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An introduction to household vulnerability

This chapter discusses how households are affected by, and respond to, economic shocks, whether those shocks are more or less severe, on a larger or smaller geographical scale, or the ways in which they occur in combination. For example, a shock might take the form of a fall in one or more sources of household income caused by the reduced production following drought, a change in the price of a commodity, a decline in employment opportunities, or conflict which reduces people's access to markets, or a combination of two or more of these factors. Our interest here is not only in the effect that shocks have on household food supplies, but also on non-food expenditure and on savings and assets.

Definitions

Risk. The probability that an event will occur: for example, in a semi-arid area drought sufficient to reduce crop production by 50 per cent may occur two years in ten: that is, a risk of 0.2 or 20 per cent.

Vulnerability. If a specified event would be expected to affect a household in a specified way, whatever the risk of that event occurring, the household is vulnerable to that event. For example, a household might be regarded as vulnerable to a specified level of crop failure if this would reduce the income of a household by, say, 50 per cent, even if crop failure in that area was rare. There are no generally agreed measures of vulnerability.

1. The effect of shocks on households

It is logical to look at the effect of a shock on household economy in two stages:

- What effect would we expect a particular shock, or combination of shocks, to have on current income, given the options open to the household?
- If we feel that as a result of the shock the household will suffer an income deficit, what do we think it will do to overcome this? Households may have a variety of ways in which they can compensate for a loss of income.

The effect of shocks on current income

The direct effect of a shock will depend upon how a household normally obtains its income: for example, a household that depends for a large part of its income on crops would be affected by crop failure in a different way from a household that depends chiefly on livestock – the first will be affected directly by a loss of crop income, whereas the second might not be directly affected at all. Conversely, an outbreak of rhinderpest would be expected to affect a pastoral household more than an agricultural one. Similarly, a household which depended on the purchase of food would be affected by a rise in the price of food.

Figure 11 shows the likely effect of a 50 per cent fall in crop production on the income of households with varying levels of dependence on food crops. Note that the total income of the households shown in the example might vary.

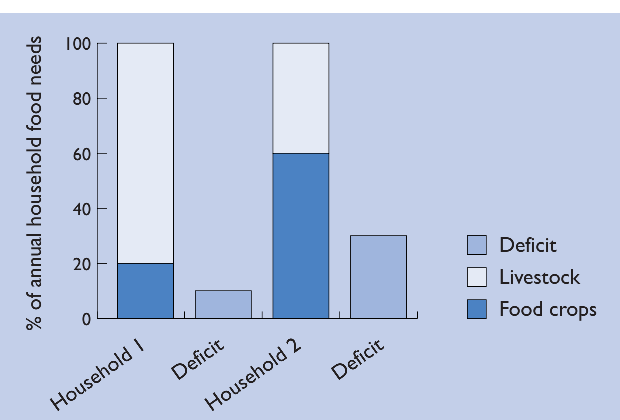

Figure 11: Effect of a fall in crop production on two households

As described in Chapter 1, poorer households often have more diverse sources of income than better-off ones. It follows that a household with a wider range of income sources is likely to be less vulnerable to a shock to any one income source: for example, a household that obtains only 20 per cent of its income from crop production cannot directly lose more than 20 per cent of its current income through crop failure.

Household income may also be indirectly affected by shocks: for example, crop failure in an agricultural area where poorer people depend on better-off people for agricultural work might lead to a situation where farmers with more land require less agricultural labour – poor people would not only lose income from their own crops, but also income from paid employment. If the price of cereals increased because of a crop failure, this would indirectly affect people who depend on cereal purchases for their food supply.

In some livestock areas that depend upon trading animals for cereals, a drought may have direct effects on income as a result of the loss of grazing (which will reduce milk yields and cause the condition of the animals, and hence their value, to decline) and may have indirect effects as people attempt to sell more animals, leading to a fall in animal prices and a loss of income from animal sales. Conflict or unrest which restricts people's freedom to travel to markets to trade may also reduce household access to food.

How prices change chiefly depends upon the balance of supply and demand for that commodity. For example, if a large number of people sell livestock and the demand from traders for livestock does not increase significantly, the price will fall, possibly very sharply. If the demand for food increases and the food supply to the market supply does not keep step, the price will rise.

Figure 12 shows the numbers of livestock sold in 1982–83 before the Ethiopian famine of 1984–85. Figure 13 shows the relative prices of a goat and a sack of sorghum in a town in Western Sudan following a drought. In the latter case, the value of a goat in terms of sorghum fell from approximately two sacks per goat to three goats per sack. Both examples are from isolated areas where a severe fall in local production and market supply was not replaced by cereal imports from outside.

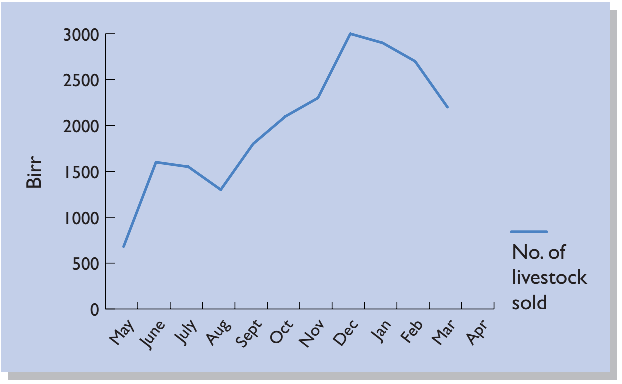

Figure 12:
Sales of livestock, Korem, Ethiopia, 1982–83
(P Cutler, 'Famine forecasting: prices and peasant behavior in Northern Ethiopia', *Disasters 8 (1)*, 1984)

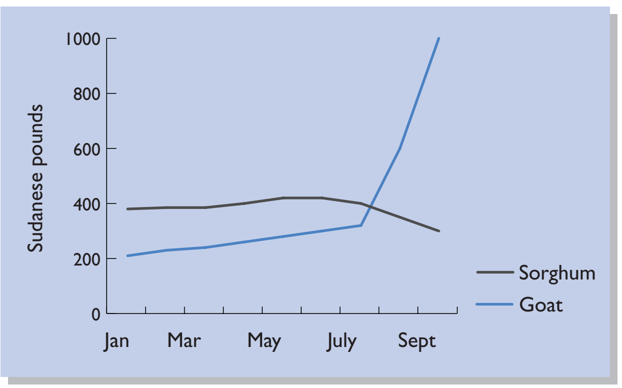

Figure 13:
Relative prices of goats and sorghum, El Fasher, Sudan, 1990
(Save the Children Food Information System, Darfur)

As might be expected, changes in the relative value of assets and food tend to be greatest where:

- the shock is severe and/or affects a large number of households, and many people are attempting to sell assets at the same time
- in locations where the demand for labour or livestock or other products such as firewood, charcoal, and handicrafts tends to be relatively fixed
- where the supply of food to the market is limited.

Increases in food prices may also be exaggerated by the tendency of households to hoard food. Even households with a marketable surplus may choose to defer

the sale, either because they are uncertain about future supplies, or to speculate on rising prices.

The effect of a shock on household income can therefore only be understood if we know the exact nature of the shock and the specific economy of the affected household.

2. Compensating for loss of income

A household may be able to compensate for an income deficit and maintain its consumption level if it:

- has a sufficient stock of food to cover the deficit
- has cash savings, livestock and other assets and can exchange some or all of them to buy food. The value of cash savings and assets in terms of food will, of course, depend on their relative price: if the price of livestock or labour falls and the price of food rises, the effect is to devalue the assets, possibly severely, and to reduce the capacity of the household to compensate for a deficit
- can expand other sources of income or find new ones: for example, the household may be able to increase its firewood production or seek paid employment or collect enough wild foods to meet part or all of the deficit
- receives food, cash or productive resources (such as livestock) as a gift: for example, as charity from better-off households, as state welfare or as gift.

A household may also be able to compensate (or at least survive) by reducing its consumption of food and non-food goods. This may be by:

- reducing their food intake
- consuming cheaper, less desirable foods
- reducing expenditure on non-food items such as soap, clothing, education and healthcare

- reducing the number of dependent people in the household. This may happen if people travel away to find work or it may be a deliberate action, as when children are sent to live with better-off kin.

In practice, households may attempt to both expand income and reduce consumption.

Household decisions about compensating for an income deficit

A household seeking to compensate for a deficit may have a range of options open to it, and will seek to use these options to best advantage. For instance, a household in deficit might decide to seek additional paid employment and not to sell livestock, or vice versa – or it might choose to do both at the same time. The options chosen will depend upon a household's judgement about its own circumstances and the best strategy to pursue. Very similar households may pursue very different strategies. The best strategy for a household with more livestock may be to sell one or two animals and purchase food, whereas a household with fewer livestock may pursue some other option.

In general, all we can say with confidence is that a household will obviously try to avoid starvation. But it will go to any practical length short of starvation to retain the land, tools, seed and livestock that will ensure its future livelihood.

The costs to a household in surviving a shock, short of outright destitution and starvation, may be severe. The potential costs to a household include:

- impoverishment, caused by the use of savings and the sale of assets
- the reduction of expenditure on basic non-food items such as cloth, soap, education and healthcare
- the risks and social disruption involved in labour migration, which may often lead to prostitution and begging
- the hazards of consuming famine foods
- hunger and under-nutrition
- long term debt.

Coping strategies

The term "coping strategy" is sometimes used to describe people's responses to shocks. In fact, most poor households already exploit to some extent all the economic opportunities open to them, and it is rare for completely new opportunities to be available. As a rule of thumb, if people are attempting an activity which they do not normally do (such as migration to another location in the hope of finding work or relief), this indicates that they are already in severe economic difficulty.

In practice, the range of options open to the poorest households in most of the poorer countries has become more and more restricted. The last few decades have seen increasing constraints on the rural subsistence economy and hence on the range of strategies available to poor families to protect their income. With a few exceptions (such as parts of Sudan), population pressures, together with the shrinkage of wild areas and hence of opportunities for hunting and gathering, and the closure of borders to pastoral migration have made it much harder for poorer rural households to subsist on their own production, much less to build savings and reserves. Households have largely compensated for the loss of domestic production by increasing their dependence on the exchange of livestock, fuel and paid employment. In most parts of the world, there are now few poorer households that could subsist without the exchange of household produce and labour.

Also, in the last few decades, particularly in Africa, opportunities for employment and trade have in general increased. Even in the poorest countries, most villages are now within reach of motor roads, and opportunities for employment have expanded to take in neighbouring countries and the richer nations of Europe, the Americas and the Middle East. Products that would formerly have been used for local consumption are now often traded to capital cities and international markets.

The effects of these changes on household vulnerability are complex, but in most situations they have probably reduced the risk of outright starvation. In many areas, governmental and international intervention is now common (although in Africa this still tends to happen only as the result of major shocks). Each situation is different, but it can be argued that households less dependent on production are now less affected by production shocks. In times of local crisis, people can migrate, sometimes over long distances, to find work (or survive on remittances from migrants), and this has the effect of spreading the risk over a wider geographical area. Livestock and other commodities may now be traded in a wider and more stable market, and their prices may be less affected by local fluctuations in supply and demand.

The paradox is that in many areas people have probably become poorer, in terms of the size and diversity of their incomes and food supply, but at the same time are less vulnerable to starvation.

Summary

The effect of a defined shock (or shocks) on a household in any location will depend on the specific combination of:

- the severity of the shock
- the scale of the shock – drought and other shocks affecting larger areas may lead to changes in the relative value of labour and other assets and food
- the type of shock
- the ways in which the household normally gets its income
- the opportunities open to the household to compensate for any loss of income and the specific choices that the household makes
- to the extent that the options open to the household involve market transactions, the relative value of labour and other commodities and food.