

The Tragedy of Hunger

"Behold, the days are coming," says the Lord GOD, "That I will send a famine on the land, Not a famine of bread, Nor a thirst for water, But of hearing the words of the LORD" (Amos 8:11).

Food security is a difficult concept to measure. When I was working on large-scale food security programming in the former USSR and Ethiopia in the 1990s, we would focus on measurements such as the prevalence / incidence of chronic or acute malnutrition and anemia rates etc. However, in the past decade, we have come to understand that food security rests on 4 main 'pillars' – availability, access, utilization, and risk (stability or vulnerability).

The following discussion contains data from the Canadian Food Grain Bank, a major food security donor, and identifies a number of rapid, accurate, and cross-cultural indicators of food security that have been developed over the past decade or so and they fall into one of five different categories:

Category	What it captures	Types of tools in this category
Dietary diversity and food frequency	Different kinds of foods or food groups and the frequency with which they eat them.	Food Consumption Score (FCS) Household Dietary Diversity Score (HDDS)
Spending on food	The proportion of income a household spends on food.	Income and household expenditure measures (no one tool)
Consumption behaviors	Food security – indirectly – by measuring behaviors related to food consumption	Coping Strategies Index (CSI) Reduced Coping Strategies Index (rCSI) Household Hunger Scale (HHS)
Experiential measures	Combines measures of household behavior related to consumption with psychological measures	Household Food Insecurity Access Scale (HFIAS) Household Hunger Scale (HHS)
Self-assessment measures	Highly subjective in nature and perhaps too easy to manipulate. Yet, do correlate with other measures	No one tool – asking households to rate their current food security compared to other time periods

Let us focus on a few of these measures first.

1. Food Consumption Score (FCS).

The Food Consumption Score (FCS) was developed by the World Food Program (WFP) as a standard indicator to be used in WFP food security and vulnerability surveys. The FCS is an approach that captures both consumption frequency and dietary diversity. How do we calculate the FCS for a household and then for a broader community?

- FCS is calculated based on a 7-day recall which captures the important food groups;
- Food items are divided into 9 different food groups and each group is assigned a weight;
- Weights are based on the food group's quality in terms of caloric density, macro & micronutrient content and quantities typically eaten (the weightings are taken as a standard from the WFP);
- The maximum number of days counted in one group is 7;
- Each household's food consumption score has a range of 0 to 112

The raw survey data for the FCS is made up of how many days, in the past seven days, a household consumed food from each of the nine food group categories: main staples, pulses, fruits, vegetables, animal, dairy, sugar, oil, and condiments. A weighting is then applied to each of the nine food groups based on nutritional quality. Here is a table used by the Canadian Food Grain Bank (I would never, under any circumstances, recommend pork as in the table below, but am simply showing a food security tool as used by a major international food donor):

Food Items (Examples)	Food Groups (Definitive)	Weight (Definitive)
1 Maize, maize meal, rice, sorghum, millet, pasta, bread and other cereals, cassava, potatoes, sweet potatoes, other tubers, plantains	Main Staples	2
2 Beans, peas, groundnuts & cashew nuts	Pulses	3
3 Vegetables, leaves	Vegetables	1
4 Fruits	Fruit	1
5 Beef, goat, poultry, pork, eggs, fish	Meat and Fish	4
6 Milk, yogurt and other dairy	Milk	4
7 Sugar & sugar products, honey	Sugar	0.5
8 Oils, fats and butter	Oil	0.5
9 Spices, tea, coffee, salt, fish powder, small amounts of milk for tea	Condiments	0

Different calculations are then used to come to the household FCS, and then to the average FCS for a given community.

2. Reduced Coping Strategies Index.

A coping strategies index can be used to capture changes in the food security vulnerability of a community. It can show what impact any food assistance has on reducing their use of food consumption coping strategies. It is important to differentiate between ‘food consumption’ and ‘livelihood’ coping strategies, depending on the nature and objectives of a project. Food consumption coping strategies are specific strategies a household takes to cope with changes in food availability and access, such as reducing the size of meals, or skipping meals.

Livelihood coping strategies do not directly relate to food consumption; instead they refer to strategies a household chooses in the face of insecurity that negatively affect a household’s livelihoods. Livelihood coping strategies are collected using a different measurement tool – the Livelihood Coping Strategies Index (LCSI), which is described below.

The reduced coping strategy index (rCSI) is specifically focused on food consumption coping strategies *only*, and is based on a series of responses (strategies) to a single question: “*What do you do when you don’t have adequate food, and don’t have the money to buy food?*”

The rCSI combines:

- ▶ The frequency of each strategy (how many times was each strategy was adopted?)
- ▶ Their severity (how serious is each strategy?)

The rCSI first measures the actual number of days reported in the past seven days for each specific coping strategy. A weighting is then applied for each coping strategy, as some coping strategies are deemed more serious than others. It uses 5 standard food consumption coping strategies, but additional context-specific food consumption coping strategies may be added to the list of possible strategies. Here is the typical question format in a survey questionnaire:

Reduced Coping Strategies Index (rCSI)	
In the past 7 days, if you did not have enough food and were unable to buy food, how many days has your household had to:	Number of days (0 – 7)
a. Rely on less preferred and less expensive foods?	
b. Borrow food or rely on help from a friend or relative?	
c. Limit portion size at mealtimes?	
d. Restrict consumption by adults in order for children to eat?	
e. Reduce number of meals in a day?	

The following standard severity weightings are then assigned to each coping strategy, e.g.:

Strategy	Severity Weight
a. Rely on less preferred and less expensive foods?	1
b. Borrow food or rely on help from a friend or relative?	2
c. Limit portion size at mealtimes?	1
d. Restrict consumption by adults in order for children to eat?	3
e. Reduce number of meals in a day?	1

Calculation example: Here is an example of how the rCSI would be calculated for a single household:

Reduced Coping Strategies Index (rCSI)			
In the past 7 days, if you did not have enough food and were unable to buy food, how many times has your household had to:	Number of days (0 – 7)	Severity weight	Weighted score (number of days * weight)
a. Rely on less preferred and less expensive foods?	5	1	5
b. Borrow food or rely on help from a friend or relative?	2	2	4
c. Limit portion size at mealtimes?	7	1	7
d. Restrict consumption by adults in order for children to eat?	2	3	6
e. Reduce number of meals in a day?	5	1	5
Total Household rCSI			27

The possible rCSI scores for each household will range between 0 and 56 (unless additional context-specific food consumption coping strategies are added to the standard five strategies).

Once an rCSI has been calculated for each surveyed household, an overall Average rCSI can be determined for the sampled group of households for the survey. This would be derived by simply summing the rCSI scores for all households and dividing by the number of households surveyed as follows:

$$Avg\ rCSI = \frac{\sum rCSI\ for\ all\ surveyed\ households}{Total\ \#\ of\ households\ surveyed}$$

The team for a food security project should set an appropriate target for the rCSI indicator, which the team believes is realistic to achieve by the end of project and based on the intervention being planned (e.g. full food ration vs half ration). Targets should be expressed a percent decrease in the average rCSI to be achieved post-distribution. Once the baseline data is collected, the target should be revisited and, if necessary, revised. As with all project outcomes and targets, end of project reporting will then compare the actual result against the target and explain reasons for significant variances.

3. Livelihoods Coping Strategies Index

The Livelihoods Coping Strategies Index (L-CSI) is used to help assess asset depletion and contributes to a measure of a household's future coping capacity (as an element of economic access to food). Unlike many coping strategies tools, the L-CSI does not ask about frequency of use.

The Livelihood Coping Strategies Index is derived from a series of questions regarding the household's experience with livelihood stress and asset depletion during the 30 days prior to survey. Responses are used to understand the stress and insecurity faced by households and describes their capacity regarding future productivity.

All strategies are pre-classified into three broad groups: stress, crisis and emergency strategies. Stress strategies are understood to be the least severe, while emergency are the most severe. A household can most easily recover from using a stress strategy, whereas crisis strategies are more difficult to recover from and emergency strategies have the possibility of permanently reducing a household's livelihood potential.

For example, selling non-productive, easily replaceable household items is considered to be a stress (low severity) coping strategy. Selling productive assets is a more severe or crisis strategy; it more significantly affects future livelihoods as those productive assets are more difficult to recover or repurchase (due to their higher cost). Finally, selling a house or land is considered the most severe type of coping strategy (emergency). Both represent significant productive assets and it may be impossible for a household to ever recover from selling such assets.

- Stress strategies, such as borrowing money or spending savings, are those which indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts.
- Crisis strategies, such as selling productive assets, directly reduce future productivity, including human capital formation.
- Emergency strategies, such as selling one's land, affect future productivity, but are more difficult to reverse or more

dramatic in nature.

A generic global list of 18 possible livelihood coping strategies provides potential questionnaire items for this indicator.

ID	Strategy	Category	Rational / Discussion
1	Sold household assets/goods (radio, furniture, television, jewelry etc.)	Stress	Selling off household assets is equivalent to spending down savings – a sign of stress, or mild food insecurity
2	Spent savings	Stress	Incurring more debt to meet food needs or spending down savings are signs of stress, or mild food insecurity.
3	Sold more animals (nonproductive) than usual ²	Stress	Items indicating reduced ability to deal with future shocks due to current reduction in resources or increase in debts
4	Sent household members to eat elsewhere	Stress	A sign of stress, or mild food insecurity
5	Purchased food on credit or borrowed food	Stress	Incurring more debt to meet food needs or spending down savings are signs of stress, or mild food insecurity.
6	Borrowed money	Stress	Incurring more debt to meet food needs or spending down savings are signs of stress, or mild food insecurity.
7	Move children to less expensive school	Stress	Used in some countries as a sign of stress.
8	Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.)	Crisis	Selling off productive assets is a crisis strategy, or moderate food insecurity.
9	Withdrew children from school	Crisis	This decreases human capital, a productive asset, so is considered a crisis strategy, or moderate food insecurity.
10	Reduced expenses on health (including drugs) and education	Crisis	This decreases human capital, a productive asset, so is considered a crisis strategy, or moderate food insecurity.
11	Harvested immature crops (e.g. green maize)	Crisis	
12	Consumed seed stocks that were to be saved for the next season	Crisis	This action decreases productive assets, affecting next year's harvest, which is a crisis strategy.
13	Decreased expenditures on fertilizer, pesticide, fodder, animal feed, veterinary care, etc.	Crisis	Items that directly reduce future productivity, including human capital formation, is a crisis strategy
14	Sold house or land	Emergency	Items that affect future productivity and are more difficult to reverse, or more dramatic in nature
15	Begged	Emergency	Items that affect or include loss of human dignity
16	Engaged in illegal income activities (theft, prostitution)	Emergency	Items that include loss of human dignity
17	Sold last female animals	Emergency	Specific to livestock producers; Items that affect future productivity, and are more difficult to reverse
18	Entire household migrated	Emergency	Items that affect future productivity, but are more difficult to reverse, or more dramatic in nature

Households engaging in routine economic activities that did not use any of these strategies would be considered “normal” for livelihood coping and food secure according to the Livelihood Coping Strategy index. The livelihoods-based coping strategies tool is used to better understand longer-term coping capacity of households. The data gathered using the L-CSI tool can be analyzed in several ways to help understand the severity of a household’s coping capacity and can contribute to an understanding of household food security. Food security programming aims for defined Normal, Stress, Crisis and Emergency targets for the target communities.

Having looked at the above modern food security indicators, let us imagine for a moment that we were to apply these food security measures in modified form to spiritual food security.

1. Spiritual Food Consumption Score.

A helpful analysis tool might read something like this:

	Spiritual Food Items (Examples)	Spiritual Food Groups (Definitive)	Weight (Definitive)
1	Joint prayer meeting with at least one other disciple	Main staple	2
2	Daily private seasons of prayer	Main staple	3
3	Journaling	Side dish	1
4	Listening to hymns of praise	Condiment	1
5	Daily reading of the Bible	Main staple	4
6	Completing the Sabbath School lesson each day	Main staple	3
7	Daily family worship	Main staple	4
8	Listening daily to a one-minute long Faith Moment during a work commute	Condiment	0.5
9	Daily watching a YouTube sermon while exercising	Main staple	0.5

Such a tool could be adapted for each of us personally, or those whom we minister among, reflecting their preferred ways of hearing and encountering God, and then used to capture the frequency and diversity of connections with Jesus Christ.

Each individual, as they grow in Christ, could set personal targets to intentionally deepen their walk with God through measuring their Spiritual Food Consumption Score.

2. Reduced Spiritual Coping Strategies Index

This tool could help us to understand our spiritual vulnerability, particularly when faced with a fast-moving life experience where daily routines are very hard to maintain, e.g. due to travel, work commitments, acute illness, undergoing persecution etc. The following table could be useful in such circumstances to understand the impact of reduced spiritual coping strategies in our lives during such difficult times:

Reduced Spiritual Coping Strategies Index (rCSI)	
In the past 7 days, if you did not have enough spiritual food, and were unable to access your preferred spiritual food, how many days has your household had to:	Number of days (0 – 7)
a. Forego your daily devotional time?	
b. Ask a friend to pray for you when you are too busy to pray for ourselves?	
c. Limit the time spent in Bible study due to excessive busyness or other factors?	
d. Miss seasons of prayer with fellow disciples?	
e. Reduce or eliminate family worships?	

As with the Reduced Coping Strategies Index, each individual could weigh the severity and significance of each coping mechanism to identify the extent to which they are living on “reduced rations” spiritually, and the severity of those reductions.

3. Spiritual Livelihoods Coping Strategies

When used in relation to spiritual matters, this tool could identify non-spiritual coping strategies and their relative severity and significance for when one’s daily Spiritual Food Consumption Score falls to critical levels, and one’s medium-term Reduced Spiritual Coping Strategies Index is indicating a chronic lack of spiritual food. A helpful table to start such a self-analysis could be as follows:

ID	Strategy	Category	Rational / Discussion
1	Operating on the highlights over the years of one’s spiritual experience	Stress	Excess busyness today forces us to rely on the spiritual highs of yesterday / yesteryear, a manifestation of spiritual food insecurity
2	Spending down one’s limited spiritual reserves	Stress	Daily spiritual outlays outweigh spiritual nourishment, resulting in long-term chronic depletion of spiritual reserves
3	Reducing participation in prayer meetings	Stress	Items indicating reduced ability to deal with future shocks due to loosening bonds with the local Body of Christ and reduced capacity to give and receive <i>agape</i> love.
4	Church shopping for a congregation that better meets our needs	Stress	A sign of spiritual stress, or mild spiritual food insecurity
5	Irregular personal daily devotions	Stress	The weeds of life are beginning to overwhelm the seed of the Word of God.
6	Borrowed strength from another disciple’s spiritual experience	Stress	Seeking spiritual strength from others continually to meet spiritual food needs is a sign of stress, or mild spiritual food insecurity.
7	Children appear only intermittently at Sabbath School	Stress	Sign of family spiritual stress.
8	Sold productive assets such as Bible stories, concordances or DVDs of spiritual music	Crisis	Selling off spiritually nurturing assets is a crisis strategy, indicating moderate spiritual food insecurity.
9	Children cease participating in Sabbath School, Pathfinders or other youth activities	Crisis	This decreases human spiritual capital, a productive asset, so is considered a crisis strategy, or moderate spiritual food insecurity.
10	Steadily reducing tithes and irregular offerings	Crisis	This financial reduction indicates a gradual disengagement from the Body of Christ and the Word of Good, or moderate spiritual food insecurity.
11	Rising private sins such as porn use, alcohol and drug consumption	Crisis	These coping strategies indicate that the mind no longer seeks the Word of God, and the voice of conscience is being steadily eroded and ignored, signs of moderate spiritual food insecurity
12	Household division, with only one adult participating irregularly in church activities	Crisis	This action decreases household productive spiritual ministry and experience, directly reducing future spiritual harvests, which is a crisis strategy
13	A spirit of criticism is allowed and nurtured within the household of the Body of Christ	Crisis	Items that directly reduce the possibility for cross-generational growth, raising Gospel-hardened youth, and represent a spiritual food crisis experience
14	Consistent and excused indulgence in sins of the flesh to alleviate stress, depression and despair	Emergency	Items that directly reduce spiritual productivity, are very difficult to reverse, representing a spiritual food crisis emergency
15	Repeated searches for meaning outside of the Gospel, including in secular humanism	Emergency	Items that affect or include loss of human dignity, representing a spiritual food crisis emergency

16	the devotional life is completely abandoned, despair replaces hope, bitterness replaces joy	Emergency	Items that include loss of human dignity and represent an existential crisis in access to, desire for, and availability in the household of spiritual food
17	Fellowship with the Body of Christ ceases entirely and the desire to worship and fellowship fades away	Emergency	Items that represent a complete lack of personal access to spiritual food despite the immediate availability of spiritual food all around, representing a spiritual food crisis
18	The entire household abandons their Christian faith	Emergency	Items that eliminate future happiness and eternal life, but are more difficult to reverse, or more dramatic in nature

As the Word of God says, “Behold, the days are coming,” says the Lord GOD, “That I will send a famine on the land, Not a famine of bread, Nor a thirst for water, But of hearing the words of the LORD” (Amos 8:11). With persecution, those days will come to all of us, and to those among whom we serve. Tragically, many of God’s professed followers will experience that famine not due to persecution, but because of persecution, because their first love has grown cold, because the cares of this world and the deceitfulness of wealth have overcrowded the Word of God and spiritual food within their lives.

Although the above examples are not direct parallels, I would like to encourage each of us to reflect on our own spiritual food security status. Maybe the above tools, while illustrative only, can point us in the direction of the kinds of questions we can be asking ourselves:

- 1) What is my spiritual food consumption status? Am I making progress or becoming food insecure?
- 2) What is my reduced food coping strategy status? Is my spiritual life alive and vibrant, or slowly fading? How can I track changes, and how can I make positive changes intentionally in this important area?
- 3) What are my spiritual livelihoods coping strategies? What am I turning to in times of stress, pressure, anxiety, pain, depression or bitterness? How is my own household of faith coping with these difficult times?

It is my prayer that as we reflect honestly on these questions, our walk with God will become ever more meaningful and vibrant, and that our experience will be as foretold by Isaiah: “And the ransomed of the LORD shall return, And come to Zion with singing, With everlasting joy on their heads. They shall obtain joy and gladness, And sorrow and sighing shall flee away” (Isaiah 35:10).