An Overview of the Food Security Situation in Selected Areas across Lashio Area

Vulnerability Analysis & Mapping Unit (VAM)
March 2010
ACKNOWLEDGEMENTS

This report is the outcome of a collaborative process and would not have been possible without the contribution of many individuals and organizations.

The World Food Programme is grateful for the support of the Government of Myanmar.

In particular, thanks go to the below list of agencies that assisted WFP by providing field monitors and/or logistics support during the data collection phase:

AHRN (Asian Harm Reduction Network), AZG (Artsen Zonder Grenzen) MSF-H (Médecins sans Frontières – Holland), CARE (CARE International), KMSS (KARUNA MYANMAR SOCIAL SERVICES), Metta (Metta Development Foundation) and NAG (Network Activities Group).

For questions or comments concerning any aspect of the survey and this report, please contact:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Chris Kaye</td>
<td>Country Director</td>
<td><a href="mailto:Chris.Kaye@wfp.org">Chris.Kaye@wfp.org</a></td>
</tr>
<tr>
<td>Ms. Sarah Gordon-Gibson</td>
<td>Deputy Country Director</td>
<td><a href="mailto:Sarah.Gordon-Gibson@wfp.org">Sarah.Gordon-Gibson@wfp.org</a></td>
</tr>
<tr>
<td>Mr. Siddharth Krishnaswamy</td>
<td>VAM Officer</td>
<td><a href="mailto:Siddharth.Krishnaswamy@wfp.org">Siddharth.Krishnaswamy@wfp.org</a></td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

There is a clear increase in overall food security across the Lashio area as compared to the situation in March 2008. While a direct comparison of individual indicators is not possible due to the difference in data collection tools used; a broad comparison of findings however is feasible.

From the March 2008 survey it was seen that nearly 95% of the sample was classified as being food insecure with 65% being classified as having ‘Poor’ and 29% as depicting ‘Borderline’ food consumption patterns.

Today, in March 2010, it is seen that Fifty percent (50%) of the sample can be classified as being food insecure. Food consumption groups were formulated and it is seen exactly half the sample seems to exhibit acceptable food consumption patterns while the other half of the sample fall under either the Poor (21%) or Borderline (29%) food consumption groups.

Constraints to Food Availability

Food availability is affected due to the following constraints:

a. Farmer’s inability to afford basic inputs
b. Farmer’s inability to afford labor
c. Loss of crops to pests /diseases

The end result is that farmers are forced to rely on lowered yields as they are unable to maximize agriculture and farming becomes more of a subsistence activity that HHs practice to, at best, fulfill their food needs rather than an income generation activity. Thus the relatively high access to land seen across Lashio does not translate into higher levels of food availability or even a more stable HH food security situation.

Constraints to Food Access

a. Due to lowered food availability food prices have increased steadily through 2009 and is one of the most commonly cited shocks affecting HHs. The increase in food prices drastically curtails food access.
b. Nearly 40% of the sample report spending 70% or more of all income on food. Thus for these HHs, almost three-fourth or more of all monthly income earned is spent on food leaving little for essential non-food items such as health, education or key utilities.
c. Nearly sixty percent of all HHs undertaking debt do so to mainly meet food needs or cover health expenses (both by definition short term objectives). This also means that 60% of the HHs are under pressure to source sufficient incomes to pay back debts or risk paying increasing interest on their debt.
d. The lack of employment and / or reduced wages which is commonly cited as a main shock affecting HHs.

The above factors severely affect both household food availability and access. The inability of HHs to source sufficient incomes (resulting in reduced food access) combined with low food availability results in poor food consumption and an increase in HH food insecurity and vulnerability.
Thus while there has been an improvement in overall food security across Lashio over the past 2 years, today at least 50% of the HHs are still food insecure. Thus there is an urgent need to ensure that the efforts thus far that have resulted in reductions in food insecurity and vulnerability at the household level continue.

**Recommendations**

There is a clear increase in overall food security across the Lashio area as compared to the situation in March 2008. In the two years, notable gains in food security are seen. However; today half the sample taken from across the Lashio areas is still food insecure and vulnerable.

The following recommendations are thus put forth with the aim of ensuring that assistance programs are targeted towards this 50% of Lashio’s HHs.

Livelihood activities including Food-for-Work, Food-for-Education, Cash-for-Work etc should be initiated across Lashio area, with an emphasis on the below noted townships

1. Tan Yan, Lashio, Man Tone and Kun Long - these townships have the highest percentage of HHs with Poor and Borderline food consumption.

2. Kutkai, Muse, Nam Kham, Tan Yan and Man Tone - these townships have the highest percentage of HHs reporting the undertaking of debt to buy food; loss of crops due to pests and / or reporting a low reliance on either agriculture or employment to source food.

3. Kun Long, Tan Yan and Man Tone - these townships have the highest percentage of HHs reporting either a lack of sufficient employment opportunities, high food prices or the reimbursement of debt.

4. Man, Tone, Muse, Lashio and Kutkai - these townships had the highest percentage of HHs reporting loss of crops to pests, diseases and the inability to afford agricultural inputs.

5. Based on information collected on basic health, water and sanitation the following recommendations are put forth.

   a. These townships of Kutkai and Nam Kham had the highest percentage of HHs reporting high monthly expenditure on health and / or cited health expenditure or sickness as the primary shock affecting them. Thus health related interventions should include these townships.

   b. Interventions related to sanitation that are initiated in Lashio ought to begin in Tan Yan, Lashio and Kun Long Townships. These townships had the highest percentage of HHs with no access to latrines; reported the non-treatment of their drinking water and / or sourcing water from unprotected sources.
Note: This is not to suggest that the above interventions be initiated only in the noted townships but rather that there is an urgent need for the specific intervention in the above named townships.

Vulnerability Profiles:

HHs depicting one or more of the below attributes are most likely to fall under the highly food insecure group:

- HHs having more than 7 members and only one or a maximum of two income earners.
- Access to less than 2 acres of land
- Have no access to wet paddy land
- Access to only small gardens
- HHs that report spending more than 70% of their entire monthly income on food.
- Female-headed HHs
- Reporting large amounts of loans (100,000 Kyat or more) that have been taken in order to buy food or meet health expenses
- Reliance on borrowing food as a coping strategy with some regularity.
**Methodology**

A sample of 500 HHs was selected from 50 villages across 9 townships in Lashio. Villages were randomly selected and households in villages were selected by systematic random sampling based on village lists obtained from village / community leaders.

The fact that WFP could access the services of twenty nine qualified field enumerators is largely due to the timely assistance from various agencies working in Lashio and the efforts of our sub-office staff.

WFP VAM conducted the field enumerators training over the course of 4 days at the WFP sub-office in Lashio. The training included a module on food security, intensive training on use of the questionnaire, group work, role play and a feedback session. The questionnaire was also field-tested by WFP Field Staff. Following this improvements were made to the questionnaire and upon finalization of the same, teams began the data collection process.

Following data collection, data entry & cleaning was carried out by 3 data entry personnel under the supervision of the VAM unit in Yangon.

Map: Sampled Townships across Lashio
**Household Demography**

The average size of the households sampled was 6 members per HHs with some variation between townships. Muse and Kun Long townships tended to have slightly larger households.

Across the sample it was seen that approximately 14% of households were headed by women. Notably 20% of the households sampled in Theinni Township reported being headed by women.

The average number of income earners per HH was 2. Keeping in mind that the average size of a HH was 6, the burden on the income generators of a HH is considerable. Theinni had the lowest number of income earners per HH (on average) – not surprising given the high proportion of female headed households in this township.

**Food Availability**

**Agriculture**

Approximately 93% of the sample had some access to agricultural land. Thus the sample has relatively high access to land (as compared to other parts of the country) and this access is more-or-less uniform across townships with one exception.

Disaggregating by gender it is seen that female headed HHs have marginally lower access to land than male headed HHs. However in Muse Township it is seen that only 57% of all female headed HHs had access to any land as compared to 98% of male headed HHs in this township.

**Land Access by Type**

Households were asked to list the type of land they had access to and the approximate size of the land. Local measures of scale were then recalculated to obtain average figures for type of land (in acres) for each township.

It was seen that on average a HH was able to access 2.8 acres of land. This figure, however, is the sample average. Further analyzing the data it is seen that 60% of all farmers could access less than 2.8 acres (the sample average). When disaggregating the data by food consumption patterns it is seen that male headed HHs with acceptable food consumption patterns access on average more than 3.3 acres.
1) Small Gardens: This type of land holding was reported by 9% of all farmers. The average size of a small garden across Lashio area was about 0.7 acre.

2) Rain-fed flatland land & upland: These were the most common types of land-holding reported by 60% of all farmers. The average size of wet paddy plot accessed by a HH was 1.6 for this type of land holding.

3) Wet Paddy Land (or irrigated paddy land) – was reported to be accessed by 20% of all farmers and the average size of such a land holding was 1.7 acres.
4) Less than 12% of all farmers reported access to orchards with an average land size of 1.5 acres.

Ninety two percent (92%) of households accessed land by virtue of ownership. The remaining HHs accessed land by renting. It is interesting to note that almost all households renting land did so primarily “in-kind”. Thus, a portion of the harvest would be given to the owner in lieu of rent.

Crops
Rice cultivation accounted for nearly half of all land under cultivation. Forty seven percent (47%) of all agricultural land cultivated was used for rice.

The next most common crop cultivated was maize, which accounted for 28% of all land under cultivation. Nine percent (9%) of the land for cultivation of various other crops, vegetables (7%), pulses (7%) and oilseeds (1%) accounted for the remaining cultivated land.

Figure 3: Main Crops Cultivated

Cropping Patterns
Some multi-cropping is seen across Lashio with such HHs mostly cultivating two (34% of farmers) to three (28%) crops. Approximately 19% of farmers reported the cultivation of only one crop. A small percentage of farmers (6%) reported the cultivation of more than 5 crops; such farmers typically being large farmers with greater access to land.
Irrigation

Only 28% of HHs (with access to land) reported having access to irrigation with some variation between the townships. Thus any delay in rains or change in weather conditions would have direct and far-reaching implications on livelihoods of majority of the HHs practicing agriculture. The townships of Tan Yan and Kun Long had the highest percentage of HHs reporting lack of access to irrigation systems. Conversely, the townships of Theinni and Muse had the highest percentage of HHs having access to irrigation systems.

Figure 4: Number of Crops Cultivated by a HH

1. Only one
2. 2 type
3. 3 types
4. 4 types
5. 5 types
6. 6 types
7. 7 types

% of HHs

Figure 5: Access to Irrigation
Constraints to Agriculture

Across Lashio farming HHs were asked to list their major constraints to farming it was seen that the most common constraints were:

1. Inability to afford good quality seeds or fertilizers to increase yields – 33%
2. Inability to afford rental fees to hire labor – 19%
3. Loss of crops due to pests & pathogens – 17%

Figure 6: Main Constraints to Farming

The three most commonly cited constraints to agriculture in Lashio, all directly inhibit food availability. Farmers thus have to rely on low yields as they are unable to maximize agriculture without key basic inputs. The lack of access to irrigation is a contributing factor to low yields. Thus without access to inputs, farmers obtain low yields leading to low incomes. This will prevent farmers from being able to hire labor (the second most commonly cited constraint). Thus due to the lack of inputs and labor, farming becomes more of a subsistence activity that HHs practice to fulfill their food needs rather than an income generation activity. This situation is further exacerbated by the loss of crop, in the fields and in storage, to pests and diseases, resulting in further loss of income and food to the HH.

Thus the relatively high access to land seen across Lashio does not translate into higher levels of food availability or even a more stable HH food security situation.

One direct consequence of low food availability is that food prices go up resulting in lowered food access, as is seen in Lashio today. This aspect is discussed further elsewhere in this report. Analyzing the data by townships, the following pattern is seen:
• Man Tone township has the highest percentage of farmers reporting loss of crop to pests / diseases as a major constraint to agriculture.
• The townships of Muse, Lashio and Kutkai have the highest percentage of farmers reporting the inability to afford key basic agricultural inputs such as seeds and fertilizers.
• In Theinni and Kun Long townships the most commonly cited constraint was the inability to afford labor.

FOOD ACCESS

Source of Rice

Figure 7: Source of Rice

Households were asked the source of rice consumed during the prior month (30 days). The most common means by which HH sourced food for household consumption was:

1. Own Production – 52%
2. Purchase – 38%

Other forms of access such as exchanging assets, receiving food as a gift etc were hardly relied on. The most common forms of access was either from own production or by purchase. However the fact that the harvest season has concluded in December / January is the likely reason for this high reliance on own production. Reliance on purchase to source rice was practiced by HHs (38% of sample) that either (a) do not grow rice or (b) do not grow sufficient quantities of rice rely on purchase.

However, overall it is seen that when data on food consumption is analyzed, townships with a higher percentage of HHs depending on own production are the same townships reporting Poor or Borderline food consumption patterns. More than 70% of all farmers in Man Tone stated
sourcing some of their food from own production while in Kun Long, this figure is much higher at 92%. In both these townships more than 63% of HHs fall under the Poor or Borderline food consumption groups. Thus it can be stated that the amount of food obtained from own production is inadequate for many HHs.

Map 1: Own Production as a Main Source of Rice Consumption

Source of Food
HHs were asked about the sources of the other food commodities consumed by them in the previous 7 days. The most common methods of access were Purchase and Own Production. Approximately 50% of all HHs reported relying on own production for cereals, potatoes, beans and vegetables in the 7 days prior to the interview.
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 three percent (33%) of the sample reported wages being their primary source of income. Wages from agriculture as a first source of income was reported by just 12% of the HHs. Given that nearly the entire sample has access to some agricultural land, this low reliance on agriculture as a source of income indicates that agriculture is unable to support both an HH’s food needs and provide income.

The four most common sources of income reported by HHs are depicted in the below table and includes all responses i.e. most important source of income, second most important income source etc.

Table 1: Most Common Sources of Income Reported – All Responses

<table>
<thead>
<tr>
<th>Income Activity</th>
<th>Percentage of Sample (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Wages / Casual Labor</td>
<td>30</td>
</tr>
<tr>
<td>2  Agriculture</td>
<td>13</td>
</tr>
<tr>
<td>3  Small Trade</td>
<td>13</td>
</tr>
<tr>
<td>4  Bamboo / Wood cutting</td>
<td>12</td>
</tr>
<tr>
<td>5  Sale of livestock</td>
<td>9</td>
</tr>
<tr>
<td>6  Trade / Business</td>
<td>6</td>
</tr>
<tr>
<td>7  Others</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: Table refers to all sources of income reported (Main, second, third etc)

Disaggregating the data across townships the following is seen:

Table 2: Common Sources of Income

<table>
<thead>
<tr>
<th>Township</th>
<th>Township</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Townships with highest percentage of HHs (within that township) reporting a reliance on agriculture as a source of income</td>
<td>Kun Long Nam Tu</td>
</tr>
<tr>
<td>2 Townships with lowest percentage of HHs (within that township) reporting a reliance on agriculture as a source of income</td>
<td>Tan Yan Man Tone</td>
</tr>
<tr>
<td>3 Townships with highest percentage of HHs (within that township) reporting a reliance on wages as a source of income</td>
<td>Nam Tu Tan Yan</td>
</tr>
<tr>
<td>4 Townships with lowest percentage of HHs (within that township) reporting a reliance on wages as a source of income</td>
<td>Muse Nam Kham</td>
</tr>
<tr>
<td>5 Townships with highest percentage of HHs (within that township) reporting a reliance on small / petty trade as a source of income</td>
<td>Muse</td>
</tr>
</tbody>
</table>
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. Food, as a primary expense of the HH was reported by 65% of the sample. The next main expense item was health (9%) followed by education (7%).

When all responses for monthly HH expenditure are analyzed, the following patterns can be seen with respect to Lashio:

- It is striking to note that other forms of expenditure especially vital non-food items such as education and health are relatively less reported as an expenditure item. Twenty eight percent (28%) of all responses account for education as an expense item. Similarly 40% of all HH responses stated health to be a regular monthly expenditure. This is far less as compared to other areas in the country and implies that HHs are unable to afford even essential inputs. The incomes derived by HHs across the sample tend to mainly be sufficient to cover HHs food expenses – this is especially true for HHs in the food insecure category (see below).
The above is underlined by the fact that sickness and medical expenses are the main shock reported by the sample. Yet only 40% of all HHs report expenditure on health. Thus HHs are unable to source enough income to afford better health care.

Nearly 40% of the sample report spending 70% or more of all income on food. Thus for these HHs, almost three-fourth or more of all monthly income earned is spent on food leaving little for essential non-food items such as health, education or key utilities. This finding clearly depicts the problems of poverty and high levels of vulnerability to food insecurity because of the limited access to food.

Map 3: Food as a Main Source of Expenditure
Access to Credit & Debt

Sixty six percent (66%) of the sample reported currently being in debt and needing to repay their loan. The main reasons for sampled HHs obtaining loans can be seen in the below figure.

Figure 8: Main Reasons for Household Debt

![Main Reason for Debts](image)

Nearly sixty percent of all HHs undertaking debt do so to mainly meet food needs or cover health expenses (both by definition short term objectives). This highlights the subsistence nature of HHs in the region and the high levels of vulnerability HHs face to further economic shock. Furthermore, it also indicates the limitations that exist to reach sustainable development and the ability to achieve longer term goals.

The pattern seen above with respect to main reasons for debt is very different from debt patterns seen in other parts of the country.

This sample had a relatively low percentage of HHs reporting the undertaking of debt to buy food; just 37% as compared to 58% (Dry Zone, Dec’09), 63% (NRS, July’09) and 46% (Delta, Nov’09). This lower reliance on debt is a clear anomaly as half the sample is food insecure and approximately 40% of the sample report spending 70% or more of all their monthly income on food. This finding is at odds with the other findings related to food security presented in this report. It is urged that the sub-office collect more information on this subject so that it can be ascertained if indeed there is a low reliance on debt and, if so, the reasons for the same.

Disaggregating data on debt across zones, the following patterns are seen:

- The townships of Kutkai, Lashio, Man Tone and Muse have the highest percentage of HHs reporting undertaking debt to buy food
- There is a clear increase in reliance on debt amongst women headed HHs especially in the townships of Man Tone, Muse and Nam Kham
Map 4: HHs Reporting Current Debt

It is also seen that the amount (in monetary terms) of loan undertaken is relatively substantial with the average amount borrowed being 175,000 Kyats (approx. 175 – 180 $). More than 36% of debts were for amounts larger than 100,000 Kyats and 21% of debts were for amounts between 50,000 & 100,000 Kyats. Thus 57% of all debts were for large amounts. Keeping in mind that loans (when taken) are mainly taken to buy food, it can be hypothesized that HHs have taken large loans to meet food expenses over a prolonged period of time and more importantly they did so since they do not expect any improvements to their current household food security situation.
FOOD CONSUMPTION

Food Consumption Score (FCS)
Information was collected on the dietary diversity of the HH with respondents being asked to list the number of days a particular food item was consumed by the HH in the seven days prior to the interview. Thus a ‘0’ for fruits would indicate that a HH did not consume any fruit in the previous seven days while a ‘4’ would indicate consumption four days out of seven etc. The mean food consumption score for a seven day period for the sample was then calculated.

Food Consumption Groups were formulated and it is seen that approximately 50% of the sample can be classified under the ‘Inadequate’ food consumption group and 50% as ‘Adequate’. In other words, exactly half the sample seems to exhibit acceptable food consumption patterns while the other half of the sample fall under either the Poor (21%) or Borderline (29%) food consumption groups.

By disaggregating food consumption data across Townships it is seen that there is a marked increase in percentage of HHs with Poor and Borderline food consumption in Tan Yan, Lashio, Man Tone and Kun Long as compared to other townships. Thus it is important to primarily concentrate efforts in these townships as they contain a larger percentage of HHs depicting inadequate food consumption patterns.

Table 3: Food Consumption Scores across Townships

<table>
<thead>
<tr>
<th></th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>1 Kun Long</td>
<td>34</td>
</tr>
<tr>
<td>2 Kutkai</td>
<td>25</td>
</tr>
<tr>
<td>3 Lashio</td>
<td>34</td>
</tr>
<tr>
<td>4 Man Tone</td>
<td>22</td>
</tr>
<tr>
<td>5 Muse</td>
<td>12</td>
</tr>
<tr>
<td>6 Nam Kham</td>
<td>2</td>
</tr>
<tr>
<td>7 Nam Tu</td>
<td>12</td>
</tr>
<tr>
<td>8 Tan Yan</td>
<td>40</td>
</tr>
<tr>
<td>9 Theinni</td>
<td>8</td>
</tr>
<tr>
<td><strong>Sample Average</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Note: Figures have been rounded
Map 5: Poor and Borderline Food Consumption
Table 4: Mean FCS Scores for the Sample

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Borderline</th>
<th>Adequate</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Other cereals (wheat, maize)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Potatoes/Tubers</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Beans/Peas</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Vegetables</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Fruits</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Meat and Poultry</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Eggs</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fish</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Milk and Milk Products</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note on Acceptable Food Consumption Group:

Access to ‘Wet Paddy Land’ seems to be an important factor in HH food consumption. It is seen that amongst HHs with access to Wet Paddy Land; over 60% fall under the Acceptable consumption group as compared to a sample average of 50%. HHs with access to Wet Paddy Land would rely less on favorable weather conditions for irrigation and are thus able to cope or adapt easier than HHs that have little or no access to such land holdings.

As mentioned in the Agriculture section it was seen that on average a HH was able to access 2.8 acres of land. This figure, however, is the sample average. When disaggregating the data by food consumption patterns it is seen that male headed HHs with acceptable food consumption patterns access on average more than 3.3 acres.

**Shocks**

*Shocks*

Respondents were asked to list the three main shocks or difficulties faced by their household in the past six months. Once the respondent had listed the shocks he or she was then requested to list the shocks in order of severity from 1 (most severe) to 3 (less severe). Based on all the responses, the following patterns were seen with respect to main shocks.

The most common shock affecting HHs were

1. Sickness / HH expenditure on health
2. The lack of employment opportunities and reduced wages
3. Lack of credit required for running a business
4. High food price

Lack of income combined with low food availability severely restricts an HH’s ability to access food. To compound matters, some HH’s are forced to divert crucial monies in order to meet health expenses at the HH level. This further reduced HH food security. The most common obstacle to food security is the lack of income combined with the burden of recurring health expenses.
A combination of the above commonly cited shocks result in HHs either being unable to afford food due to rising prices or being unable to produce enough food and / or source sufficient incomes.

Map 6: HHs Affected by Household Expenditure on Health & Loss of Employment

Analysis of Shocks by Townships

Table 5: Most Commonly Reported Shocks – By Township

<table>
<thead>
<tr>
<th>Most Commonly Reported Shock(s)</th>
<th>Township</th>
</tr>
</thead>
</table>
| Sickness / HH expenditure on health | Man Tone  
                                         | Nam Kham          |
| The lack of employment opportunities and reduced wages | Man Tone  
                                                        | Nam Tu  
                                                        | Tan Yan          |
| Lack of money required for running a business | Theinni  
                                                    | Kun Long          |
| High food price | Man Tone  
                                        | Kun Long          |
| Unable to practice agriculture | Muse  
                                     | Nam Kham          |
| Debt to reimburse | Theinni  
                               | Tan Yan          |
**Water and Sanitation**

Access to water
Households were asked about the source of their drinking water. The majority of the sampled HHs access water from unprotected sources (43%) while the remaining HHs primarily depended on protected sources such as piped water and/or protected wells.

The highest percentage of HHs accessing water from unprotected sources was seen in the townships of Lashio and Tan Yan. By contrast, the majority of HHs in Nam Tu and Theinni townships reported obtaining their water from protected sources.

A dependence on water from unprotected sources poses a serious health risk especially amongst children. Logically, such a risk would be greatest in Tan Yan and Lashio. Thus it is strongly recommended that any sanitation measures or initiatives undertaken in Lashio target these townships as a starting point.

**Figure 9: Drinking Water Sources, by Type**

Households were also asked if they treated their drinking water. Sixty-two percent (62%) of the sample reported not treating their drinking water. Tan Yan and Kun Long had the highest percentage of HHs reporting non-treatment of their drinking water. Boiling was the most common method used by those treating their water.
Latrine Facilities
Sixteen percent (16%) of the sample stated that they had no latrine facilities. Amongst the remaining HHs (that had access to latrines); direct pit latrines were the most common (46%) followed by fly proof latrines (26%). Once again it is seen that Tan Yan and Kun Long have a significantly higher percentage of HHs with no access to latrines as compared to other zones.
This underlines the above recommendation that any sanitation initiative in Lashio necessarily begin in Tan Yan.

Figure 10: Access to Latrines, by Type

![Type of Latrine Chart]

*Health Education*

Only twenty percent (20%) of all sampled HHs across Lashio area reported never having received any health education on basic nutrition or hygiene. With the exception of Muse Township which reported more than 50% of HHs having received some health education; most townships reported an average of 10% of HHs have any knowledge of basic health and hygiene.