Key Findings....

- Settlements in the former poppy growing areas appear to be dealing with regular seasonal food insecurity with normal coping mechanisms. Settlements assessed in the Chilli Farming communities appear to be experiencing severe food insecurity and require immediate assistance.

- Chilli Farmers report Paddy production as being significantly lower in 2011 than in 2010, both in terms of output and yield.

- Household diets of Former Poppy Growers are more diverse than those of the Chilli Farmers, 91% of whom are consuming inadequate diets (3 food groups or less).

- Approximately one third of the Chilli Farmers were found to be sourcing food by means that reflect clear distress; e.g. exchanging food for work, exchanging items (assets) for food.

- Food interventions are required immediately in the identified areas assessed during the June round of data collection. A full ration should be made available until December 2012. All areas need to be monitored around the next harvest period to determine the success of the 2012 harvest and if there is a need to continue assistance.

Background

In 2011, the Government of the Republic of the Union of Myanmar stepped up poppy eradication efforts, destroying standing poppy crops throughout the country. Recognizing the impact this campaign was having on community livelihoods, the Government requested UN Agencies, and particularly the World Food Programme (WFP), to provide emergency assistance in areas where poppy eradication efforts were significantly impacting household food security status. Requests for assistance were first received in January 2012 for communities in two townships in southern Shan State, Pekon and Pinlaung (See Figure 1).

The initial assessment in January did not find high level of food insecurity but recommended that a follow-up of the situation be assessed in June 2012. In June 2012 it was brought to the attention of WFP by the Minister of Kaya and KMSS (WFP’s local cooperating partner), that chilli farmers in the very southern part of Shan state were under considerable stress in terms of accessing food, requesting that action be taken by WFP. From this request this area (in Pekon) was included in the June assessment. This report provides information on the progress of the previously assessed former poppy growing areas and the chilli farmers in the far south.

Methodology

The objective of this assessment was to indicate the extent of the food insecurity of the chilli farmers in the southern Pekon and to update WFP on the current situation of the former poppy growing areas (Pekon and Pinlaung).

Designed as a rapid assessment, WFP assessed the same 10 villages identified by the previous assessment and a further 20 in Phekong, identified by the Government and KMSS. Thus, findings apply only to the 30 villages assessed and cannot be generalized to other communities in Pekon and Pinlaung townships. In each village, one key informant interview was conducted, as were 20 household interviews.

The key informant and household questionnaires included indicators of dietary adequacy and hunger including the household dietary diversity scale and the household hunger scale. Questionnaires were designed to collect comparable information to WFP’s food security monitoring system and surveys by other partners.

Data collection started and completed at the end of June 2012. Data analysis was completed in July.
Lean Season Food Security Situation

The lean season is the period pre-harvest during which the previous food stocks have been exhausted. The duration and severity of the lean period is dependent on, amongst other things, how successful the previous year’s harvest was. Cash from cash crops such as chilli (or poppies in this specific context) will provide resources for purchase after own food production stocks are finished. Due to poppy eradication efforts this source of cash for these communities is no longer available. The reliance for food is either on own production or purchase using cash savings. For chilli farmers the success of their cash crops is an important part of their cash reserves for the lean season. However, if agricultural shocks are experienced during the growing period not only is cash income affected but food production as well, increasing vulnerability to food insecurity.

What is clear from the data is that households that were former poppy growers have not been as deeply impacted, in terms of food security, during the lean season as the chilli farmers.

2011 cropping season

For the June 2012 assessment only the chilli farmers were asked about production of the 2011 and 2010 harvests. As the chilli crop is the main harvest for income in these areas it was important to note changes. The most striking of which was that, on average there was a 60-80% decrease in chilli production between the 2010 and 2011 chilli harvests, and was relatively consistent across all communities. This was also represented as a similar reduction in yield (kg/acre). In fact, 90% of the chilli farmers indicated a decrease in total production as well as significant changes in upland paddy production (a decrease of 60% production). However, most of these households did not see a decrease in lowland paddy production, if not a small increase (although, on average, there was a 15% increase in the area of lowland paddy planted). There were only two communities that indicated an increase in chilli production.

To normalise the area planted (both paddy and chilli) acres per capita where used to determine difference between communities (and the effect on food security). The data indicates that communities which planted the greatest area (per capita) of chilli also planted about 30-40% more paddy than those which accessed the smallest area per capita. This is likely to indicate a greater land access in certain villages. Despite this, upland paddy production was reduced across the board, with some settlements seeing up to 70% reduction in crops in communities in the middle range of chilli production.

For the analysis, communities were divided into 3 groups according to the total area of paddy planted for the 2011 harvest. For each of these groups, none had reduced the areas of chilli planted since 2010 and there was little difference in the area (per capita) allocated to the chilli crop between...
these groups, perhaps an indication of labour efficiency and/or effort to sustain this crop. The amount of land from 2010 – 2011 dedicated to upland or lowland paddy had not changed much for each of these groups either. However, there were some important issues differing between groups in paddy production with each group seeing different rates of decline in rice production (except chilli, which dropped by 70-86% for all groups).

Communities that planted the largest areas of paddy per capita saw a 50% reduction in yield. However, due to larger absolute areas planted, these same communities reported having 2-3 times more food stock (than those having planted smaller areas per capita). Comparing communities that grew the least area per capita (0.2 acres) with those growing the most (0.32 acres) indicates that they, in fact, actually plant paddy of the same absolute area (40 acres). This may suggest that land access is a particular challenge for larger communities and increases vulnerability when crops fail or produce significantly lower yields.

**Dietary diversity of affected communities**

Dietary diversity of the households interviewed was low in both communities. Although lowered diversity is anticipated during the lean period (pre-harvest) the dietary diversity of the chilli farmers is particularly low (average of 2.5 food groups compared to 3.8 of former poppy growers). What is most concerning is that 56% of households in chilli growing settlements reported consuming only 2 food groups or less (91% consuming 3 food groups or less), an indication that there are immediate and acute needs in these communities. This situation compares to 55% of households in the former poppy growers settlements consuming 4 or 5 food groups (but around 40% of households consuming 3 food groups or less).

Neither of the areas assessed are within the WFP operational areas. Comparing the data collected during the June assessment with those of the January assessment there is a clear indication that there are much fewer households in Pekon and Pinlaung consuming adequately diverse diets (4 or more food groups). This increase is likely to be, considering other indicators, mainly due to normal seasonal variations in the diet, along with some mild coping mechanisms, rather than more severe coping mechanisms (reflecting severe food insecurity). By comparison the majority of chilli farmers are not consuming adequately diverse diets, indicating that this situation is much worse.

As was anecdotally reported, dietary diversity with the households in the chilli farming areas is very low, and consumption is by in large restricted to staples and vegetables. For the former poppy growing households fat/oil is commonly consumed and around 40% of the households are consuming meat and/or fish. The consumption of pulses (or any protein source) by households in...
the chilli farmer areas is alarmingly low with less than one quarter of households consuming some form of protein. Milk consumption was rarely reported by any of the households.

The source of food also helps to understand current circumstances around food acquisition and how well the household is coping with it’s current circumstances. In the former poppy growing areas most food was being acquired by purchase (63% of households reported this as one of the main sources) and some 26% reported that they still had their own stocks. However, households in the chilli farming areas described a more diverse set of food sources. Many of these reflect greater difficulties, such as borrowing food, purchase on credit or advance (45% of households). However, many more households indicated a more desperate situation such as exchange items for food (33%), working for food (38%) and receiving food (rice) as a gift (21%). Food aid was not mentioned by any of the households.

These mechanisms of acquiring food are concerning and indicate both destructive coping mechanisms as well as a more extreme situation in terms of food acquisition. This is also reflected in the indicator designed to measure household hunger (as defined by the Household Hunger Scale, developed by FANTA\(^1\)). In the chilli farming households almost 60% of the households reported moderate\(^2\) or severe hunger\(^3\), compared to only 17% in the former poppy growing areas. This reinforces the observational data that the majority of the households in the chilli farming areas are highly or severely food insecure.

**Market access and commodity prices**

As implied by the reliance on staple food purchases, market access is relatively sufficient in the communities surveyed. While only one of the 30 communities reported not being able to access a market, all villages report being able to access nearby markets via road.

The poppy eradication efforts did not appear to be affecting local staple food prices or daily wage labour rates. Rice prices were cheaper in Pinlaung and Pekon (432 MMK/ Kg) than in Taungyyi (545 MMK/Kg). This is interesting given that the assessment was carried out during the monsoon season when roads are more difficult to travel and a resulting increase in costs would be expected.

Daily wage labour rates were also similar (2100 MMK/day) in the chilli farmer areas of Pinlaung and Pekon and slightly higher in the more northerly parts (2500 MMK/day)). Lower labour rates (15% lower) in the chilli farmer areas will have some impact on household food security, reducing purchasing power.

The relative parity in rice prices suggests a level of market integration that may make it possible for cash-rather than food-based programming. However, due to the apparent acute food shortages, the short-term strategy would favour food distribution.

**Health**

A rather concerning finding from this assessment was that the frequency of diseases reported by households in the chilli farming areas appears particularly high. This compares to an apparent decrease in households reporting disease in the former poppy growing areas reporting of disease from the households (occurring in the previous two weeks prior to the survey). It is not clear why this change occurred. However, fever in children was reported by two thirds of all the chilli farmer households (three times higher than in the former poppy growing households). Acute Respiratory Infections of children was reported by almost half of all the chilli farmer households and diarrhoea by more than one third. The high prevalence of disease in the chilli farming communities is concerning as, in combination with the apparent poor food access and expressed hunger, this increases risk of malnutrition due to poorer absorption of what little nutrients are available.

Additional risk comes in the form of poor sanitation, with 15% of households indicating that they do not have access to a latrine. In addition, about 16% of households (chilli farmers) use unsafe drinking water sources. It is not possible to know if the high levels of disease reported by the chilli farmer households is due to poor nutritional intake or poor sanitation / unsafe drinking water, but all are likely to contribute.

\(^1\) http://www.fantaproject.org/publications/hhs_2011.shtml

\(^2\) Moderate hunger is defined as a household hunger score of 2-4 and largely denotes rare occurrences of acute food shortages

\(^3\) Severe hunger is defined as having a household hunger score of between 4-6 and largely denotes frequent occurrences of acute food shortages
Food security situation moving forward

This analysis has indicated two quite different scenarios between the assessed settlements.

Former Poppy Growing Settlements

The current situation, and based on the previous assessment results would suggest the following:

- **Moderate Food Insecurity**
  - 2011 harvest stocks remain for about 20% of households
  - Dietary diversity is low and about 40% of households are consuming an inadequate diet (3 food groups or less). However, this is likely to be a seasonal reduction in variety
  - Market access is fair, with rice prices and labour rates not indicating reduced purchasing power
  - Disease reporting is low (having decreased), despite risks relating to sanitation and drinking water sources.
  - Coping strategies are generally mild or moderate.

The food security situation has certainly deteriorated since the January assessment. There are signs of moderate hunger and lowered dietary diversity. However, most households are no longer using their own production as a food source but most are managing to cope. It is possible that assistance is required in these settlements but only for around 10-20% of the households. However, in the case that production of the next harvest is poor, it is likely that there will be a future need for assistance. What is clear, however, is that the impact of destruction of poppy fields does not seem to have impacted households in these settlements to the same extent as chilli farmers (who have also experienced significant losses of their main cash crop).

Chilli Farming Settlements

These settlements were new assessed during the lean period (i.e. pre-harvest). The following observations summarise the food security situation:

- **Severe Food Insecurity**
  - Dietary Diversity is extremely low with 91% of the households consuming inadequate diets (3 or less food groups). Any ration provided should be the complete food basket due to such a high percentage (56%) of households consuming only 2 food groups (staples and vegetables).
  - Severe coping strategies being employed to acquire food
  - Chilli crop failures
  - Rice production greatly reduced
  - Food access reflects atypical patterns, such as working for food and trading assets for food.
  - Although market access is fair and rice prices on a par with other local and main markets, daily labour rates are lower than other parts of Southern Shan and indicates reduced purchasing power.

The situation with the chilli farmer settlements is much more serious than that of the former poppy growers.

There is an immediate need of assistance and support to the majority of households in these settlements with direct food aid.

Shifts in climate and farming practices are claimed to have been underlying causes in crop failures of chilli and upland paddy. It is important that food aid is not the only form of assistance provided to these settlements. Other strategies should consider the issues being faced by households that are resulting in reduced production of cash and food crops in order to reduce the risk of this situation continuing into the following agricultural year.

Overview

There is a clear and immediate need for food based interventions in the chilli farmer settlements (full ration) effective immediately given the quite dire circumstances faced by these communities. However, in the longer-term livelihood based interventions are required in order to improve and protect farming practices for sustained agricultural income. Cash-based programming certainly has a role given the apparent market integration reported. The loss of cash crops to both communities has clearly had a greater impact on the chilli farmers. This difference may reflect better savings in the former poppy growing communities and the ability to better deal with the lean season and reduced paddy harvests. However, both communities require assistance to improve non-cash crop practices.

Alongside food security responses, the health and nutrition situation needs to be closely monitored in the next few months as large percentages of children under-5 were reportedly affected by diarrhoea, fevers and acute respiratory infections, in addition to having limited adequate food supplies, in chilli farming settlements. Health and nutrition sector responses would be the most appropriate way to address this situation, as high disease burdens can impact child mortality as well as child nutritional status. Increasing malnutrition rates often require a complementary food-based intervention. WFP will thus continue to monitor this situation.