

Loss and waste

The numbers are alarming: Up to 40 % of all farm produce worldwide is squandered before it gets to the table. A significant amount is lost after harvesting. Reducing this waste could alleviate hunger, experts say. Aid strategies are misguided however.

By Uwe Hoering

➔ To judge merely by the numbers, sub-Saharan Africa wouldn't need any grain imports if it could reduce the amount of food it loses after harvest. The African Postharvest Losses Information System (APHLIS), which was initiated by the European Commission in 2008, estimates that the food wasted annually is worth about \$ 4 billion. This sum corresponds to the average annual expenditure on grain imports (2000–2007), and is more than the total value of food aid the region received in the past decade.

Around 20 % of the losses occur between harvest and processing – during threshing, storage and transportation. For fruit and other easily perishable

products, the ratio can be twice as high, excluding indirect losses in terms of operational costs, manpower and wastefully used resources like land and water.

When food prices rose dramatically five years ago, international policymakers concerned with agriculture and food took notice of the post-harvest losses. The idea was to improve the standard of life of millions of people by reducing these losses, and to protect the environment by using scarce resources such as land and water more productively.

The World Bank publication "Missing food" sees reducing post-harvest losses as a "key element to

meet the growing food and energy needs of the world." Agencies like the UN Food and Agriculture Organisation (FAO) and the Global Donor Platform for Rural Development have begun numerous projects. The FAO and the African Development Bank, for example, provided \$ 1.7 billion to a programme in Africa designed to curtail post-harvest waste.

At first glance, this approach seems to make sense. The snag is that, in most countries of the global South, one does not know how large post-harvest losses really are, whether they can be reduced, and whether doing so would actually help the needy (see box below). Unfortunately, the efforts of most large aid organisations seem to be missing the mark.

Private sector as all-purpose weapon

To date, international aid agencies have been focusing on the private sector. There are, indeed, shared interests. In recent years, industrial-scale food production has expanded, and multinational supermarket brands and corporate interests are controlling more and more of the supply chain in agriculture and food processing. Their interest in limiting food waste at the very start of the commodity chain is growing. Moreover, they are especially interested in goods for which losses are very high: easily perishable products such as fruit and vegetables, milk and meat.

Aid organisations recommend including farmers in the industry's marketing system. GIZ, for example, considers cooperation between farmers and their private-sector customers, such as processing companies and supermarkets, the silver bullet to minimise losses.

The aid agencies, however, tend to neglect that food security basically depends on staple foods like

rice and root crops such as cassava, which are all of little interest to corporations. Moreover, smallholders and other poor farmers typically cannot meet the requirements of industrial processing, such as products' uniform size and shape.

Aid agencies are also cooperating with the packaging industry. The FAO campaign "Save food" is an example. To expand its market, the packaging industry will happily provide clients all over the world with cooling systems, extensive storage facilities and packaging that is designed to meet the requirements of supermarkets. Competent packaging ensures that less food spoils on its way from producer to consumer.

But even here, it is important to pay close attention. In the food industry, technological and logistical innovations basically serve farmers who produce surpluses they can market – and only if they have the capital to shoulder the necessary investments. Smallholders and other poor farmers are not among them.

Throw-away mentality

Another snag is that involving smallholders in the international food supply chain does not necessarily mean reducing the total amount of wasted food. A lot of food is wasted further down the value chain.

Films like "Taste the Waste" and numerous studies show that the amount of food wasted in industrial processing or at the retail and consumer level may be even greater than farmers' post-harvest losses. Moreover, one needs to factor in the costs of international food transports.

The first thorough inventory for Germany, which was commissioned by the Federal Ministry for Agriculture (BMELV) and published in 2012, concluded

Staple foods like rice and tubers are particularly important for food security: rice field in Tanzania.



Verf. urth

Guesstimates

Policymakers concerned with food and development have been in favour of reducing the post-harvest losses in agrarian societies for several years. Whether doing so would actually minimise hunger in the world is hard to prove.

Gathering statistics about post-harvest losses is methodologically difficult. The extent and causes vary greatly depending on products, countries or climate zones. Very few countries collect relevant data systematically, so most assessments are based on case studies

from the 1970s and 1980s. Making things more difficult, these studies relied on different measurement methods and reference values. As a study by the Heinrich Böll Foundation points out, there is "little consensus on the extent of current global food losses and wastage."

Accordingly, it is difficult to estimate how much waste can be cut back, what the precise costs would be, and whether the numbers add up to be attractive in a business sense. Likewise, it remains largely unclear which measures should be taken first to reduce hunger and poverty and not only reduce as much

waste as possible. Less post-harvest losses would probably only alleviate hunger in places where food is scarce for example. That tends to be the case in precisely those regions where it is difficult to run successful projects for improved storage and better infrastructure. Typically, agriculture has been neglected in these areas for a long time, and there is a lack of transport connections and access to markets. It is easier and cheaper to cut losses in regions where the general conditions for agriculture are better. But cutting losses there does not help the poor and hungry. They live in the disadvantaged parts of the world. (uh)

that every year 11 million tons of food end up in the garbage. Much of it would still be good for consumption. Almost two-thirds of the alleged waste came from private households, and only 22% from trade and industry.

The study does concede, however, that the losses in trade and industry may be greater. In processing, some 210,000 to 4.6 million tons may be wasted annually, and the respective figures for the wholesale and retail sector are 460,000 to 4.8 million tons. The wastage in marketing and processing may thus actually exceed the wastage in private households. None of this is surprising. An economy designed for growth, quantity and revenue will not

instance, to use local materials such as clay and wood for storage facilities, or to rely on simple processing methods that make food last longer. By contrast, rice threshers for \$5,000 or rat control measures that cost a third of the harvest revenue are hardly useful.

In particular, small farmers need better conditions for their operations. They need land, water, seed and market access. Most of them can hardly afford to submit to big business' demands for standardisation however. First of all, smallholders must supply local markets. If development policymakers seriously want to fight hunger, they should make sure their measures serve this specific target group.



Much food is wasted in processing and consumption: tropical fruit juice in a British supermarket.

Ashley Cooper/Lineair



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only constantly produce more goods, but also result in loss and waste. After all, it breeds a "throw-away mentality."

Contradictions

The debate on reducing food losses is marked by contradictions. The contribution to fighting hunger and poverty isn't known and probably quite small, though some may claim otherwise. To reduce hunger and poverty, policies should tackle the roots of the problem, focussing on places haunted by hunger. Instead, policymakers are promoting the expansion of an industrial food system, where waste and the production of waste are virtually built-in.

It is certainly of vital importance to provide smallholders with technology to stem crop losses. It is equally true that involving smallholders in commercial markets is essential in the fight against hunger. However, technologies must not be too expensive or too labour intensive. They must be tailored to the needs of the target group. It makes sense, for

Links:

FAO campaign "Save Food": <http://www.save-food.org>

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Damaging investments

In response to the enormous demand for food and commodities, the interest in arable land is growing worldwide. Oxfam warns that large-scale real-estate speculation has severe consequences. The charity wants the World Bank to enact a moratorium on activities related to property deals.

By Sandra Abild

➔ Like every year, the IMF and World Bank will hold their spring meeting in April 2013. In March, Oxfam was busy preparing to rekindle a debate it started last autumn. Oxfam wants to draw attention to the World Bank's involvement in land grabbing (see box on p. 160).

In October 2012, Oxfam published the study "Our land, our lives". It claimed that the World Bank's support of agriculture investment has led to irresponsible land grabs and property speculation. The civil society organisation wants the Bank to freeze related loan operations for six months. Though the Bank agreed with aspects of Oxfam's study, it has not acted on the moratorium so far.

Land grabbing

For a long time, agriculture in developing countries was of little interest to international investors. Africa in particular was seen as unprofitable. That changed in 2008, when food prices skyrocketed. Suddenly, interest in cropland arose. Governments hoped to safeguard access to food, while private investors understood that they could make profits from speculation. Trade in arable land increased rapidly. The Oxfam report examined the impact of this trend.

Essentially, humankind produces enough food for everyone, according to the authors of the study, and unfair distribution is the reason why many people stay hungry. Approximately 1 billion people can not afford the food they require. The global population may grow by another 2 billion people by 2050, however, so experts fear that agricultural land and other natural resources will become increasingly scarce.

The study found out that, in the past 10 years, up to 227 million hectares of land were sold in developing and emerging countries, or signed away as

long-term leases. The total area is roughly six times the size of Germany. In the past two years, competition has intensified further, especially in sub-Saharan Africa. According to Oxfam, more than 60% of the land deals concern countries that suffer poverty and hunger. This is considered worrisome since international investors are basically interested in exporting commodities to richer economies.

Irritating trends

Oxfam is in favour of investing in small farms in poor countries, strengthening local markets and fending off hunger and poverty thanks to the additional income generated. Responsible investment, the agency demands, must also protect natural resources and facilitate adaptation to climate change.

Most large-scale land transactions hardly contribute to those goals however. The Oxfam authors point out that these deals usually concern countries where state bureaucracies are weak and the rule of law deficient. To attract investors, some governments may have tried to improve the conditions for agriculture and food companies, but, according to Oxfam, they generally tend to neglect small farmers. "Strategies to tackle poverty and hunger basically only serve to support the growth of corporate agriculture and food industries in developing countries," says Marita Wiggerthale of the charity's Berlin office.

Some of the buyers and leaseholders of land in Africa, Asia, Latin America and Eastern Europe are investors from rich industrial countries and emerging powers like China and India. They want to secure affordable access to food and the raw materials they need to produce biofuels for example. At the same time, speculators too are becoming interested in land. Croplands often lay fallow because investors are waiting for a good moment to sell it for a hefty profit.