

# Introduction

It is now widely agreed that hunger and famine are best understood not only in terms of the supply of food, but in terms of people's ability to gain access to enough of that food. Even in rich countries where food is in abundant supply, people can go hungry if they do not have enough money to buy it.

This criterion of access to food has been very useful in explaining why hunger and famine occur in the way they do. For instance, it explains why, in poor countries where even in normal times some people do not get enough to eat, the failure of crops and other production is only rarely followed by starvation. Even in the face of severe production failure, people can often acquire enough food to survive by using food reserves or by exchanging savings, livestock and other assets for food. Even the poorest people, those who have neither assets nor reserves, may be able to survive by finding additional employment or other sources of income.

However, the concept of access has proved less useful in practice. Although the monitoring of food production and exchange (for example, by remote surveillance or price monitoring) has become routine, it is more difficult to assess people's ability to access food. A crop failure, an increase in the price of staple foods or some other shock may be easy to observe, but it is much harder to explain how they might affect people's ability to obtain enough food. We can only understand this if we understand people's normal economy: how they usually make a living; their savings, reserves and assets; and how household production and labour are exchanged for other goods. For example, a family heavily dependent on agriculture would be more affected by crop failure than one that relied more on livestock or wage income. A family with substantial reserves might easily survive a production shock, whereas a family without reserves or alternative sources of income might be quickly reduced to starvation.

Acquiring an understanding of food access poses major technical problems.

Information is often needed about large populations with diverse economies often situated in remote areas, and it is needed quickly and at reasonable cost. To be useful, this information must be sufficiently trustworthy to inspire action, and it should be capable not just of indicating that people are failing to obtain enough food, but also of quantifying the problem and suggesting possible approaches to intervention.

The household economy approach (HEA) was developed between 1992 and 1997 by Save the Children in collaboration with the Food and Agricultural Organisation (FAO) Global Information and Early Warning System (GIEWS) to meet this need. The aim was to find a method that could indicate the likely effect of crop failure or other shocks on future food supply. FAO GIEWS was interested in a system that could be used on a national scale. In the first phase of the project, several national databases and a computer program (RiskMap) for analysing large data sets were developed.\*

The HEA has two main parts:

1. A quantitative description of the economy of a defined population, including all the main factors determining current household income and potential household income under changed conditions, and how these vary between households. A standardised set of information is collected which includes an estimate of how households normally obtain their food and other income; their expenditure on food and non-food items; their savings, livestock and other assets; the availability of wild foods; and their access to, and use of, markets. This information is collected using rapid field methods.
2. A system to analyse the relationship between a shock – for example, crop failure from drought or a rise in the price of a staple food – and the ability of households to maintain their food and non-food consumption. In practice, these relationships can be complex. For instance, a drought may affect household income directly (for example, by reducing crop income) or indirectly. As the marketed food surplus falls, food prices may rise, and with reduced production the demand for food may increase; in addition, asset prices may fall as households sell their assets to buy food. Qualitative issues can also be important: the outcome may be affected if the asset being sold

by a household is a cow, firewood or its own labour. The approach used in HEA is to model the most likely chain of events linking a shock and the outcome.\*

We cannot, of course, foresee the future with complete accuracy. Models of complex systems have intrinsic limitations – not least because we can never be sure that the predicted outcome is what will actually happen. However, the aim of the HEA is not simply to forecast one particular outcome, but to develop systematic, well-informed arguments about the most likely range of outcomes in a given situation.

This approach has several strengths:

- By developing a systematic argument, it creates a logical and transparent link between an event, its outcome and the possible responses, which is accessible to non-technicians and which can serve as the basis of discussion with a wide variety of people.
- The need for a minimum “complete” set of information, including all the relevant variables, ensures that the collection of information is comprehensive. If for example we do not know about some critical variable (such as the availability of wild foods), then we must find out.
- It allows us to make use of information normally available only as estimates. For instance, crop statistics are often only a rough estimate of actual production; information on rangeland production, where it is collected at all, is often little better than anecdotal; and estimates of human population sometimes still span a wide range. HEA allows scenarios to be developed using different estimates for each variable.
- It enables us to analyse complex changes in the economic context. Economic shocks often involve a variety of factors – such as production changes that affect different crops and livestock differently, changes in price, or restrictions on access to markets – that sometimes interact over a period of several years. For example, famine in Ethiopia in the early 1980s followed several years of production failure and was exacerbated by war; the 1993 famine in

\* The idea that famine can be understood only in terms of a model which includes supply and demand factors follows from Amartya Sen's theory of exchange entitlements. HEA also draws on participatory and other existing rapid field techniques (see Annexe 4).

\* Supported by the European Union

Somalia followed widespread conflict and economic disruption; and the 1998 famine in Bahr-el-Ghazal, Sudan, followed a long-standing economic blockade and was triggered by drought and the displacement of a population by war.

- It provides information in a form that can be used to monitor a situation as it evolves. If, for example, the analysis suggests that people will have to sell livestock to maintain their income, and that the price of livestock will therefore fall, this can be easily observed.
- It allows an analysis to focus on the needs of defined groups within populations not just an aggregate measure which reflects an average reality.
- It tells us not only that a problem exists, but also the scale of the problem and the relative contribution of different factors to this, and so suggests possible responses.

HEA models are relatively simple to construct, although this is most easily done using a spreadsheet or other computer simulation.

## Other uses of HEA

Famine (apart from the malnutrition of refugee and other populations) is now quite rare. In the past twenty years acute large-scale human destitution and starvation have scarcely occurred outside Africa, and within that continent chiefly in three countries: Ethiopia, Sudan and Somalia.

Starvation is, however, only one measure of the effect of shocks on the rural economy. Although even in poor countries most people survive most economic shocks, they do this at a cost. These costs can include temporary hunger as people eke out available food, the risks of migration to find work, and the need to forego buying clothing, fuel, soap and other basic household items, and health care and education. For many of the poorest people, survival is bought only at the cost of longer-term impoverishment as assets are sold and savings depleted.

Development agencies increasingly recognise that economic shocks do not have to be severe or widespread to impede development significantly. Poor households often devote much of their effort and income to reducing their

vulnerability to economic fluctuations, and therefore are often unwilling to risk economic change. If shocks occur, development gains may be lost.

As the risk of starvation recedes in most regions, so information needs have changed. Although it is still important to be able to anticipate the likelihood of starvation, in many locations the need now is for information that will enable much finer distinctions to be made between different types of economic effect on different types of household, which will allow more considered choices about intervention to be made.

The HEA goes some way towards providing this kind of information. The effect of a shock on a household's food supply cannot be understood without an awareness of the household's ability to acquire soap, fuel, clothing, education and other non-food goods. Central to the HEA is the need not just to estimate changes to a household's food supply, but also the need to estimate the household's need to sell assets or to forego non-food expenditures. The approach enables a range of possible interventions to be identified, including market intervention, income support and a reduction of household costs (for example, by suspending taxation and charges for certain items).\*

In more general terms, therefore, the HEA allows a response to be made to questions of this kind: "How will a change in the economic context of a household or group of households affect their ability to meet their food and non-food needs?"

HEA also generates detailed budgets for defined categories of household and detailed information about: the size of household income; its quality (how much of the household's food is from cereals, animal products, etc); how this varies quantitatively, qualitatively and seasonally within and between locations; and about non-food expenditures (cloth, soap, taxes, education and health). This may be useful as background information for many purposes and as the basis for livelihood analysis, the targeting of the poor and as a contribution to project design.

The HEA has been widely used in Africa (and to a lesser extent in Asia) in a

\* The approach, reflecting its original objective of famine early warning, was originally termed the household food economy approach. As the method has been increasingly used to understand household non-food expenditure, the term household economy approach (HEA) has been used in this manual. The emphasis remains on food as, for the poor, this makes up the greater part of their economic activity.

range of situations, and we now have sufficient experience to be confident that the method is a useful addition to crop surveillance and other established techniques.\*

## The scope of this manual

In developing the HEA, a primary aim was to find an approach that would enable information on economies to be routinely included in assessments of crises, and which could therefore be used by non-specialists. This aim has been at least partly fulfilled and a large group of people from a range of backgrounds has now been trained. Nevertheless, the subject has its complexities. In most situations a degree of judgement is required, and there is no doubt that more experienced users are likely to produce better results.

The aim of this manual is to describe the components of the HEA and the practical techniques needed to use them. It is primarily intended as a reference for people who have already had, or are engaged in, practical training in HEA. We suggest that readers of the manual who wish to use the approach to make significant operational decisions (for example, to supply food aid) should also obtain training. Save the Children is now developing training in field techniques and information use.

The more specialised use of the HEA over larger geographical areas and for other purposes, and the use of computer techniques for analysis, are briefly described in the Annexes.

The emphasis of this book is on the rural economy, with particular reference to Africa, as it is in this setting that HEA has been most widely used, and on the more typical situations which are encountered. Experience of the approach outside Africa and in urban areas is more limited, although it has been used in Nepal, Afghanistan and Pakistan and in urban areas in Mozambique and Afghanistan.

\* HEA has been widely used for local assessments of drought and other shocks (Kenya, Tanzania, Ethiopia, Democratic Republic of Congo); as part of the early warning/information systems of Operation Lifeline Sudan and the Somalia Food Security Assessment Unit, and by the World Food Programme (WFP) Vulnerability Analysis and Mapping System (VAM) in Afghanistan; for the assessment of the economy and food needs of refugees in many locations in East Africa, Nepal and Pakistan; for the evaluation of the impact of food aid in Ethiopia and for teaching the elements of rural economy and food security. Maps of rural economy are being developed by the governments of Mozambique and Swaziland.