selection of households was by systematical random sampling.



The state of Agriculture and Food Security across the Sampled Villages

The Agriculture Sector: Agricultural productivity is still low and agriculture is not currently viable as a source of income or food for the majority of farming HHs. Some of the findings that reinforce the above facts include:

1. On average farming HHs produced enough rice to last them approximately two and a half months

2. The most common constraint reported amongst farming HHs was the inability to afford rental fees to access more land. Thus farmers do want to expand but are unable to afford to do so.

3. Less than 20% of all farmers depended on their own production for their HH rice needs.

4. Less than 20% of all HHs with access to land reported agriculture being a source of their income.

5. Ninety percent (90%) of all farmers reported being currently in debt.

Thus, agriculture is unable to provide sufficient food or incomes to farming HHs.
There is also no doubt from the findings that farmers urgently need assistance in the form of access to agricultural inputs and extension which would reduce their input costs and increase

productivity. There is a clear need for farmers to gain access to seeds, implements and fertilizers. This was a finding stressed by WFP in earlier reports and an expected finding.

The findings do not suggest that food availability is high or that farmers enjoy surplus harvest.

The Non-Agriculture Sector: For the purpose of this report this sector largely refers to casual or wage labor; small business and petty trade; and fishing.

1. Keeping in mind that the area sampled has always been highly dependent on fishing; a relatively low percentage of 21% of the sample sourcing income from fishing indicates that HHs primarily practice fishing to source food for own consumption and are unable to do so for income generation.

2. Lack of employment opportunities was the most commonly cited shock or difficulty faced by the sample. In other words neither the agriculture or non-agriculture sector is able to generate enough employment opportunities for the sample. HHs thus face unemployment and under-employment resulting in them being unable to source sufficient incomes. (Note: A productive agricultural sector producing surplus harvest would result in greater not lesser employment opportunities).

3. The reliance on casual labor has increased thus increasing the supply-demand gap.

4. Access to cash or credit was the second most commonly cited household need.

5. Employment opportunities were the third most commonly expressed need.

Thus HHs, irrespective of whether they have land or not, lack the 3 most basic tools for self sufficiency – access to food, access to cash and the ability to find gainful employment.
Access to food (irrespective of availability) is a major constraint to food security of the sample.

Food Security: **Food insecurity continues to remain a serious concern in the sampled villages.**

1. Approximately 89% of the sample reported currently being in debt and needing to repay their loan & the most common reason to undertake a loan was the purchase of food.

2. More than half the HHs that have taken a loan have done so in the past 6 months combined with the fact that the most common reason for taking a loan was the buying of food highlights the fact that food insecurity continues to be a sizeable obstacle for the sample.

3. Nearly half the sample reported food to be their most important need.

Conclusion
Both food availability and access continue to be constraints to the food security of the sampled villages (notwithstanding improvements in access to land over the past 6 months).

Recommendations:

There has been improvement in overall food security in the Delta. This, in no small part, has been due the efforts of NGOs and International Organizations. However the present situation especially with regard to food availability is not as healthy as recently reported. The data obtained in this survey clearly underlines this.

It is thus recommended that

1. Targeted food assistance to continue; but only for the extremely food insecure, till November 2009. A key issue here is targeting and for this, input from sub office & the field is vital. However a rough profile of HHs most likely to require this assistance (based on this data) is provided in the annex. This needs to be corroborated from the field and expanded upon.

2. The emphasis should however be on Food-for-Work and Food- for-Training activities and the re-establishment of the agriculture & fishing sectors.

3. There is clear need to increase farmer's access to agricultural inputs. Increasing farmer's access to seeds, agricultural implements would have a direct and positive effect on agricultural productivity and thus food availability.

4. There is a clear need for Cash-Programs and thus other organizations /NGOs are urged to implement the same.

5. Increase formal and semi-formal access to credit across the 2 townships

The continuation of food assistance, food-for-work activities until the end of the year combined with non-food assistance aimed at making agriculture more sustainable and increasing employment opportunities will be the most effective way in reducing food insecurity in the delta.

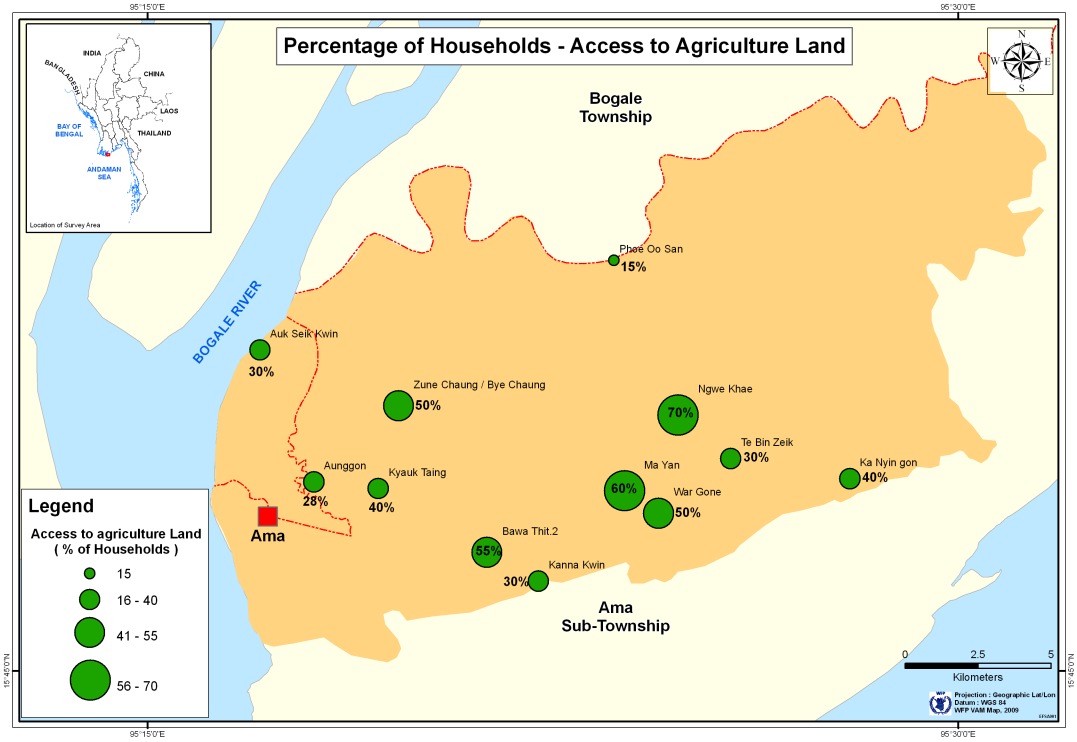
Household Demography

Across the sample it was seen that approximately 6% of households were headed by women. However no marked variation in performance of indicators was seen when comparing male and female headed HHs.

Regarding HH size the average figure for the sample was 5 (mean of 4.8) members per HHs. Upon comparing data on HH sizes with average number of income earners per family, it can be hypothesized that HHs typically consist of just a single member who generates income and four economically dependent members – in other words children and /or the elderly who are unable to contribute to household incomes. This figure is surprising as usually a mean of 2 income earners per HH is the norm. However for this sample the average number of earners per HH was 1, and furthermore, there was no change in number of income earners per HHs as compared to a year earlier.

Food Availability

Agriculture

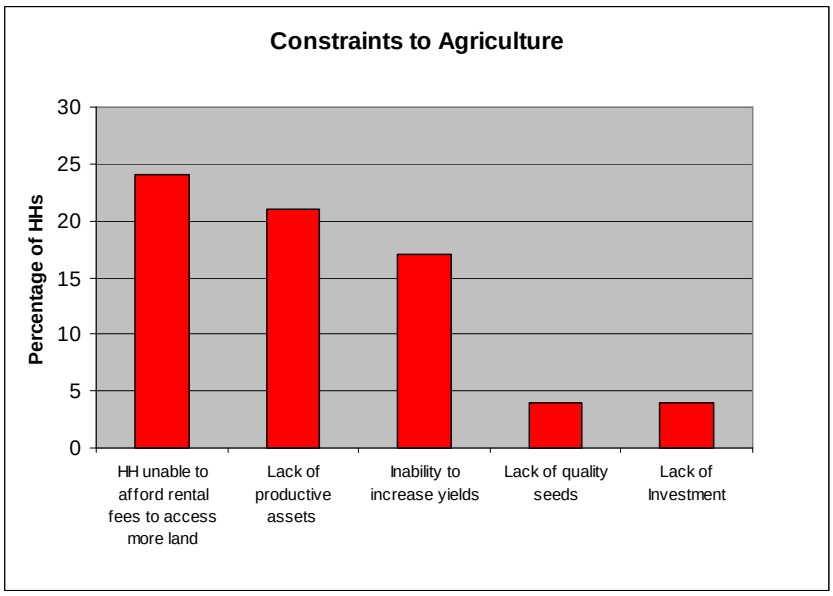


Approximately 40% of the sample had some access to agricultural land. This is similar to the figure (42%) obtained from the WFP survey across Bogale and Laputta townships in February 2009. This figure seems to be close to pre-Nargis levels – in terms of percentages of HHs with access to land. The Periodic Review determined that prior to Nargis; 40 – 45% had access to agricultural land which then decreased to 30 – 32% post-Nargis.

Households (with access to some agricultural land) were asked to list the approximate size of their land and whether they owned or rented this land. Approximately 72% of the sample accessed land by virtue of ownership. The remaining HHs accessed land by renting.

Thus slightly above one-fourth of all farmers in the sample tend to spend money in accessing land. The average size of land per farming HH for the sample was 7 acres with wide variation.

Constraints to Agriculture



The above common constraints are similar to the commonly reported constraints in the earlier survey of February 2009. It is crucial to note that the main constraint is not lack of available land but rather the lack of income in order to buy / rent land. The three most common constraints are closely related to each other. A lack of assets would result in HHs being unable to maximize agricultural productivity and thus unable to increase yields. In turn low yields would result in lowered incomes with the end result that HHs are unable to afford key non-food expenditures including rental fees for the expansion of agriculture.

Duration of Staple Food Stock

Farming HHs were asked to report on how many months the HHs would able to eat rice from their own production (i.e. their rice stocks from previous harvest). On average HHs produced enough rice to last them slightly below two and a half months (2.4). Given that the last harvest in the area was in December, food stocks for most farming HHs would have been exhausted by the end of March. This is a telling statistic as it also helps explain the high percentage of expenditure on food and the reliance on debt to obtain food.

Furthermore, a figure of 2.4 months of food availability from HH stocks is more in line with the performance of other food security indicators. There have been some recent reports stating that farming HHs in the area had enough food stocks to last them for up to *1.5 years*. This is clearly not the case across the sampled villages in Bogale Township. Indeed, only three HHs in the sample reported having stocks to last them more than 6 months.

Source of Staple Food

Households were asked the source of rice consumed during the prior month. The most common means by which HH sourced rice for household consumption was:

1. Purchase – 87%
2. Own Production – 8%
3. Borrow / On Credit – 4%

The lack of productivity of the agricultural sector is attested to by the fact that only 8% of the sample (or 20% of farming HHs) report sourcing their staple food from their own production. The Joint Food & Nutrition survey which collected data from across the Delta in September 2008 reported 7% of HHs accessing rice from own production. Thus while there has been an improvement over a span of 10 months, more progress needs to be made.
Note: The sampled villages had not been receiving food assistance for approximately a month prior to the survey, hence reliance on food assistance was non-existent and hence not reported as a source.

Reliance on Livestock

Approximately 42% of the sample reported ownership of some livestock (excluding poultry). However less than 1% of HHs reported obtaining some income from the rearing of livestock. The lack of reliance on livestock to source incomes indicates that HHs that rear livestock primarily do so in order to help supplement household food.

Food Access

Sources of Income

Households were asked to list their sources of income and it is seen that the most common source for households was income derived from wages. Thirty five percent (35%) of the sample reported wages being one of their main sources of income.
The 4 most common sources of income reported by HHs can be seen in the below table.

Table 1: Most Common Sources of Income Reported

	Income Activity	**Percentage of Sample (%)**
1	Casual Labor	35
2	Fishing	21
3	Trade / Business	18
4	Agriculture	8

Note: The above does not take into account priority of responses

Keeping in mind that the area sampled has always been highly dependent on fishing; a relatively low percentage of 21% of the sample sourcing income from fishing indicates that HHs primarily practice fishing to source food for own consumption and are unable to do so for income generation.

Less than 8% (7.6%) of the sample reported sourcing incomes from agriculture. Thus most often farming HHs in the sample will rely on agriculture to source some of their staple food needs and rely on casual labor for incomes. Furthermore, as seen elsewhere in this report, HHs are unable to obtain even substantial staple food stocks from agriculture and hence their reliance on wage-generation increases. This hypothesis is further strengthened by the fact that majority of sampled HHs report being in debt with the main reason for under taking debt being the buying of food (see section on Debt).

Sources of Expenditure

Data on expenditure for food and non-food items, such as education, health transport, etc. were collected to better understand household resource allocation.

Approximately 81% of the sample reported food to be their primary expenditure.

After food the second most commonly reported expenditure was on education with 39% of the sample reporting some monthly expenditure; followed by health with 32% of the sample reporting some expenditure in the previous month.
Thus food, education, health & utilities are the most common HH expenses. Expenditure on clothes, farm inputs, livestock, transport, social inputs etc are negligible strongly reinforcing the view that HHs income is largely utilized to try and meet basic needs.

Apart from the fact that food is a primary expenditure for most of the sample; it was seen that on average 63% of a HH's monthly expenditure was on food. Indeed, 30% of the sample spent more than 75% of their total monthly expenditure on food. Keeping in mind Engel's Law (i.e. the greater the share of total expenditure on food, the more food insecure the HH), it is clear that HHs are mainly concerned with trying to meet food needs. A factor underlined by the findings on debt, shocks, agricultural sector constraints and HH needs analysis.

Household Debt

Eighty nine percent (89%) of the sample reported currently being in debt and needing to repay their loan. This is an extremely high figure and indicates that

(1). The majority of HHs are unable to meet just their basic needs (refer section on Expenditure).
(2). HHs are unable to obtain enough income from agriculture and / or wage labor to meet basic needs and essential non-food expenses such as the buying of agricultural inputs.
(3). There is a lack of sufficient income generating opportunities and HHs are thus forced to depend on loans

Table 2: Main Reasons for Households Undertaking Loans

	Main Reason for Undertaking Loan	**Percentage of Sample ***
1	To buy food	31 %
2	To meet health expenses	21 %
3	Buy agricultural inputs	17 %
4	Loans as investment in trade / business	15 %

* - Amongst HHs reporting debt (89% of sample)

Note: It should be noted that less than 1% of the sample reported the reimbursement of debt as expenditure. The fact that less than 1% of HHs report debt repayment as an expense while 89% report being in debt could mean that (a) HHs undertake long-term debt and typically pay of loans at end of harvest or once in 6 months, or (b) HHs enter a debt cycle wherein they repay an outstanding debt by undertaking a greater loan amount from a different source / money-lender.
The amount of loan undertaken by a HH ranged from 3000 Kyats to 300,000 Kyats with the average for a HH undertaking a loan being approximately 233,578 Kyats (210 US$).

Among HHs with a debt to repay; the following pattern with respect to time the loan was taken is seen:

Table 3: Timeline of Loans

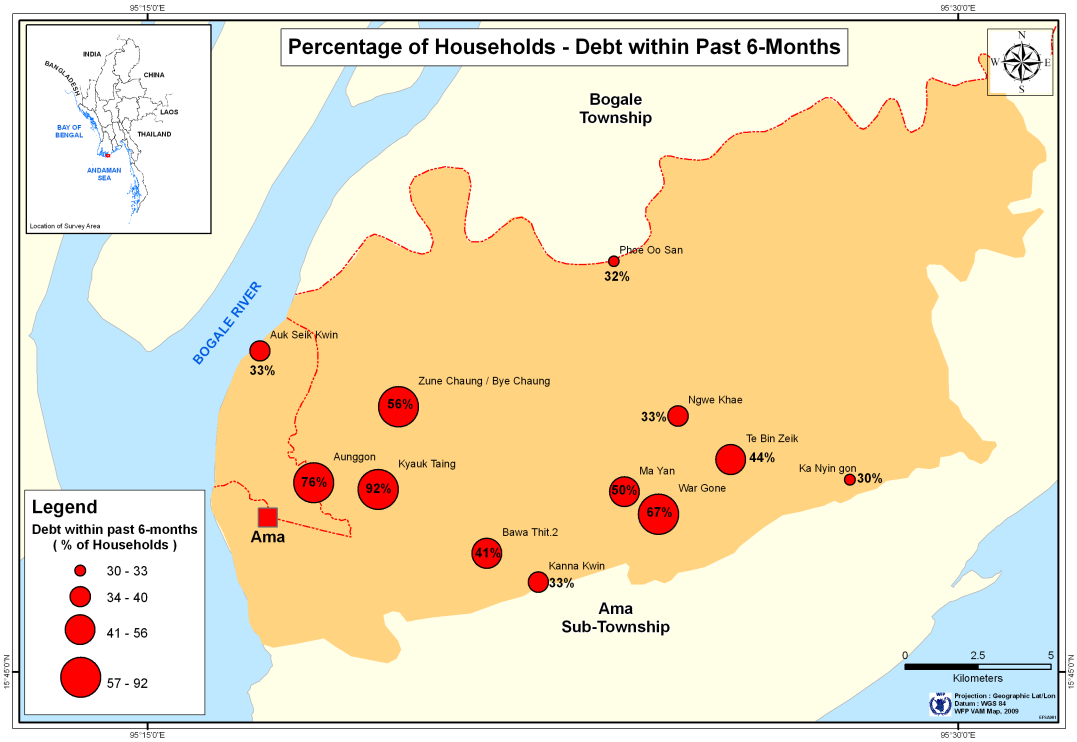
	Loan Undertaken :	Percentage of the Sample *
1	In the past 6 months	51%
2	Between 6 months & 12 months ago	19%
3	Prior to 12 months ago	30 %

* - Amongst HHs reporting debt (89% of sample)

It could be expected that the period with highest percentage of HHs reporting the undertaking of a loan (and therefore being in debt) would be the period 6 – 12 months ago; the period immediately after Nargis. However this is not the case. More than half the HHs reporting currently being in debt took out a loan in the past 6 months i.e. the period December 2008 – May 2009.

Keeping in mind the fact that more than half the HHs that have taken a loan have done so in the past 6 months combined with the fact that the most common reason for taking a loan was the buying of food – it can be stated with confidence that food insecurity continues to be a sizeable obstacle for the sample.

Furthermore, 30% of the sample had obtained a loan before Nargis. Following Nargis and the loss of their livelihood these HHs have been unable to repay this older loan to date.



Looking at debt patterns, it can be seen that villages with access to the sea had less percentage of HHs reporting undertaking a loan in the past 6 months. While the data does not permit one to

make a direct and concrete relation between the 2; more information needs to be obtained on debt and fishing as a livelihood to analyze the possible connection between the 2.

Household Needs Analysis

Households were asked to report their 3 most important needs in terms of priority. Disaggregating the data it is seen that 142 HHs out of a sample of 180 (79%) report food to be one of their urgent needs. *More pertinently, for nearly half the sample food is the most important need.*

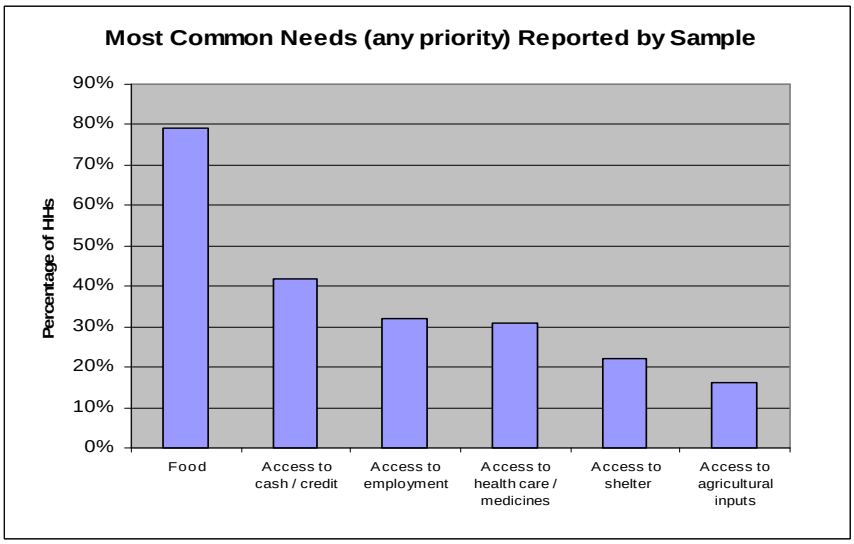
Disaggregating between HHs with access to land and those without:

- The 3 most important needs for farmers (in order of priority):
  (a) Food
  (b) Access to cash or credit
  (c) Agricultural Inputs
- The 3 most important needs for HHs without access to land (in order of priority):
  (a) Food
  (b) Medicine / Health Care
  (c) Employment

The second most widely reported need is access to cash / credit reported as a need by 42% of the sample. This is an expected finding given the high dependence on debt. Since there are no formal sources of credit available, HHs necessarily obtain loans from informal sources and thus pay above normal interest rates.

The third most widely reported need was employment opportunities. The lack of productivity of agriculture has also resulted in a lack of reliance on the sector with small farmers now being forced to rely on casual labor rather than agriculture for incomes. Consequently the supply of causal wage labor has increased thus reducing the demand or opportunities for work.
Thus, paradoxically, even as employment opportunities are reduced, the available labor supply increases.

Figure 2: Most Common Needs (any priority) Reported by Sample



Note: Multiple Response Question thus not cumulative to 100%

It can be noted here that WFP activities since Nargis and indeed since the last survey have been directly addressing the above reported most important needs. WFP activities such as food assistance including Food-for-Work, Targeted Food Distribution and Food-for-Training activities address not only the food needs but also attempts to provide employment opportunities, access to cash and rebuild community infrastructure which in turn would hasten the rehabilitation of key sectors further fueling employment and labor opportunities.

Shocks

Respondents were asked to list the shocks or difficulties faced by their household in the past 6 months. The most commonly reported shocks affecting HH food security across the sampled villages include the burden of the reimbursement of debt, poor harvests, health expenditure and the lack of employment opportunities. Thus, it can be seen that food insecurity in the sampled villages is mainly a result of reduced incomes and reduced food availability.

For questions or comments concerning any aspect of this report, please contact

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Annex

Data was disaggregated to distinguish between HHs with access to land and those without. The below profiles are based on the data collected for this assessment.

"The Farmers"

- Nearly 70% of all farmers reported sourcing their staple food (Rice) thru purchase underlining both the low productivity of agriculture and the absence of food stocks amongst farming households. Less than 20% of all farmers depended on their own production for their HH rice needs.
- The most common source of income for farmers is not farming as would be expected BUT income derived from wages and / or petty trade & small business.
- Less than 20% of HHs with access to land reported agriculture being a main source of their income
- The most common source of expenditure was food with nearly three-fourth of all farmers in the sample reporting food to be their primary expense.
- Food, Education and Expenditure on Farm Inputs were the 3 most commonly reported expenses, in that order.
- Ninety percent (90%) of all farmers reported being currently in debt mainly for the buying of inputs, food and to meet health expenses.
- The 3 most important needs for farmers (in order of priority):
    (d) Food
    (e) Access to cash or credit
    (f) Agricultural Inputs

"The Wage Laborers"

- This group depends almost completely on purchase for their rice needs.
- The most common source of income for this group is casual labor, fishing and small businesses.
- Food, Health and Education were the 3 most commonly reported expenses, in that order. Thus these HHs are mainly concerned with meeting basic necessities.
- Eighty eight percent (88%) of HHs in this group reported being currently in debt mainly for food, health and investment.
- The 3 most important needs for HHs without access to land (in order of priority):
    (d) Food
    (e) Medicine / Health Care
    (f) Employment

Targeting

Based on data the following attributes would strongly indicate that these HHs are highly likely to be very food insecure. Thus the more categories particular HHs falls under, the more likely the HH is to be food insecure.

1. Large HHs (> 5 members) with only one income earner
2. Farming HHs with very low access to land as compared to the area average.
3. Farming households that rely on credit / borrowing to source rice rather than own production or purchase.
4. Households reporting primary income source from wood or bamboo cutting
5. HHs that spend more than 70% of their monthly expenditure on food.
6. HHs reporting undertaking debt to buy food.