Food Security Surveillance survey
Comparative Report
Southern Chin State, Kanpetlet Township
June and October 2011
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Introduction

Solidarites International (SI) started its intervention in Kanpetlet Township, Southern Chin State in March, 2011. After conducting two rapid assessments in the two townships of Mindat and Kanpetlet in September and December 2010, SI launched a food security intervention in Kanpetlet Township, with the support of WFP and CIAA. SI started its intervention with a blanket food distribution funded by WFP in 67 villages, targeting 10,000 people, around 1900 HH. The beneficiaries’ selection was based on the rodent infestation level: most of the selected villages had been severely affected by rodent infestation, and the majority of the villages had lost at least 75% of their crops. In each selected village, all the villagers, except the government employees, received 10 kg of rice per month, for 2 months.

In parallel, SI launched a food security project funded by CIAA. The specific objective of this project was to improve the access to food and to restore the production capacities of the communities affected by the rodent infestation. The project activities included corn and paddy seeds distribution, Food for Work (FFW) for rodent control and rat trap distributions. This project targeted 58 villages, for a total of 8800 beneficiaries.

Within the framework of this project, one of the expected results was to monitor the food security situation in the targeted area, in order to better understand the main constraints faced in terms of access to food, and thus to better address the needs.

SI conducted 2 food security surveillance surveys during 2011 project implementation period: the first assessment was done in June 2011 and the second assessment end of September/beginning of October 2011. The rationale behind conducting those 2 surveys at that time was to collect data both towards the beginning and the end of the lean season in the area. The present report shows a comparison between the main findings of those 2 food security surveillance surveys.

Objectives and Methodology of Food Security Monitoring

Overall Objective
The overall objective of the surveillance is to follow-up on the food security situation and the communities’ level of recovery in the implementation area.

Specific Objectives
• To know about the farming situation of the area;
• To collect information about food availability and access in the area;
• To better understand the livelihoods and coping strategies in the target area;
• To assess the consequences of the rodent infestation;
• To evaluate the households’ food consumption.

1 Comité Interministériel pour l’Aide Alimentaire (French Cooperation)
**Data collection**

The sampled villages were selected according to the time and human resources constraints, as well as their geographic spread within the implementation area. However, because of the difficult access to reach some villages, the monitoring team could not select the most remote villages. In total, 74 households from 19 villages were surveyed in the first assessment in June, and 98 HH from 23 villages in the second assessment in October. Random sampling was used to select the respondents.

To conduct those 2 surveys, a HH interview questionnaire was designed, inspired from the WFP Food Security Monitoring Questionnaire (see Annex 1). The monitoring team interviewed the people both at SI Food Distribution points when beneficiaries came to receive their food, and directly at village level in the households’ houses, allowing for direct observations to confirm some of the answers given by the interviewees. The 172 households interviewed in the frame of the 2 surveys represent 22% of the total population of the targeted villages.

As much as possible, the team tried to interview the same HH during the first and the second surveys, in order to allow for an easier and more accurate comparison; however, it proved difficult to find the same people available for a second interview, and eventually, only 35 households could be interviewed twice.
Summary of the main findings

- More than 90% of the interviewees only rely on upland farming in both surveys;
- More than 90% of the crops were destroyed by rats in 2010;
- Respectively 51% of the interviewees in the first survey and 72% in the second survey got less than 10,000 MMK (around 13 USD) income per household in the 30 days prior to the assessment. As the price of rice is around 785 MMK (average between the 2 surveys) for one pyi (2 Kg), an average family of 5 persons eating minimum 2 kg per day can only buy rice for 12 days with this income;
- More than 96% of the interviewees in the 12 months prior to both surveys answered that they faced food shortages;
- During periods of food shortages, the majority of the interviewed people eat food they do not like or that they are not used to (broken rice\(^2\), banana pith, wild leaves or vegetables from the forest, yam or red millet);
- According to the Food Consumption Score results combined between the 2 surveys, 65% of the sampled households are in the “poor” category and 27% of the sampled households are in “borderline” category, against only 8% in the “acceptable” category.
- The average time to reach the market place from the villages is 4.5 hours; market places are mostly accessible by walking only.
- More than 95% of the interviewed households are in cash debts. The average amount of cash debts is 527000 MMK in the first survey and 574000 MMK in the second survey, the major reason for taking debts being by far the purchase of food.

Household Composition

The average family size among the surveyed households is 5.6. Interestingly, when looking at the repartition of the members according to the age, it is worth noticing that around 50% of the households’ members are under 15. Between 5 to 10% of the children of the households targeted by the 2 surveys cannot go to school, the main reason being the high costs.

Occupation and income

**Occupation**

In both the first assessment (FA) and the second assessment (SA), more than 90% of the interviewees reported high land farming as their main occupation. Indeed, land access is not an issue in this area: as showed below, an average of 99% of interviewed people reported to have access to some plots of land for agriculture. In addition, because the surveyed area is very remote and access between the villages and from villages to the Township capital is difficult, the villagers have very few job opportunities. Consequently, apart from farming, most of them have to rely on natural resources like finding resources from the forest (elephant foot yam, wild life, vegetables, etc), as well as livestock husbandry.

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\(^2\) “Broken rice” is a kind of poor-quality rice, normally used only to feed the livestock.
As for the second main occupation, people primarily rely on livestock keeping, collecting wild food supplies or daily labor or farming (elephant foot yam, orchard, avocado, lime, tea leaves and a few other vegetables). As shown below, livestock husbandry comes as the second main occupation; in this area, livestock is mainly mithum (gaur), pigs, chicken and goats.

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Regarding the average level of income in the interviewed households during the 30 days prior to the interview, a difference in income has been observed between the first assessment and the second assessment, from an average of 23,334 MMK to 20,020 MMK, due to the differences in income opportunities linked to the season.

Indeed, the first assessment was conducted in June, when farmers have finished the sowing and they thus have more time for other job opportunities. In addition, they still have some supplies from the previous harvest like...
elephant food yam or castor oil to sell at market places; as a consequence, firstly they get income from the sale of those products in the market, and in a second time some of them create job opportunities by hiring daily workers to carry the goods from the village to the market place. On the contrary, the second assessment was conducted beginning of October, when the crops are ripe and close to harvest time. The farmers are thus busy protecting the crops from birds, rodents, wild boars and other animals, and cannot dedicate time to other sources of income.

When looking at the average income compared to the price of the rice, the results are surprisingly positive. Indeed, at the time of the first assessment, with an average monthly income of 23,334 MMK and an average price of 811 MMK for 2 kg of rice, a 5-members family can buy rice for a period of 28 days; as for the second assessment, the result is similar, with the capacity to buy rice for 26 days. However, those results have to somehow be mitigated. Indeed, this situation is not representative of the majority of the population in the area, as a few people earned a bigger amount of money, thus significantly increasing the average income. Indeed, more than 56% of the households during both surveys got an income of 10,000 MMK (around 13 USD) or even less; and with this amount, a family with 5 members can only buy rice for approximately 10 days.

Interestingly, when comparing the income level with the family size, as shown below, there was a clear correlation in the results of the first assessment. Indeed, in June, most of the households have completed the sowing, and the members are thus free to find other job opportunities; bigger-sized households usually have a more important number of able-bodies, who can thus bring more income to the family. On the contrary, in the second assessment the family size has no significant impact on the income earned; in October, most of the people in the area start being busy with the farming activity, and thus do not have many other sources of income at that time.
**Migration**

To the question “Do people in your family migrate for work?”, around 15% answered positively. Among those, people usually migrate either in other Townships, or in other countries such as Malaysia, Thailand or India, where they can find more job opportunities. On average, there is not more than one member per family who migrates.

<table>
<thead>
<tr>
<th>Do people in your family migrate for work? (FA)</th>
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<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>14%</td>
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<tr>
<td>No</td>
</tr>
<tr>
<td>86%</td>
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<table>
<thead>
<tr>
<th>Do people in your family migrate for work? (SA)</th>
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<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>85%</td>
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</table>

**Land Tenure**

In both surveys, 99% of the interviewees reported to have access to agriculture land; land access does not seem to be an issue. In addition, as opposed to other areas, small farmers and big farmers cannot really be distinguished; indeed, the consequence of the shifting system is that most of the farmers cultivate the same area of land, and land tenure cannot be considered as a wealth criterion.

<table>
<thead>
<tr>
<th>Access to Agriculture Land (FA)</th>
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<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>99%</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access to Agriculture land (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>99%</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>1%</td>
</tr>
</tbody>
</table>

Land tenure is a mix of different systems in this area: 59 to 64% of the interviewees have their own land, 15 to 16% can access land through tribal ownership land and 16 to 20% rent their land. The cultivation system, known as slash and burn system, requires large areas of land for the shifting that is necessary every year. The average of area of land planted per family is one plot of 3 acres per year; only 5 people reported to cultivate 2 plots of 3 acres, and 1 mentioned 3 plots. However, every year they shift to another part of the mountain; the head of village is the person who decides where the villagers will cultivate the following year, and the size of the plot cultivated then depends on each family’s capacities.
Tribal ownership means that the land is owned by the same tribe. Moreover, even if people own the land, they still have to pay for it, but they will pay mainly with chicken (to members of the clan/tribe) and not necessarily on a yearly basis, in opposition to people who rent the land who pay a higher price on a yearly basis in cash or crops.

Table 2, land tenure situation

2010 harvest

The assessment team collected data related to the 2010 harvest. Results for the 2 staple crops, rice and corn, indicate that the 2010 harvest was deeply affected by the rodent infestation. The other crops mentioned by the interviewees during both assessments are red and yellow millet, beans and castor oil plant.

Among the interviewees who sowed rice, the average harvested number of baskets in 2010 was around 7, against 67.7 baskets for what respondents estimate to be a “normal yield”; it has to be specified that among the people who sowed, as many as 43% have reported not to have harvested anything, while 18% harvested less than 5 baskets, 27% between 5 and 15 baskets, and only 11% between 15 and 30.

As far as corn is concerned, results are even far more alarming. Among the interviewees who sowed corn, the average harvested number of baskets was 0.47, against 52 baskets for what respondents estimate to be a “normal yield”. Among them, as many as 90.3% reported not to have harvested anything, while most of the others harvested less than 5 baskets, and only 4 households (2.6%) harvested more than 5 baskets (up to 20 maximum).

It has to be noted that, if only 6 interviewed households (3.5%) did not plant neither rice nor corn, as many as 74% of all respondents did not harvest any of those 2 crops, which are the basis of the diet in this area.

Among the other crops, 59.3% reported to have cultivated yellow millet in 2010, 64.5% grew red millet, 75.6% cultivated castor oil plant and 9.3% planted beans. Nonetheless, among those, very few actually managed to harvest, especially for yellow and red millet (respectively 19% and 26%). The rate was much higher for castor oil plant (which is however only used as a cash crop), with 61.5% of the households who planted it managing to harvest some of it; as for beans, out of the 16 households who planted some, only 4 managed to harvest. Generally speaking, for all those crops, the reported yield was far below what is considered as the normal one in the area.
Food Shortage

Even in a normal year, farmers are not self-sufficient in terms of food in Southern Chin State. The farming system is still the shifting cultivation, and the techniques are inadequate. Due to demographic pressure, land availability decreases, and the rotation time between two crops becomes shorter which does not allow for the forest to grow back; this leads to increasing erosion and decreasing soil fertility. Local villagers cannot address these difficulties due to insufficient local investment capacity and a lack of technical support, therefore leading to a decline in agricultural productivity. As a result, most of the farmers’ own production cannot cover the food requirements in this area, and the majority of the population has to import food from the nearest surplus area in Saw Township, Magway Division.

During the 2010 cropping season, farmers lost their food stocks due to the rodent infestation and they faced alarming food shortages. According to both surveys, more than 96% of the interviewed people faced food shortages in the past 12 months, the main and only cause being the rodent infestation, which destroyed most of the crops.

Most of the surveyed villagers reported to have already faced some food shortage problems in the past. In the first assessment, 72% of the interviewees said they faced food shortages in the past but less severe than in 2010, against 55% in the second assessment; however, it has to be noted that 10% only reported to have faced a worst food shortage in the past, compared to 2011. Interestingly enough, an average of 27.5% reported never to have faced food shortages before, against only 3 to 4% in the past 12 months. Those figures highlight the chronic food insecurity situation of this area, while emphasizing the seriousness of the situation in 2010/2011, following the peak of the rodent infestation.

Coping Strategies

When asked about the coping mechanisms people use in the area when the food stocks are over, the 2 main answers were the same during the 2 assessments: to borrow food or rely on help from friends/relatives, and to purchase food on credit.
However, the proportions are interestingly different: the percentage of interviewed people purchasing food on credit was lower during the second assessment, while the percentage of people relying on borrowing food was higher in the second assessment. Indeed, the second assessment was conducted end of September/beginning of October, near harvest time, when the people are struggling to access both food and cash, thus having less means to purchase the food and being able to rely less on friends or relatives’ support.

The other main coping mechanisms that have been cited are to eat less preferred or less expensive food (such as broken rice, leaves), to collect wild food from the forest. The selling of livestock only appears in the list of second main coping strategies. Also, it is interesting to note that households would rather eat disliked food, rather than diminishing the number of meals per day, which is not a common coping mechanism among the surveyed households.
When the interviewees were asked if they eat food they don't not like or that they are not used to during food shortages, 77.5% of the interviewed villagers answered positively; this food mainly consists in banana pith, broken rice soup, green bananas, yam, wild vegetables or leaves from the forest and red millet.

Those rates largely decreased when asked if they were eating like this at the time of the survey: 27% were during the first assessment, and 17.3% during the second. The main reason could be that the first survey was conducted following SI’s food distribution in the area; as for the second assessment, it was close to the harvest period, when many people start eating the corn buds (which are actually tasty and people like to eat it) even if the corn is not yet ripe enough to be harvested.

**Food Consumption Pattern**

In order to collect data on the food consumption patterns in the surveyed area, SI used the WFP Food Consumption Score (FCS). This method allows for the analysis of both the dietary diversity and the food frequency. This indicator is calculated according to the diversity of food consumed within the 7 days prior to the interview, as well as the frequency with which each food item was consumed.

When looking at the results, the tendencies are striking: in both cases, more than 60% of the surveyed households have a poor FCS, against only 7 to 8% having an acceptable one. There is no major difference between the first and the second assessment. However, we can notice that the “Poor group” is more important in the second assessment; assumptions to explain this tendency could be twofold: either SI’s food distribution in June, or the fact that people have more difficulties to cope with the lack of food in September/October because it is the period just preceding the harvest.

Most people eat 3 meals per day; only 18.6% reported to eat 2 meals a day only. There is no correlation between the FCS and the number of meals eaten per day. Some households who are in the “poor” group have 3 meals a day, while some who are in the “acceptable” group have only 2 meals per day.

The main difference between the “poor” and the “acceptable” FCS is the consumption of meat or fish.

![Food Consumption Score (FA) and Food Consumption Score (SA)](image)

**Food Sources / Access**

During the first assessment, 96% of interviewed households answered that they primarily got their food from the humanitarian aid; indeed, this is confirmed by the fact that the assessment was conducted two weeks after SI’s
food distribution, and almost all inhabitants in the area were beneficiaries. The difference with the second assessment is obvious, as only 3% of the interviewees mentioned humanitarian assistance as the first source, people’s 2-month ration having run out. At that time, the first sources of food most commonly cited were the farmers’ own production and the purchase of food. It has to be specified that, when people mentioned “Own Production”, it means that they start eating the crops (mainly rice and maize) before the harvest to cope with food shortages, even if the crops are not entirely ripe for harvest, which usually starts during the month of October.

In terms of second sources of food, there are interesting differences between the 2 surveys. If the purchase of food and the purchase on credit come first in the first assessment, when people can still afford to buy part of their food, borrowing food comes first in September/October when people lack money just before the harvest; at that time, they also start eating their own production, even if it is not ripe yet (21% mentioned their own production as a source of food during the second assessment).

SI team’s direct observation in the houses confirmed that there were food stocks only during the first assessment, following SI's distributions; however, only rice or corn stocks could be seen. The second assessment was conducted close to the harvest time, so the households did not have any food stock left in their home; however they households could start eating their own production.

When looking at the price of the rice, according to the interviewees, it can vary between 500 MMK and 1000 MMK for 2 kg (1 pyi) according to the quality. The average price of the rice for one pyi (2 kg) was 811 MMK in June and
758 MMK in September/October; it decreases towards harvest time, and increases a few months after the harvest, when the demand increases again.

Among the people who reported the purchase as one of their sources of food, all of them mentioned buying food from market places; indeed, none of them reported buying it inside the village, as most of the villages do not have shops and rely entirely on market places.

This area is very remote and transport infrastructure is very poor; people have to walk to reach market places and have to bring back the food to their villages with manpower (by themselves). The average time to reach the market is 4 and half hours. This average time is only for one way to reach the market place; in addition, more time is needed on the way back, as the people bring back food from the market to their village.

| Debt level | In the first assessment 96% of the interviewees answered that they have debts to pay back and 97% in the second assessment. Those figures thus confirm a general but worrying tendency in the area. The average amount of cash debts was 527,000 MMK in the first survey and 574,000 MMK in the second survey. As a conclusion, if the percentage of indebted people remains quite stable, the amount increased between the two assessments, thus confirming that the more the harvest time is approaching, the more people struggle to access food or cash. |
| Table 9 Time to reach the market place |

<table>
<thead>
<tr>
<th>Time to reach market place (FA)</th>
<th>Time to reach market place (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 hour</td>
<td>39.19%</td>
</tr>
<tr>
<td>4 to 8 hour</td>
<td>41.89%</td>
</tr>
<tr>
<td>above 8 hour</td>
<td>14.86%</td>
</tr>
</tbody>
</table>

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| Table 10, debt level |

<table>
<thead>
<tr>
<th>Cash Debt level (FA)</th>
<th>Cash Debt Level (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 15,000</td>
<td>5%</td>
</tr>
<tr>
<td>From 15,000 to 100,000</td>
<td>24%</td>
</tr>
<tr>
<td>From 100,000 to 1,000,000</td>
<td>55%</td>
</tr>
<tr>
<td>Above 1,000,000</td>
<td>11%</td>
</tr>
<tr>
<td>Under 15,000</td>
<td>4%</td>
</tr>
<tr>
<td>From 15,000 to 100,000</td>
<td>18%</td>
</tr>
<tr>
<td>From 100,000 to 1,000,000</td>
<td>65%</td>
</tr>
<tr>
<td>Above 1,000,000</td>
<td>12%</td>
</tr>
</tbody>
</table>
This tendency is also confirmed by looking at the main reasons for people to contract debts. For 93% of respondents in the first survey, and 95% in the second survey, the main reason for indebtedness is the purchase of food.

Most of the households whose debt level goes above 1,000,000 MMK explain it by the fact that they are investing in the process of going abroad (Malaysia, Thailand…) to look for job opportunities; they thus need an important amount of money to cover the passport, visa and travelling costs.

In addition, the interest rate stands at 100% for one year; the people thus have to pay back double the amount of the original loan, resulting in the debt level doubling year by year. Usually, people borrow money from the money lenders, who are rich people living in market places who are also often merchants, or from better off relatives.

Eventually, 49% of the total number of interviewees answered that they have debts in kind (food or seeds); they borrow corn, millet and rice from shops and relatives. When borrowing in kind, the interest rate is the same as for cash: they have to give back twice the amount of crops/food that they borrowed.

**Water**

Water access in this area is not considered as the main issue, and other humanitarian actors such as UNDP, CARE and UNICEF have already implemented WASH projects in Kanpetlet, especially in terms of support for access to drinking water.

However, during the 2 surveys, the SI team also asked 2 questions to collect basic data on water sources and water treatment.

According to the findings, 82% of respondents reported that they had access to drinking water from pipes (connection of a pipe from the stream/river to the villages through a gravity water flow system). The others said they are collecting it either from a protected well, or for some directly from the stream/river. As far as the water treatment is concerned, more than 50% of the households surveyed boil the water, while very few filter it.
From direct observation, there are very few latrines in the villages and people are practicing open defecation in the areas on the mountain side.

**Conclusion**

Those 2 surveys, conducted at two different periods of the year, allowed interesting comparisons which have confirmed some major tendencies linked to the calendar. Indeed, people face increasing difficulties to access cash and food at the end of the lean season.

If some factors are structural and chronic in the area, such as the extreme remoteness and isolation, the lack of work opportunities, poor farming techniques and the rodents infestation, which peaked in 2010, considerably worsened the situation; people lost the majority of their harvest, thus struggling to feed their households, and the majority went deeply into debts.

SI’s intervention in the area in 2011, thanks to WFP and CIAA funding, have allowed the people to start recovering and to have a better harvest than last year. However, according to the results of a similar survey conducted by SI after the harvest, the level of recovery is still far from being satisfactory. The majority of the people in the area have only harvested enough to feed their households for a period of 5 to 6 months, and most of them have not managed to pay back their debts yet.

Consequently, a second phase of early recovery in the area is absolutely necessary for the people to recover an acceptable level of food security and to increase their resilience capacities. Priorities should be given to access to food and cash both for the people to pay back the debts and to cope with their short self-sufficiency in terms of their own production; in addition, farming inputs and techniques should be supported, for the farmer households to improve the yield of the next harvest, and thus to be able to rely on their own production for a longer period of time.