

# Zambia Fact Sheet

## Community and Household Surveillance (CHS)

### October 2008

#### Highlights of October 2008

- ⇒ Around 65% of the households with access to land indicated they had **no cereal stocks** at the time of the interview. This is much lower than the 70% in March 08. Beneficiary households were less likely to have no stocks (59%) than non-beneficiaries (70%).
- ⇒ Only 18% of beneficiary households indicated that **food assistance** was their most important source of cereal in the past 30 days while 47% relied on purchases and 20% on own harvest. Non-beneficiaries rely mostly on purchase (61%) and production (23%).
- ⇒ Around 22% of beneficiary and 18% of non-beneficiary households had received **food remittances** in the six months prior to the survey; 13% had received cash remittances and 6% had received agricultural inputs.
- ⇒ More beneficiary households (28%) had **borrowed money** in the 3 months prior to the survey compared to non-beneficiary households (23%), mostly to buy food (both). This was down from 32% for beneficiaries and 28% for non-beneficiaries in October 2007.
- ⇒ Round 11 showed that 13% of beneficiary and 18% of non-beneficiary households **sold assets to buy food** while only 7% sold assets to **pay for health care**—both are higher than in October 2007.
- ⇒ Around 17% of all households **sold poultry** while 8% sold sheep or goats in the months prior to the survey which is a bit higher than in October 2007.

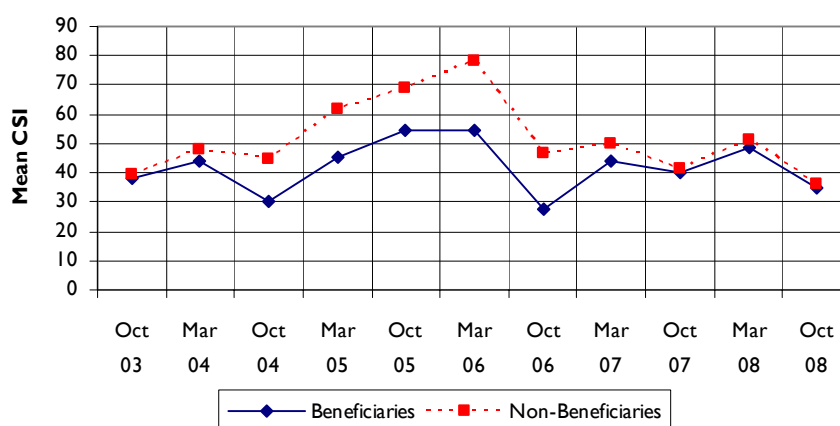
#### Effects of Food Assistance

Analysis of CHS data allows for comparison of WFP beneficiary and non-beneficiary groups on the basis of measures computed from the household data. The **Coping Strategies Index (CSI)** measures the **frequency** and **severity** of actions taken by households in response to the presence or threat of a food shortage.

With the CSI, a lower score implies reduced stress on the household and thus, relatively better food security. As indicated in the graph, the average CSI score of beneficiary households is the same as that of the non-beneficiaries and the lowest levels ever for non-beneficiary households.

- October 2008 results show a decrease in CSI for both beneficiary and non-beneficiary households when compared to March 2008 and also slightly lower than that of October 2007. The decrease in CSI from March 2008 is expected due to the period being post harvest implying relatively better household food security and hence reduced stress on households compared to March 2008.
- **By programme activity**, FFA beneficiary households again have a higher CSI (39.5) compared to other programme beneficiaries: MMC (36.4), OVC (36) with ART/HBC having the lowest at (20.8). All activities experienced a decrease in CSI compared to March 2008.
- **By district**, the highest CSI was found in Mumbwa (FFA) (74), followed by Lukulu (FFA) (65) and Senanga FFA (63). The lowest were found in Chingola ART (11) and Sesheke MMC (12).

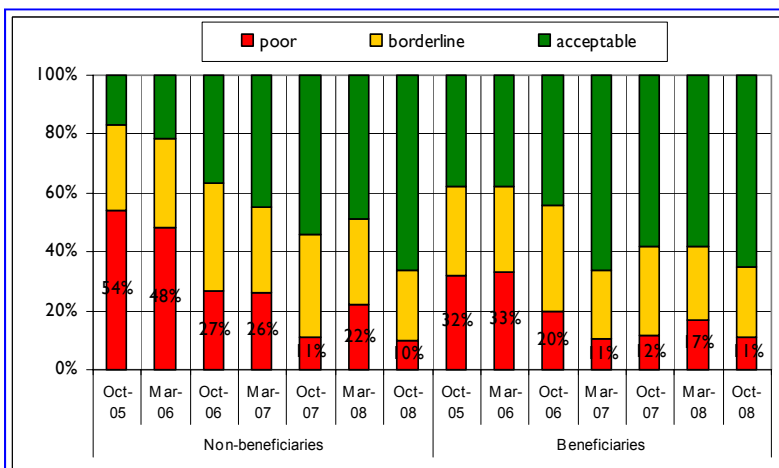
Trends in Coping Strategies Index - Zambia



#### Food Consumption Profiles

The **food consumption score** not only allows comparisons of dietary quality and diversity between beneficiary and non-beneficiary populations but also is used to establish a threshold of dietary quality against which to compare these populations. Research has shown that dietary diversity and food frequency are good proxy measures of household food security. The chart shows that the percentage of beneficiary (10%) and non-beneficiary (11%) households with

**poor consumption** decreased in October 2008 as compared to March 2008. Although there are no differences in distribution by consumption group by beneficiary status, the mean food consumption score for beneficiaries (48.7) was higher than non-beneficiaries (46.2). By programme activity, OVC (15%) and MMC (13%) beneficiaries had the highest percentage of households with poor consumption, while only 5% of the ART/HBC beneficiaries had poor consumption.



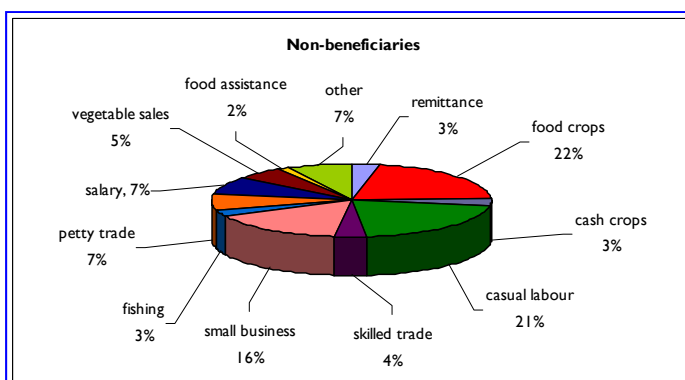
#### Consumption classifications

Using a 7-day recall period, information was collected on the variety and frequency of different foods and food groups to calculate a weighted food consumption score. Weights were based on the nutritional density of the foods. Households were then classified as having either 'poor', 'borderline' or 'acceptable' consumption based on the analysis of the data. Households with **'borderline'** consumption are eating the equivalent of cereals and vegetables on a daily basis plus pulses and oils about 4 times per week. Those with **'poor'** consumption managed to eat the equivalent of only cereals and vegetables on a daily basis. This is considered a bare minimum and is a sign of extreme household food insecurity.

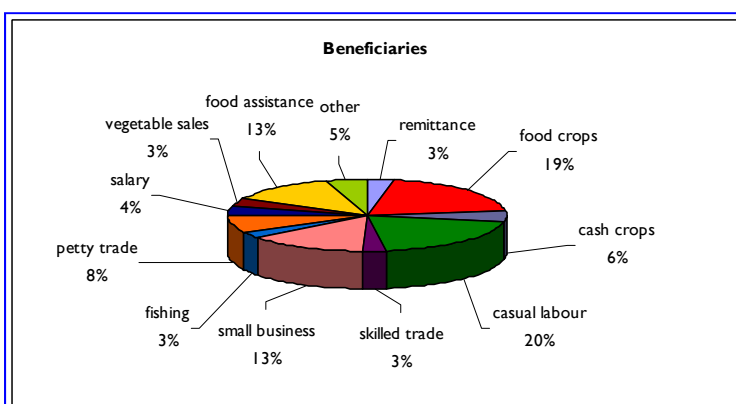
## Contribution to Total Income

In order to better understand the relative importance of different livelihood sources the heads of households were asked to estimate the contribution of each source to the total household income.

For RII, the graph on the right shows that sales of food crops, casual labour, small business, petty trade and salary/wages have the greatest contribution to total monthly income for **non-beneficiary** households. Remittances make up only 2% of total income.



For **beneficiary** households, the greatest contributor to total income are casual labour, sales of food crops and small business, with food assistance only contributing 13 percent compared to 18% in October 2007.



By programme activity, ART beneficiaries received 8% of their income from remittances, 24% from casual labour and 20% from small business yet only 3% from food crops. These were very different from the other programme beneficiary groups. The FFA beneficiaries derived 15% of their income from food assistance which was more than the other groups.

### Information is collected on:

- Household demography
- Household livelihood strategies
- Coping strategies
- Food aid outcomes
- Food consumption & sources of food consumed
- Vulnerable Groups
  - \* Orphaned children
  - \* Chronically ill
  - \* Female headed households
  - \* Elderly headed households
  - \* Asset poor
  - \* Disabled
- Targeting observations
- Household wealth and income
- Detailed household expenditure
- Maternal health and nutrition (body-mass index—BMI)
- Child health and nutrition (anthropometric measurements)

## Livelihood Sources and Expenditure

### Main livelihood sources of households

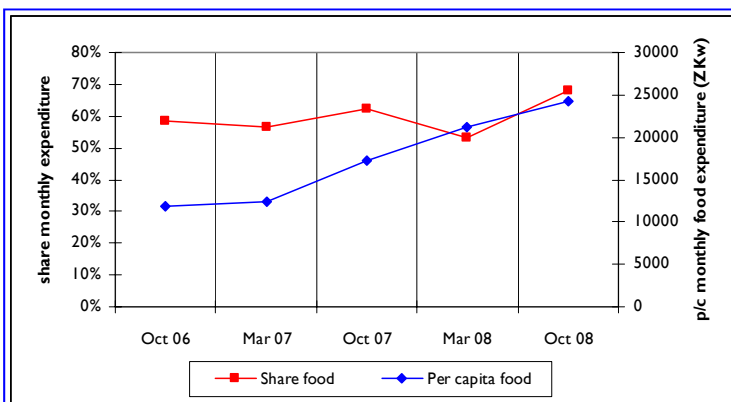
Beneficiaries	Non-beneficiaries
Food crop sales (38%)	Food crop sales (37%)
Casual labor (38%)	Casual labour (36%)
Food assistance (36%)	Small business (30%)
Small business (27%)	Petty trade (15%)

Casual labour and food crop sales were the most common livelihood sources for both beneficiary and non-beneficiary households. Compared to October 2007, reliance on food assistance has decreased from 51% to 36% for beneficiaries. Reliance on small business activities is greater for both groups.

- Significantly more ( $p < 0.001$ ) non-beneficiaries have only one livelihood source (35% vs. 22%).
- By programme type, 36% of ART beneficiaries have only one source, compared to 21-22% from the other groups.
- ART beneficiaries are the most likely to rely on small business, salary and remittances (13%) while OVC households are more likely to rely on food crop sales (61%).
- FFA beneficiaries are the most likely to name food assistance (43%) as a major livelihood source while MMC households are the least likely to name remittances (2%), followed by OVC beneficiary households (4%).

**Expenditure information** was collected for the fifth time in Round II.

- Non-beneficiary households had a slightly higher share of monthly expenditure for **food (64%)** compared to beneficiaries (61%) which is higher than March 2008 but almost the same as in October 2007. However, there were no differences in share of expenditure for education, health, debt repayment or funerals between the groups.
- Both ART and MMC beneficiaries had a monthly share of expenditure on food of 68% compared to 60% for OVC and 58% for FFA households. Most ART and MMC beneficiaries are found in urban to peri-urban areas.
- Median monthly **per capita expenditure** was ZKw 34,400 for beneficiaries and ZKw 39,000 for non-beneficiary households - both of which are higher than October 07 figures (R9).
- ART beneficiary households had the highest median per capita monthly expenditure (ZKw 46,500) while FFA beneficiary households had the lowest ZKw 29,200).
- The chart on the right shows that per capita monthly food expenditure has been increasing since October 2006 while the share of expenditure for food as remained between 55-60% until October 2008 where it reached nearly 70% of total monthly expenditure.

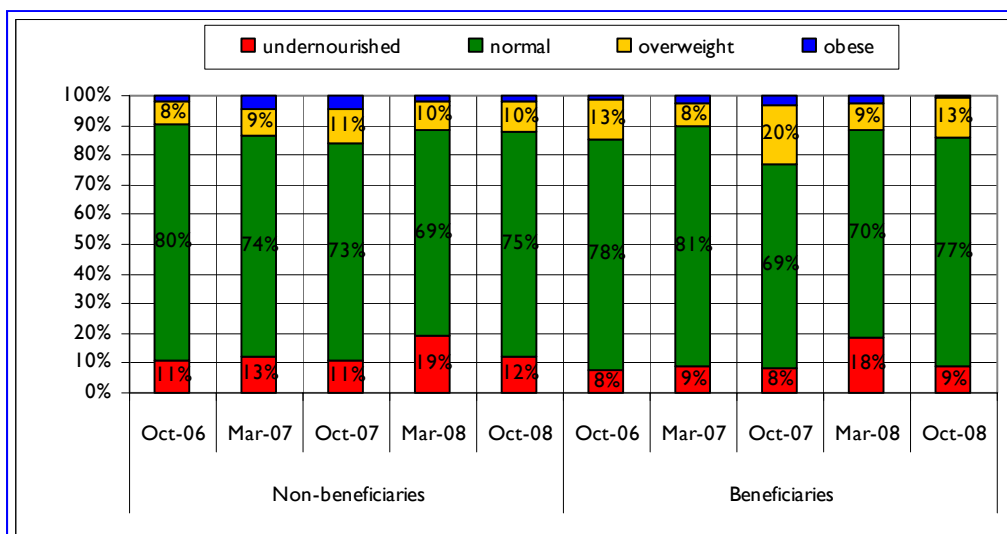


## Nutrition of Women

Over 300 women aged 15-49 years were included in the sample. The graph below shows nutritional status of women in the CHS samples by beneficiary status for five rounds of data collection. For both groups, the percentage of women who are undernourished (BMI < 18.5 kg/m<sup>2</sup>) has decreased from the previous round. Trend analysis shows that there appears to be a seasonal pattern in nutritional status of women with increases in BMI between the March and October rounds.

By **programme type**, 11% of women in ART/HBC beneficiary households were malnourished with 17% overweight or obese representing a decreased from 28% malnourished in March 2008. For other programmes, 12% of women in OVC beneficiary households were malnourished followed by 11% in MMC and only 6% in FFA households. The greatest percentage of overweight or obese women were found in the FFA beneficiary households (18%).

By **region**, women from the West had the lowest average BMI (21.1 kg/m<sup>2</sup>) and the highest percentage with BMI < 18.5 kg/m<sup>2</sup> (16%), followed by the Central region (21.6 kg/m<sup>2</sup> and 14%).



### Health and Nutrition in CHS

The CHS has been collecting and analyzing health and nutrition information on women of reproductive age (15-49 years) and on children 0-59 months of age since Round 7 in October 2006.

For non-pregnant women, the body-mass index (BMI) is calculated. For Zambia, the majority of women in the sample 'normal' with BMI 18.5-24.9 kg/m<sup>2</sup>.

For children, age, sex, weight and height/length are collected and z-scores are calculated using Epi-Info software. Then children are classified as being moderately wasted, underweight or stunted with a z-score < -2 SD.

WFP partners with the Ministry of Health and National Food and Nutrition Commission in design, collection and analysis of this information. So far data are available for five rounds, allowing for some trend analysis.

### Women: Education and recent Illness

- In the Round 11 sample, the **education levels** of women in beneficiary households were slightly better with 36% **completed primary or higher** compared to 32% in non-beneficiary households.
- There is a relationship between BMI and education with 17% of women with no education being malnourished compared to 10% with some primary and 8.5% with primary completed or higher.
- In all, 18% of women reported having **diarrhoea** in the 2 weeks prior to the survey which is about the same as previous rounds. Diarrhoea was more common in women from MMC beneficiary households (21%) and least common in ART (11%).
- 29% of the women reported **fever** in the 2 weeks prior to the survey which is identical to the October 2006 and 2007 rounds. Fever was also most common amongst women in MMC households (34%) and least among those in ART households (11%).
- There were no relationships between recent morbidity and women's nutritional status.
- Women with poor quality sanitation have significantly ( $p < 0.05$ ) lower BMI than those with adequate sanitation.
- Women living in houses with thatch roof and dirt floor have significantly ( $p < 0.001$ ) BMI than those with adequate housing.
- Women from households accessing drinking water from improved sources are less likely to have recent diarrhoea or fever.

## Nutrition & HH food security

In this round, several interesting relationships were found between household food security and nutrition outcomes of women and children.

- Women from households with poor quality housing or poor sanitation have significantly ( $p < 0.01$ ) lower BMI than those with OK housing or good sanitation.
- Women from asset poor households have a significantly ( $p < 0.05$ ) lower BMI than those who are asset medium or rich.
- Children with a malnourished mother/caretaker are significantly ( $p < 0.01$ ) more likely to be underweight.
- Children from asset poor households are significantly ( $p < 0.05$ ) more likely to be wasted or underweight.
- Non-beneficiary children from households with an elderly head are significantly ( $p < 0.05$ ) more likely to have diarrhoea or ARI.
- Beneficiary children from female-headed households are significantly ( $p < 0.05$ ) less likely to be underweight.
- Households hosting **wasted** children derive a significantly higher share of income from petty trade and have significantly ( $p < 0.05$ ) greater dependence on food assistance and bartering to access food.
- Households hosting **underweight** children derive a significantly lower share of income from salary and have significantly ( $p < 0.05$ ) less dependence on purchase to access food.
- Households with an undernourished woman derive a significantly ( $p < 0.05$ ) greater share of income from casual labour than those without.

## Children's health and nutrition

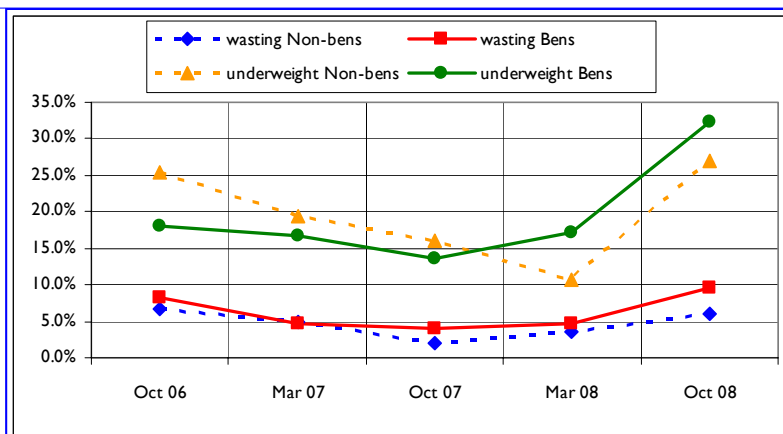
In Round 11, around 420 children 6-59 months were weighed and measured. Of those, 7.4% were **wasted** or low weight-for-height, while 28.8% were **underweight** (low weight-for-age) and 54.0% were chronically malnourished or **stunted**. This compares with 3.1% wasting, 15.9% underweight and 35.1% stunting in the October 2007 sample. Based on five rounds of data collection, trend analysis shows that there has been an increase in acute malnutrition to levels around that of October 2006 while the prevalence of underweight has increased dramatically for both groups since March 2008. The levels of stunting are similar to that found in Round 10. In this sample, beneficiary children are more likely to be malnourished than non-beneficiary children.

By **programme activity**, the sample sizes are small and thus only indicative. Children from ART beneficiary households are the most likely to be wasted (14%) while those from the MMC households are most likely to be underweight (49%). More than 60% of the children from ART, MMC and OVC households were chronically malnourished. Children from FFA households are the best off nutritionally.

By **region**, children in the West were most likely to be wasted (11%) while those from the Central region were the most likely to be underweight (39%) and nearly 60% from Central and Eastern regions were stunted.

In this sample, 25% had experienced **diarrhoea** in the 2 weeks prior to the survey which is the same as October 07, but lower than the 35% from October 2006. Approximately 43% of the children were reported to have experienced recent **fever** which compares to 37% in October 07 and 48% in October 2006. Lastly, 18% of the children had suffered from acute respiratory infection which was similar than the levels in the past rounds. Beneficiary children were slightly more likely to have suffered diarrhoea and fever than non-beneficiary children. There were no significant relationships noted between nutritional status and recent morbidity.

In this round, children from households using **improved sources of drinking water** (UNICEF definition) were slightly less likely to be malnourished. This was also the case when considering **sanitation**. In addition children with poor sanitation were significantly ( $p < 0.05$ ) more likely to have experienced recent diarrhoea.



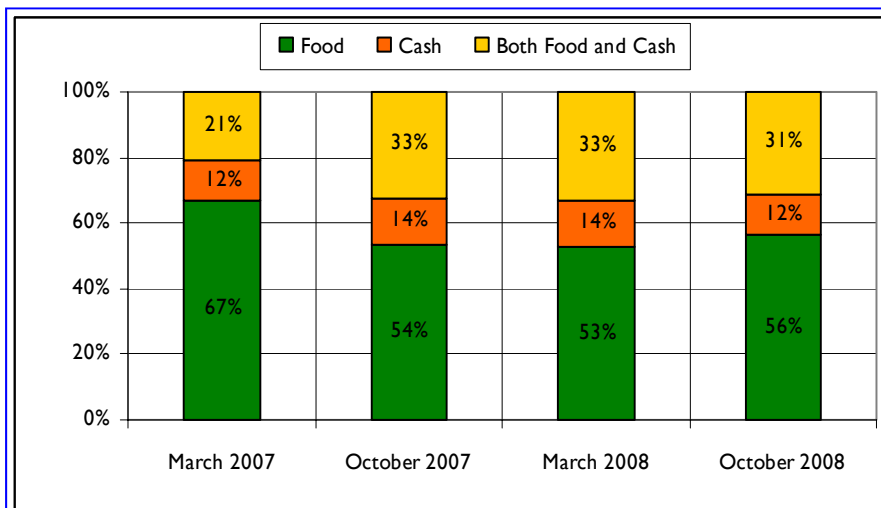
## Preferred Type of Assistance

The chart below shows that 56% of the beneficiary households preferred food only, 31% preferred both food and cash and 12% preferred cash only. Compared to March 2008 and October 2007, the percentages are nearly the same.

Main **reasons why food** was preferred were: food satisfies household food shortages by 83% of the households, food prices are high (39%), food prices are unpredictable (35%), better for children (32%) and difficult to access the market (28%). Compared to previous rounds, the percentage of households naming high food prices as a main reason has increased from 25% in October 2007.

For **cash preference reasons** given were: can be used for other expenses (90%), can purchase food and other items (69%), and can purchase a variety of foods (62%). For both cash and food, reasons given were: best meets seasonal needs (95%) and ability to cope is improved (90%).

By programme type, **food only** was preferred by 69% of FFW/A beneficiaries, 52% of OVC, 49% of MMC and 44% of the ART beneficiary households. However, there were big differences in cash only and both food and cash preferences by beneficiary type.



**Cash only** was preferred by 17% of the ART beneficiary households, 14% of MMC, 11% of FFA and 10% of OVC households.

The FFA households were the least likely to prefer both food and cash (21%) compared to the other beneficiary groups (38-39%).

### Types of Assistance

In order to learn more about the needs of beneficiaries, the households were asked if they preferred food, cash or a combination of both food and cash. In addition, they were also asked to give up to three reasons for their preferences.

These new questions were added to inform the WFP regional Special Initiative on Cash and Voucher Programming (SICVP) which began in late 2006.

They also provide empirical information on beneficiary needs and perceptions for planning and decision making in WFP operational areas.

## Demographic indicators

	Beneficiaries	Non-beneficiaries
HH size*	5.2	5.8
% Effective Dependants*	64%	57%
Female Head	35%	31%
Elderly Head*	22%	12%
Disabled member*	16%	9%
Keeping orphans*	44%	33%
Member died in past three months	9%	8%
Chronically ill member	12%	13%
Asset poor	28%	2%

\*statistically significant difference

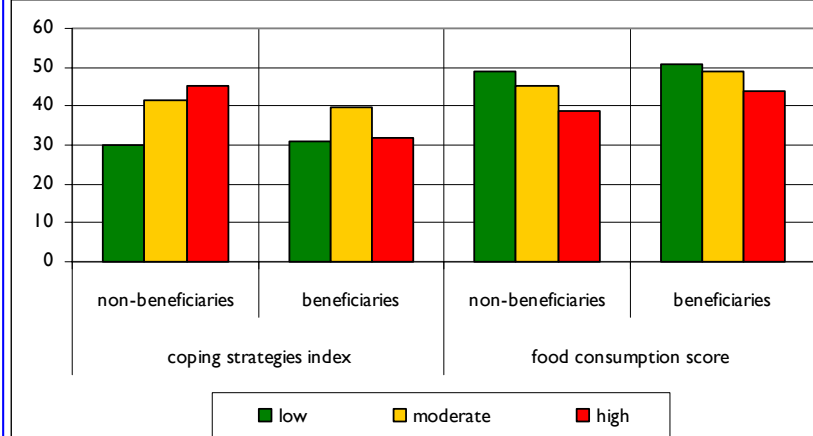
**Asset wealth** is defined on the basis of the number of different types of productive and / or non productive assets owned by a household. Groups are classified as:

- Asset Poor = 0 to 4 different types of assets
- Asset Medium = 5 to 9 different types of assets
- Asset Rich = 10 or more different types of assets

## Vulnerability Characteristics

In Round 11, vulnerability was assessed by considering the number of vulnerable characteristics (out of 9) found in each household.

- Variables used were asset poverty, female or elderly head, chronically ill member, hosting orphans, disabled member, recent death of a member, 80% or more effective dependents and large family size. Households were described as having either low (0-1 characteristics), moderate (2-3) or high (4+) **vulnerability**.
- In this round, significantly more ( $p < 0.01$ ) beneficiary households were highly vulnerable (19%) when compared to non-beneficiary households (13%) which is an improvement over October 2007 (14% vs. 12%).
- By **programme activity**, ART (28%) had the highest percentage of highly vulnerable households followed by OVC (24%) and FFA (16%) while MMC had the lowest at 6 percent.
- Two-thirds of the MMC beneficiary households had low vulnerability compared to 53% of non-beneficiaries and only 21% of ART beneficiary households.
- The chart below compares the mean coping strategies index (CSI) and food consumption score (FCS) by **vulnerability level and beneficiary status**. For non-beneficiaries the relationship between CSI and FCS and vulnerability is clearly illustrated, the higher the vulnerability the higher the coping strategy index and the lower the food consumption score.
- For the beneficiaries, a positive effect of food assistance on reducing stress as indicated by the lower CSI in the highly vulnerable households as well as higher FCS than non-beneficiaries in all categories.

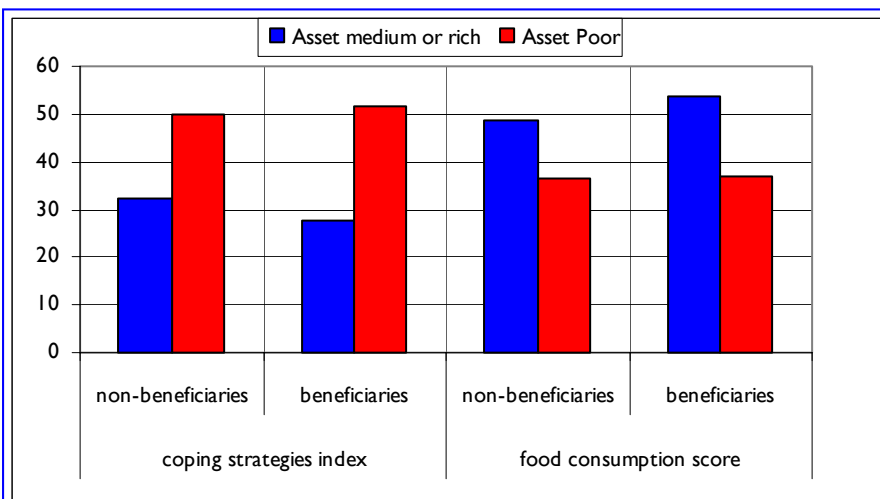


## Targeting Efficiency

10 out of the 24 district surveyed (42%) had no beneficiaries that met the highly vulnerable criteria. Targeting should therefore be improved in Chin-gola, Siavonga, Chongwe, Mambwe, Petauke, Kazungula, Sesheke, Kafue, Kalomo and Luangwa.

In total, about 25% of sampled households were asset poor households with no significant difference between groups. For **beneficiary** households, the **asset poor** were significantly ( $p < 0.001$ ) more likely to use risky coping strategies. There was a stronger significant relationship between asset poverty, food consumption and coping strategy for **beneficiary** households.

FFA households were more likely to be asset rich (81%) followed by MMC (76%), while ART households were more likely to be asset poor (36%).



The sampled households show that, beneficiaries were significantly more likely to be **households hosting orphans** (HHO), an elderly head (EHH) or have a high percentage of effective dependents.

By program activity, MMC had the poorest targeting with 0% of its beneficiaries being in the highly vulnerable classification.

The **best targeting** was found in Katete (OVC) with 25% of their beneficiaries having more than six criteria, followed by Lukulu (FFA) (8%) and Mungu (FFA/ART) (7%).



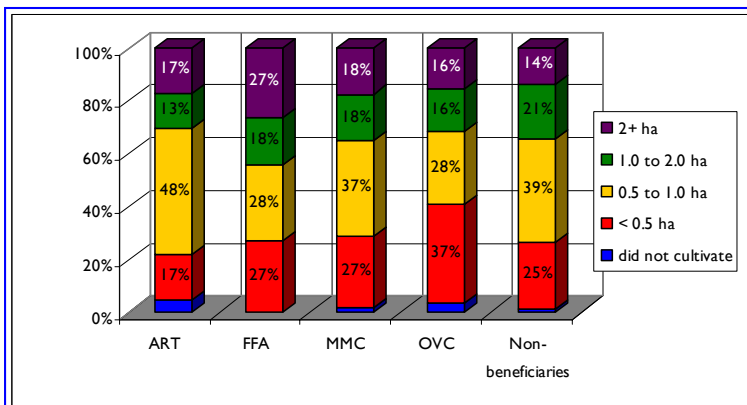
## 2008/09 Agriculture Season

Significantly more ( $p < 0.05$ ) beneficiary households had **access to agricultural land** (80%) compared to non-beneficiary households (73%). However, by programme activity, only 25% of the ART beneficiaries had access to land as compared to 97% of FFW/FFA, 94% of MMC and 87% of OVC beneficiary households. As the chart below indicates, the OVC beneficiary households had the smallest plots under cultivation while the FFW/A households had the largest area.

Slightly more beneficiary households (19%) **cultivated less** land this season than last compared to non-beneficiary households (16%). Overall the main reasons for cultivating less are **lack of seed** (28%) and **lack of sufficient labour** (25%). The main reason for cultivating less for OVC beneficiary households is lack of seed (63%) while for FFA, the main reason is given as lack of sufficient labour (36%). For ART, the main reason for cultivating less was lack of fertilizer (40%) while for MMC, it was weather related causes (43%). One-third of the sample used cattle for draught power and the rest had none.

Overall, 97% of the cultivating households had planted maize, followed by groundnuts (47%), cotton (18%), cassava (13%) and sorghum (12%). ART beneficiary households were the most likely to grow

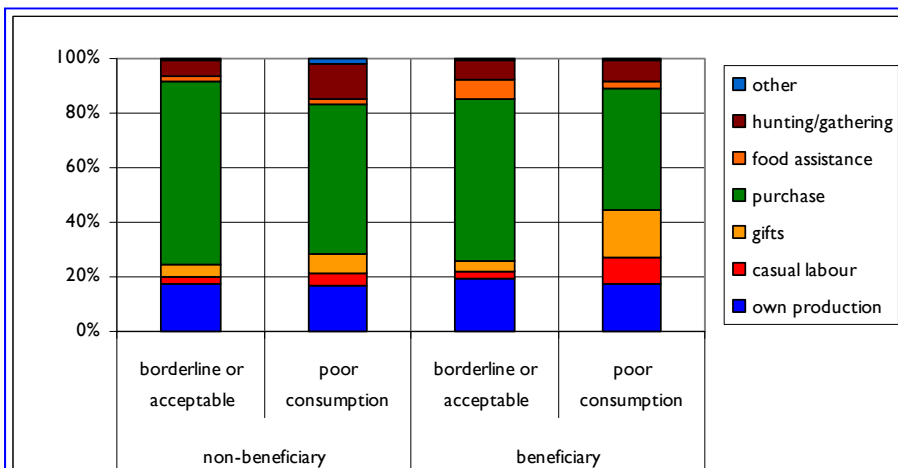
groundnuts (59%) while FFA (23%) and OVC (22%) households were the most likely to grown cotton. MMC households were the most likely to grow sorghum (37%) and millet (30%).



## Sources of Food Consumed by Households

Identifying the major sources of food and monitoring these over time is critical to understanding the principal factors affecting food security of households. As illustrated in the chart below:

- As in previous rounds, the main source of staple food consumed in the past two months prior to the survey for **non-beneficiary** households was purchases followed by own harvest. However, non-beneficiary households with poor consumption also relied significantly more on borrowing and hunting/gathering to access food than those with border-line or acceptable consumption.
- Beneficiary households** also relied mostly on purchase to access food, followed by own production. There was very little reliance on food assistance. Beneficiary households with poor consumption relied significantly more on gifts and casual labour and significantly less on purchase to access food. Reliance on food assistance was similar to October 2007 for both consumption groups.



### Education of Children

- For beneficiaries 68% of eligible boys and 68% of girls are attending school compared to 80% (B) and 81% (G) in October 07, and 86% (B) and 87% (G) in October 2006.
- When comparing by beneficiary status, there are few differences in enrolment for either boys or girls.
- However, by programme activity, only 59% of eligible children from ART beneficiary households were enrolled and attending, followed by 68-69% of FFA & MMC beneficiary children and 78% of OVC beneficiary children with boys slightly less likely to be enrolled for all groups except OVCs.
- By orphan status, there is no difference in enrollment nor any difference by orphan status and sex. However double orphans are much more likely to be enrolled and attending than single or non-orphans.
- By age, orphaned children in general are less likely to be enrolled in secondary school, starting around age 14 years.

### Households obtain food in one or more of the following ways:

- ⇒ Grow and consume from their own stocks
- ⇒ Purchase from markets
- ⇒ Transfers from relatives or members of the community
- ⇒ Casual labour
- ⇒ Transfers in the form of food aid
- ⇒ Gathering wild foods

Understanding how these patterns differ across groups, provides a general starting point for understanding the nature of food insecurity.

(Source: FANTA)

### For comments or queries, please contact:

UN Common Premises  
Alick Nkhata Road  
P.O. Box 319666, Lusaka  
Zambia  
Phone: (00260) 1 253 845  
Fax: (00260) 1 254 332

Website: [www.wfp.org](http://www.wfp.org)



**World Food Programme**