Introduction to food security

The concept of food security is one that first immerged in the 70s, after several local and global food crises including the global food price hikes in 1972, the failure of the harvest in the USSR in the same year, and the famine in Bangladesh in 1974 [1][2]. In 1974 that the first World Food Conference took place, contravened by the United Nations, with objective of “developing ways and means whereby the international community, as a whole, could take specific action to resolve the world food problem within the broader context of development and international economic co-operation” [3]. It was here that the idea of food security was first properly realised. However since its conception the basic concept of food security has undergone several changes.

In the twenty first century, the complexity of the issues surrounding food security are better understood than they have been in the past; the term itself is flexible, with hundreds of subtlety different definitions depending on the context [4]. But in 1974 when Henry Kissinger talked about no child going to bed hungry, he was expressing the basic sentiment of food security without appreciating the wider issues surrounding it. Since that time, the definition has gone through three overlapping paradigm shifts [1].

1- From a Global view to an individual view

The first was a change of perspective from a national and international scale, to an individual and household scale. At the time of the first World Food Conference, there was concern that world agriculture would not be able to keep up with demand. The emphasis was on supply, ensuring there was enough food available to meet demand and to resist changes in the market, as show by this definition of food security from 1974-

“availability at all times of adequate world food supplies of basic foodstuffs ... to sustain a steady expansion of food consumption... and to offset fluctuations in production and prices” [5]

The very basic requirement for basic food supply still exists and is a central concern for many countries, especially in terms of self sufficiency. However it becomes clear by virtue of the fact that poverty occurs even within developed nations that hunger can and does exist alongside sufficient food supply to a nation [1]. It was noted, for example, that the Green Revolution in Asia, while dramatically increasing agricultural output, did not automatically or quickly lead to comparable reductions in poverty[4]. It was realised that the focus had to shift from the total amount of food available to a nation, to improving an individual’s access to food. It’s no good food supplies existing within a country if they cannot be reached or afforded by sections of the population, an idea that still applied to the global situation today. This idea was reflected by a new food security definition in 1983-

“Ensuring that all people at all times have both physical and economic access to the basic food that they need.” [6]
Over time food supply and production became viewed as means towards increasing access to food; either directly to the producer, or indirectly to the consumer by driving down prices and increasing availability. Over time as more work was performed on the subject, the concept of how food insecurity damages a country was made clearer. The idea that it was important for individuals to have enough food not only to survive but also to make an active contribution towards society came to the forefront of thinking about food security. This is show by the World Bank definition of food security put forward in 1986, and is often cited even now [1]

“Food security is access by all people at all times to enough food for an active, healthy life [7]”

On comparison to the 1974 definition, the changes are clear to see.

2 - From a Food First Perspective to a Livelihood perspective.

The second major shift in thinking on food security came from observation of the way people behaved during the 1984-85 famine in Darfur. Up to that point, efforts to improve food security around the world had mainly concentrated on supply of food as a primary need, but even in times of famine, people are aware that they must plan to secure their future. Short time nutritional intake is nothing without long term stability and livelihood, and even when faced with shortages people will endure high levels of hunger and hardship in order to preserve seeds for planting or to avoid losing an animal. To people regularly faced with famine, avoiding hunger is not such a priority as having the means to endure shortages in the long term [8]. The result of this analysis was to view the security of a household’s livelihood as important a factor towards its contribution to society as short term food shortages.

3 - From Objective indicators to subjective perception.

The third shift in thinking brings food security in line with current theories about poverty. Specifically, the actual quantitative level of deprivation in a community matters less than feelings of deprivation. Furthermore the quantitative measures used to monitor food security are based on averages, based on figures which are constantly being revised. For an individual, their nutritional requirements vary depending on a multitude of factors including age, health, weight, size, workload, environment and behaviour. Whether an individual is food secure or not according to a national average is not as important as how food secure they think they are.

Once subjectivity is taken into account other problems start to arise, such as food preference, cultural acceptability and human dignity. A person could have an inexhaustible supply of food to keep them alive, but if this was of only one type, one staple such as potatoes or rice, they will suffer mentally. All these factors, and these shifting ideas, has led to a much more comprehensive definition of food security-
“A country and people are food secure when their food system operates in such a way as to remove the fear that there will not be enough to eat. In particular, food security will be achieved when the poor and vulnerable, particularly women and children and those living in marginal areas, have secure access to the food they want” [9].

ALL THAT ^^ [1]

Monitoring Systems

Problems in existing systems, ideal systems

Sub Saharan Africa is an area of the world often troubled by conflict, corruption, drought other difficult conditions, and as such the problems in maintaining food security there have attracted a lot of resources and study from around the world. However, despite all this effort, success has not always been forthcoming. This can be attributed to several factors, including a poor understanding of the principles of food security, inappropriately designed monitoring systems, inefficient operation of and communication between these systems and analysis of the resulting figures, or simply trying to too much within one system. It is not even uncommon to find several different systems with similar goals operating autonomously of each other within the same country [11]. As well as this, once information has been successfully assimilated, the means to take action on this information by interventions or changes in policy is often lacking. To be more efficient, systems need to be simple, user driven and cost effective, with a clear outputs and goals. This is to make the system as resistant to change and difficulties as possible. Most importantly, no system is of any use without the backing and commitment of the relevant decision makers, and so it should be based within the institutional structures it is aiming to affect—both organisationally and physically, if possible. Leadership that is devoted to the aims of food security is the optimum, but if this is not so forthcoming, the food security programs need to be able to apply pressure themselves, directly [10].

Types of system

All food security systems are organised differently and work different, they can measure different things and have different overall goals depending on the environment they work in. However, in all of these different systems, source [10] identifies five separate types of system, which have different operations styles and objectives.

1- Program monitoring and evaluation

These programs are set out to collect information useful to evaluation of ongoing intervention programs, mainly for the use of managers and administrators from governmental or from donor agencies. The information is then used to modify and redesign intervention programs. These systems are concerned with the actual impact on the population. The majority focus on health and nutrition, but sometimes agriculture is the subject of observation.
2- Development Planning and Policy Design

These programs gather information primarily from primary sources to facilitate the planning of development initiatives and policy interventions. The information produced is used by planners, policy analysts and policy decision makers at all levels, from local government to highest tiers. The information is predominately sourced from one or two sectors, such as agriculture and health. Policy alternatives covering all time frames are analysed, while attempting to allocate resources to the most needy population groups and geographical areas.

3- Timely/ Early Warning and Intervention

These programs detect impending food shortage on local and national levels by monitoring food security and nutritional status. Agriculture is most commonly examined, with figures for food production and rainfall being examined to try and detect potential problems. By their very nature they tend only to exist in countries that are prone to periods of drought and famine. Food security is monitored at local, regional and national levels and is shared between national and international agencies so that emergency aid and distribution systems can be readied.

4- Problem identification and advocacy

These programs focus on specific food security and nutrition problems, such as specific geographical areas or within population particular groups, then quantifying the data for use in sensitising the public, the government or international bodies. Often specific nutritional outcomes are sought. Often these programs are integrated into planning and policy design programs, or else program management and evaluation, however when no systems exist, this type of food security monitoring can be a starting point from which other systems immerge.

5- Monitoring impact of structural adjustment

These programs exist to monitor and protect against possible negative effects unwittingly generated by structural adjustment, stabilisation policies and other policy changing decisions. They are in place to prevent short term negative effects of policy reforms and to detect risks to vulnerable groups. Although it could quite easily be incorporated into other food security programs, these programs can be run more effectively when they are not based within the schemes they are vetting.

[10][11]
References

1. Maxwell, S; Food Security: A Post Modern perspective; Food Policy; Vol.21; No. 2; 1996; pages 155-170.
2. Razzaque, A; Alam, N; Wai, L; Foster, A; Sustained Effects of the 1974-5 Famine on Infant and Child Mortality in a Rural Area of Bangladesh; Population Studies; 44; 1990; Pages 145-154
5. United Nations, 1974
6. Food and Agriculture Organization of the United Nations, 1983
7. World Bank, 1986, page 1
8. de Waal 1991, page 68
10. Babu, S C; Pinstrup-Andersen, P; Food Security and Nutritional Monitoring; Food Policy; Vol.19; Issue 3; 1994; Pages 218 – 233.