Review of the CLP's Approach to Monitoring Food Security – June 2012

Background

The Chars Livelihoods Programme (CLP) works with extreme poor households living on island *chars* in North West Bangladesh. Improving food security is one of the main desired outcomes of the CLP. The CLP's support seeks to improve food security on the *chars* through the provision of an income generating asset (IGA), livelihoods training and inputs (homestead gardening and cattle management), access to clean water and sanitation, etc.

Food security is a complex issue, affected by a range of factors which vary according to time and place. In the unique *char* context such factors include flooding, erosion, landlessness, extreme seasonality[1], poor living conditions, low income and unequal household food distribution, etc.

The Innovation, Monitoring and Learning (IML) division of the CLP is responsible for demonstrating the outcomes of the programme in a number of areas including livelihoods, female empowerment, nutrition and food security.

The IML division already had an established set of indicators used to monitor food security (see text box). This monitoring approach was sufficient to meet the targets set in the CLP logframe. However, IML reviewed its monitoring approach between April and June 2012 to better understand food security dynamics among *char* dwellers. This included a literature review, as well as conducting Focus Groups Discussions (FGDs) and in depth interviews with CLP participants and control households. This helped the CLP understand local definitions of food security and assess whether the indicators originally being monitored were adequate.

The CLP's approach to monitoring food security up to June 2012

Up to June 2012, the CLP used to monitor food security by collecting data on indicators of 'access to food' (see text box).[2] They are also being used by other extreme poor programmes in Bangladesh.[3] Such indicators provide a basic picture of food security in the *chars*, however by only focusing on one of the three pillars, these oversimplify the issue of food security and overlook added complexities.

Aligning with the existing theory

The review of the CLP's approach undertaken between April and June 2012, revealed the need to realign with the theory.

Following the 1996 World Food Summit, food security was defined as existing when *"all people, at all times, have access to sufficient, safe and nutritious food to maintain a healthy and active life"*. It was also recognised that food insecurity is a complex and multidimensional issue that should be broken down according to three pillars:

1. Food availability: *Food must be available in sufficient quantities on a consistent basis.*
2. Food access: *Households must be able to regularly acquire adequate amounts of food.*
3. Food utilisation: *Consumed food must have positive nutritional impact on people.*[4]

Going forward, IML's approach to monitoring food security will therefore include the original indicators as well as additional ones explicitly categorised according to these three pillars.

Selecting additional indicators

As a result of the review process, IML selected additional indicators that would help to generate a context specific picture of food security among *char* dwellers by covering the three pillars of food security.

The IML division first reviewed all of the key indicators of food security used by the United Nation agencies (FAO, WFP)[5], USAID[6], USDA[7], as well as food security

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[1] Extreme seasons include the lean and rainy seasons.
[2] 'Access to food' is just one of the three pillars of assessing food security. Other pillars include, 'food availability' and 'food utilisation'.
[3] SHIREE also uses 'mean number of food types consumed' and 'mean number of food shortage coping strategies used'

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[4] http://www.wfp.org/food-security/
http://www.who.int/trade/glossary/story028/en/
[5] Food and Agricultural Organisation, World Food Programme
[6] United States Agency for International Development

committees and initiatives (CFS, FIVIMS)[8]. The selection of the additional indicators was first based on their relevance to the *char* context, as well as on IML's resources and capacity.[9] Each indicator was selected with the aim of providing a holistic picture of food security in the *chars*.

Reviewing Indicators of Food Availability

Up to June 2012, the CLP's monitoring approach did not focus on indicators of food availability. As a result of the review, a new indicator was selected to assess the dynamics of food availability. This indicator considers the different source of main food items ie: own production, purchased from the market, gathered, or borrowed. Knowing the source of food items consumed is essential to understand the vulnerability of core participants to external shocks ie: changes in food prices, extreme weather influencing agricultural production, etc.

Reviewing Indicators of Food Utilisation

Up to June 2012, the CLP's monitoring approach did not include indicators of food utilisation. As a result of the review, new indicators were selected to assess the impact the CLP is having on food utilisation. Food utilisation specifically refers to appropriate food preparation and intra-household food distribution. An extensive number of indicators could have been used to monitor food utilisation eg: anthropometric measurements (BMI, MUAC)[10], disease incidence, calorie consumption etc. As many are already being collected as part of the CLP's nutrition monitoring system, IML focused on a separate indicator, maternal buffering.[11] The review process revealed that the mother was usually the first to sacrifice within a household. Monitoring this indicator would therefore provide insight on food distribution and utilisation patterns, as well as vulnerability, food availability and seasonality of food insecurity. The IML division also decided to focus on WASH[12] indicators such as hygienic practices and access to safe water and sanitation. These are considered as useful proxy indicators for safe food preparation and consumption leading to positive nutritional impact.

Reviewing Indicators of Food Access

Up to June 2012, the CLP's monitoring approach solely focused on indicators of access to food. However, the review highlighted the need to modify the original

indicators. In response, new indicators were added that considered the scale of severity in coping strategies, as well as importance of considering food diversity alongside food frequency. Two WFP tools were identified as appropriate to fill in the gaps: the Coping Strategy Index (CSI) and the Food Consumption Score (FCS). In addition, a specific indicator on food expenditure was selected to assess participant's vulnerability to food insecurity, as a household is particularly vulnerable if over 70% of their income is spent on food (Smith, 2000).

Table 1: The CLP's indicators for food security

Categories	Indicators	Status
Availability	Food sources	New
Access	Food expenditure *% income spent on food*	New
	Food frequency *Number of meals eaten per day*	Old
	Food diversity *Number of food groups consumed*	Old
	Food diversity *Food Consumption Score (FCS)*	New
	Coping strategies *Number of food shortage strategies used*	Old
	Coping strategies *Coping Strategy Index (CSI)*	New
Food Utilisation	Intra-household food distribution *% maternal buffering*	New
	Access to water *% HHs with access to improved water source*	New
	Access to sanitation *% HHs with access to sanitary latrine*	New
	Hand washing *% of women reporting hand washing at key times*	New

Adapting key indicators to the unique *char* context

Having decided to use the CSI and FCS, IML needed to make sure these were aligned with the *char* context.

The Coping Strategy Index (CSI)

The CSI, a tool developed by WFP, is a key indicator to monitor, as household food security is largely determined by the use of coping strategies. It allows for the measurement of frequency of coping strategies, as well as the quantification of their severity. The frequency and severity of coping strategies are then combined into a single score. The analysis of this indicator allows for an assessment over time of whether household food security is improving or worsening.

Coping strategies are complex behaviours, which are inherently context and time specific. Thus, when monitoring the use of coping strategies, it is essential to use a list of coping strategies determined and ranked by the local community.

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[7] United States Department of Agriculture

[8] Committee on World Food Security, Food Insecurity and Vulnerability Information and mapping systems

[9] Certain indicators would have required specialised data collection and analysis.

[10] BMI = Body Mass Index
MUAC = Mid-Upper Arm Circumference

[11] This indicator refers to mothers who eat less or skip a meal so that their children can eat more.

[12] Water, Sanitation and Hygiene

Following WFP's methodology, a list of the main coping strategies determined by *char* dwellers was first produced. During a series of FGDs, women were asked to name coping strategies used due to a shortage of food or money to buy food. This was repeated a number of times, until no new coping strategies were mentioned, to ensure the final list was representative. The final set of coping strategies was developed using those which were the most frequently mentioned. A separate set of FGDs were subsequently conducted to establish their severity. An average was calculated for each coping strategy. These values then allowed for the severity of each coping strategy to be determined (see Table 2).

Table 2: Severity of coping strategies determined by char dwellers from least to most severe

Order	Coping Strategies
1	Reducing quantity of food
2	Collecting wild vegetables (spinach)
3	Eating twice a day
4	Mother skips a meal/eats less for children
5	Reducing quality of food
6	Taking money from savings
7	Taking food loan
8	Selling hens and ducks
9	Eating rice with salt and/or chilies
10	Eating once a day
11	Selling goats and sheep
12	Taking money loan with interest to buy food

The Food Consumption Score

The FCS, a tool developed by WFP, is a key indicator to monitor as it can be used as a proxy for food consumption. It is a weighed score based on dietary diversity, food frequency and the nutritional importance of food groups consumed. The FCS of a household is calculated by multiplying the frequency of foods consumed in the last seven days with the weighting of each food group. The weightings of food groups have been determined by WFP according to their nutrition density.[13] Scores are then compared to pre-established thresholds: 1) poor food consumption, 2) borderline food consumption and 3) acceptable food consumption.

Following WFP's methodology, IML adjusted these thresholds considering the oil consumption of *char* dwellers. In Bangladesh, there is a known high consumption of edible oil. The review confirmed this high consumption pattern among *char* dwellers. In order to reveal the *chars* specific food consumption score, the FCS thresholds each had to be raised by seven points to account for this daily consumption of oil. Below are the set thresholds with their adjusted scores:
- Poor food consumption: 0 to 28
- Borderline food consumption: 28.5 to 42

- Acceptable food consumption: > 42[14]

Understanding how the community defines food security

The final part of the review process consisted of collecting data on local understandings of food security. By producing a set of food security indicators based on the perceptions of *char* dwellers, IML could determine whether *char* definitions of food security are aligned with the theory.

During a series of FGDs, women were asked to identify specific determinants of food security and food insecurity. This was repeated a number of times, until no new indicators were mentioned, to ensure the final set of indicators was representative. The final set of food security and food insecurity indicators comprises those which were most frequently mentioned (see Table 3). These indicators demonstrate the necessity of this review, and the importance of focusing on food diversity as well as food frequency, and consider coping strategies determined by *char* dwellers.

Table 3: Local understanding of food security

You are food secure if you:	You are food insecure if you:
Eat fish and meat every week	Don't eat fish and meat every week
Eat three meals a day	Take a loan out (cash or food)
Grow your own crops	Eat less than three meals a day
Eat vegetables every week	Collect wild vegetables

The way forward

Going forward, the IML division will apply these changes to the CLP's approach to monitoring food security. Following the review conducted between April and June 2012, IML conducted a survey, in July 2012, to assess the outcomes of the programme on food security using the new indicators. A number of reports will be produced to disseminate the results to donors, implementing organisations and other extreme poor programmes in Bangladesh.

In addition, the IML division will adapt its monitoring system. The new indicators will be applied to existing bi-monthly monitoring of new cohorts and annual monitoring of past cohorts and controls. This will allow IML to monitor the outcomes of CLP on food security over time. By adding new indicators to its monitoring system, the CLP will have a more context specific and holistic understanding of food security among *char* dwellers.

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[13] Nutrition density is defined as the ration of nutrient content (in grams) to the total energy content (in kilocalories)

[14] Emergency Food Security Assessment Handbook, page 63.