Ensuring a food secure future: ingredients for change

Hunger makes the international news during times of famine, yet chronic food shortages are a feature of everyday life for millions of people in Africa and Asia. What can be done to change this and what role can journalists play?

The International Food Policy Research Institute (IFPRI) states that, unless there is a major change in policy, 600 million people worldwide will regularly go hungry by 2015.

In her survey of 15 countries published in 2006, Jennifer Coates of Tufts University defines food insecurity as a lack of food, poor nutritional quality of available food and constant worry about getting food in the future.

Research into food security investigates the role of technology, health trends and environmental issues. It considers the effect of global commercial interests and how a lack of food has a different impact on men, women and children. It confronts the issue of governments’ responsibility, ability and political will to implement effective policy.

Researchers are often aware of pending disasters long before they occur, and can recommend how to prevent hunger. Academic research can provide the back-story to events and help journalists broaden the debate. Some research findings influence government policy, while others are ignored – either out of expediency or because they go against policy trends. Not all findings will reflect the experiences and needs of the poorest people in the country and this can be challenged.

For city dwellers, small money-making schemes, such as selling surplus vegetables, will help to provide income and possibly savings for lean times in the future.

Media toolkit on communicating research

This is the third in a series of briefing documents for the media from the RELAY programme. The programme works with Southern print and broadcast journalists to communicate the findings of academic research in an accessible way through the media.

If you would like further information about the RELAY programme or wish to sign up to receive future media briefings by email, please contact media@panos.org.uk

More information about Panos London and the Panos Network can be found at www.panos.org.uk
Threats to food security
While a lack of rain and a failed harvest are obvious threats to food security, they are not the only ones. Conditions set by international financial institutions, socio-economic inequalities, corruption, agricultural trade and HIV and AIDS can all contribute to a decline in food security, which can in turn lead to famine. Violent conflict is behind many food crises. Particular groups are also more vulnerable to hunger than others: for example, herders in Kenya, low-caste urban poor in India and women generally. V K Waware's work published in 2003 found that Nepalese women deprive themselves when food is scarce. Franz Heidhues of IFPRI emphasised in 2004 that women often lack access to land, financial credit and education – with huge implications for their food security.

Questions to ask researchers:
- What aspect of food security does your research investigate?
- When was the research carried out?
- Who is it about?
- Who funded it, and why?

How is food security measured?

Food availability
Calculate the amount of food produced in a country and add that to the amount imported. During times of natural disaster the amount of locally produced food will decrease, but food availability might be increased by food aid from overseas.

Access to food
Amartya Sen's research published in 1981 found that famine can take place even where a food supply is available: unemployment, rising food prices and flawed distribution systems all affect people's access to available food.

Government policy and international institutions
The government of Niger blamed the country’s famine in 2005 on low rainfall and a plague of locusts, despite evidence that traders had resisted grain imports, to protect the price of their stocks. Niger continued to export grain to other West African countries during the famine.

According to Stephen Devereux from the UK-based Institute of Development Studies, Malawi's 2002 famine was caused by a combination of factors: erratic rainfall leading to a 32 per cent fall in the maize harvest; food imports delayed by transport bottlenecks and competing demand from neighbouring countries; and crucially, the fact that the government had sold its national grain reserves on International Monetary Fund advice – so there was no free food to distribute to those most at risk. In contrast, the Indian government’s public distribution system has long provided access to subsidised food for poor people. Even pro-market researchers like Carlo Del Ninno recognise that the Indian system protects poor consumers and provides incentives for food producers to sell to them.

The ineffectiveness of the Niger and Malawi governments during times of food crisis was partly down to fear of disrupting the market. Research shows that the process of economic liberalisation behind this fear has also eroded smallholders’ ability to buy seed and fertiliser; so even where there is plenty of rain, hunger is still present. In 2006, Pauline Peters from Harvard University laid a large part of the blame for the Malawian famine on the fact that the government had dismantled institutions that sold reliable supplies of seeds and fertilisers to farmers and bought their produce at guaranteed prices.

Questions to ask researchers:
- How did you decide who to interview in the government?
- How many people did you talk to?
- What did you identify as the main threats to food security?

Low-caste women in India are a particularly vulnerable group and are at risk of not having enough food on a regular basis.
Conflict

Countries in conflict experience high levels of chronic food insecurity. In 2004 Ellen Messer and Marc Cohen found that in a protracted conflict like Angola’s, agricultural production fell by as much as 44 per cent. Investment in health, education and nutrition also tend to suffer, with a disproportionate effect on vulnerable groups such as women and children.

At times of conflict, food can also be used as a political weapon: in 2003 Human Rights Watch research documented how Zimbabweans could not register for government-subsidised grain without showing proof of membership of ZANU-PF – President Robert Mugabe’s ruling party.

Farmers continue to feel the effects of conflict long after the fighting has stopped. The presence of landmines often prevents them from returning to farmland; Messer and Cohen recount how fighters in Mozambique deliberately destroyed agricultural machinery and marketplaces.

HIV and AIDS

HIV and AIDS are acknowledged as complex threats to food security. Writing in 2002, Alex de Waal from the Social Science Research Centre pointed out that famine victims used to be the very old and the very young, a fact that is now changing because AIDS kills young adults – the very people whose labour is needed to plant and weed. The epidemic is over-stretching social support networks, such as extended families, and state welfare services.

In a 2006 Overseas Development Institute (ODI) briefing paper, Fiona Samuels and Sara Simon show how HIV and AIDS and food insecurity reinforce each other. A lack of food weakens the immune system, making people more susceptible to infections, including HIV, while malnourishment undermines efforts to provide care and support. A lack of food also causes people to migrate for work – placing them in risky situations where they may be sexually active but have limited access to health information and care.

Crop diversification schemes funded by international non-governmental organisations support poor people’s livelihoods and promote food security by encouraging them to grow produce for sale at markets. But IFPRI research has shown that if people can grow crops for sale, they are probably already food secure. Sweet potato farming schemes in Tanzania have been shown to work for the poorest households – but they tend to eat, not sell, their produce. Gabriel Ndunguru from the Tanzania Food and Nutrition Centre said in 2005 that for such schemes to help the most vulnerable, they must be accompanied by reduced taxation on crops, increased access to credit and support in negotiating with traders.

In more urban areas poor people often grow vegetables and keep chickens to feed their families. They can also broaden their sources of income through money-making schemes such as home brewing.

However, encouraging poor farmers to grow cash crops can increase their anxiety about their future ability to access food. Michael Whyte and Betty Kyanddondo publishing research in 2006 found that farmers in Banyole county (eastern Uganda) involved in a rice-growing scheme worried about no longer being self-sufficient in food, the new significance of money in their lives and their increasing interdependence with other families involved in the ‘new rice economy’.

Questions to ask researchers:

- How have people coped with threats to their food security?
- Did you talk to people who are most at risk of hunger?
- How many people said that selling crops for cash was the most important thing to them?

Figure 1

Percentage of populations who are undernourished

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Asia</td>
<td>19%</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>20%</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>22%</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>23%</td>
</tr>
<tr>
<td>South Korea</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Mexico</td>
<td>5%</td>
</tr>
<tr>
<td>Bolivia and Herzegovina</td>
<td>9%</td>
</tr>
<tr>
<td>India</td>
<td>20%</td>
</tr>
<tr>
<td>Nepal</td>
<td>17%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>23%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>22%</td>
</tr>
<tr>
<td>Malawi</td>
<td>34%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>45%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>19%</td>
</tr>
<tr>
<td>Zambia</td>
<td>47%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>46%</td>
</tr>
<tr>
<td>Kenya</td>
<td>31%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>44%</td>
</tr>
<tr>
<td>Uganda</td>
<td>19%</td>
</tr>
<tr>
<td>Malawi</td>
<td>34%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>45%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>19%</td>
</tr>
<tr>
<td>Zambia</td>
<td>47%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>46%</td>
</tr>
<tr>
<td>Kenya</td>
<td>31%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>44%</td>
</tr>
<tr>
<td>Uganda</td>
<td>19%</td>
</tr>
<tr>
<td>India</td>
<td>20%</td>
</tr>
<tr>
<td>Nepal</td>
<td>17%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>23%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>22%</td>
</tr>
<tr>
<td>Malawi</td>
<td>34%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>45%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>19%</td>
</tr>
<tr>
<td>Zambia</td>
<td>47%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>46%</td>
</tr>
<tr>
<td>Kenya</td>
<td>31%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>44%</td>
</tr>
<tr>
<td>Uganda</td>
<td>19%</td>
</tr>
<tr>
<td>India</td>
<td>20%</td>
</tr>
<tr>
<td>Nepal</td>
<td>17%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>23%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>22%</td>
</tr>
<tr>
<td>Malawi</td>
<td>34%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>45%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>19%</td>
</tr>
<tr>
<td>Zambia</td>
<td>47%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>46%</td>
</tr>
<tr>
<td>Kenya</td>
<td>31%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>44%</td>
</tr>
<tr>
<td>Uganda</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: UN Human Development Report 2006
How can food security be improved?

Effective use of information

Early warning systems study weather patterns to predict food shortages. This data is more useful when combined with information about people’s livelihoods – which can be provided by organisations working closely with communities. Save the Children used questionnaires about food and income sources in Malawi and Swaziland, and fed this information back into early warning systems.

But in order for such information to be effective, governments need to react quickly. An ODI report on Kenya shows that, although increasing destitution among herders was reported throughout 2004–5, the situation only attracted international attention when the Kenyan government declared a national emergency at the end of 2005. By this time, 40 per cent of livestock on the Kenya–Somalia border had died.

To maximise the effectiveness of early warning systems, James Hansen of Columbia University recommended in 2004 that information about weather patterns be communicated directly to farmers so that they could adapt their farming practices.

National and international trade policy

Many people argue that governments should intervene in macro-economic policy to stabilise prices – an approach that Colin Poulton of Imperial College, London, believes could work in parts of Malawi and Ethiopia, where there is the potential to produce grain surpluses, but poor farmers fear investing in seeds and fertiliser because a bumper harvest causes price collapse. However, the researchers also acknowledge that there has to be effective government for this approach to work: Ugandan smallholders growing vanilla pods were let down by the under-funded ministry of agriculture following a collapse in world prices.

Other researchers focus on international trade policy, calling on developed country governments to reduce trade barriers that prevent developing countries from fulfilling their potential to generate income by exporting agricultural products.

Genetic modification (GM)

The role of GM crops is an area of fierce debate: while some argue that they produce greater yields, are more pest-resistant, and therefore increase food security for poor farmers, others insist that GM is driven by US and European commercial interests, and not a desire to achieve food security for poor people. IDS research by Ian Scoones, published in 2006, studied the effects of biotechnology – including GM – on the people of Karnataka state in India, concluding that Karnataka’s story is of two worlds. One is high-tech, driven by scientific development and international commerce; the other is characterised by poverty and debt, leading to the destitution and, in some cases, suicide of farmers.

Supporting small-scale agriculture

Shadrack Mwakalila and Christine Noe’s work in 2005 showed that small-scale irrigation schemes can significantly enhance food security for poor Tanzanian farmers, allowing them to plant early and diversify their economic activities. However, many irrigation schemes are dominated by large commercial operations growing cash crops for export – the result of an ongoing debate in policy circles around whether supporting small-scale or industrialised agriculture offers the best prospect for achieving food security for all.

Questions to ask researchers:

- How successful has government policy been in addressing food security?
- How have things changed in terms of securing a regular and reliable food supply?
- What led you to say that GM crops are the answer?
Lessons learned from research

Many researchers say that governments need to formalise their responsibility to enforce the human right to food – using courts, listening to popular pressure and signing up to legally binding targets. Civil society organisations often try to support this process by highlighting ‘abuses of the right to food’ including denial of access to land, water, subsidies and environmental degradation. The examples below show the key role that states and governments need to play in improving food security.

A strong, accountable state

Better governance is a crucial component of improved food security: weak governments that are not accountable to the people jeopardise food security. People in developing countries rely on stable prices, access to markets, and sometimes government financial support to ensure that they can support themselves and their families. Government institutions need to be well organised and well resourced to implement complicated food security strategies.

Coordinating food and health policy

HIV and AIDS have become significant factors in food security, especially in southern Africa. Adults affected by HIV-related illness are unable to work in the fields and agricultural skills and know-how cannot be handed down through the generations. Governments need to coordinate agriculture and health policy more closely.

The HIV and AIDS pandemic has had a major impact on a generation of farmers in Africa, resulting in children and grandparents having to take greater responsibility for farming. Agricultural skills and know-how are being lost.

Early warning systems need to communicate broadly

Technology alone cannot solve a food crisis. Governments can ignore warnings should they choose to. Early warning systems are important, but they will only work if the information is communicated to all levels of society.

Questions to ask researchers

- Did the findings of your research surprise you?
- Did you learn anything new?
- Do other researchers disagree with your findings?
- What did you expect your research to prove?
- Why did you decide to highlight this particular recommendation?
- Who should act on your findings?
- How will you communicate these findings?

The role of the media

The media have a crucial role in highlighting food security because, according to IFPRI's Klaus von Grebmer in 2005, governments listen to them more than anyone else. Some international development experts believe that newspapers and radio stations in Africa need to debate alternative policies and feel safe criticising government policy. But the media often only engage with the debate when there is a crisis, and selective reporting among the international press – guided by their political position – often portrays famine as apolitical. Journalists can spot trends and act as an unofficial early warning system: if journalists had covered reports of early warnings for Niger in 2003, governments and aid agencies might have acted earlier.
Organisations researching food security

African Centre for Technology Studies (ACTS), Kenya: conducts research on agriculture and food security to support effective policy-making in African countries
Tel: +254 20 722 4700/4000
Email: acts@cgiar.org
wwwacts.or.ke

Centre for the Study of Administration of Relief (CSAR), India: researches how famine relief can reach poor communities
Tel: +91 11 2649 1774
Email: famsoc@nda.vsnl.net.in
www.famine-and-society.org

Civil Society Agriculture Network (CISANET), Malawi: works to promote sustainable livelihoods for poor rural communities
Tel: +265 (0)1 775 580
Email: cisanet@globemw.net
www.cisanet.org

Consortium for Southern Africa Food Security Emergency (C-SAFE): works to address food insecurity in Lesotho, Zambia and Zimbabwe
Tel: +27 11 679 3601
Email: jservice@crszam.org.zm
Tel: +27 11 679 3601
Email: jsummary@crszam.org.zm
www.c-safe.org

International Research Institute for Climate and Society (IRI) Columbia University, USA: conducts research into the social impact of climate change
Tel: +212 854 1754 or +212 845 680 4468
Email: rthomson@iri.columbia.edu
(Africa Programme)
www.iri.columbia.edu

Feinstein International Center, USA: carries out field-based research in complex food emergency environments focusing on those people most affected
Tel: +1 617 627 3423 (USA)
+251 (0)11 651 8619 (Ethiopia office)
http://fic.tufts.edu

Human Rights Watch: investigates human rights violations including abuses of the right to freedom from hunger
Tel: +1 312 573 2450
www.hrw.org

Institute of Development Studies, UK: conducts research on poverty including food and agriculture issues
Tel: +44 (0)1273 877 032
Email: s.barrientos@ids.ac.uk
www.ids.ac.uk/ids/pvty/pvfoodagtheme.html

International Livestock Research Institute (ILRI): conducts research into the relationship between livestock and poverty
Tel: +254 20 422 3000 (Kenya)
+251 11 6463 215 (Ethiopia)
Email: ILR Kenyagi@cgiar.org,
ILR-Ethiopia@cgiar.org
www.ilri.cgiar.org

International Water Management Institute (IWMI): researches water and related land management issues facing poor rural communities
See website for East Africa, Southern Africa and South Asia office contact details
www.iwmi.cgiar.org

Faculty of Agriculture, Makerere University, Uganda: generates knowledge and technologies for the sustainable development of agriculture
Tel: +256 41 542 277 or 531 152
Email: deanagric@agric.mak.ac.ug
www.makerere.ac.ug/agriculture

Forum for Food Security in Southern Africa: a platform for discussion around increasing vulnerability to food security
www.oodl.org.uk/Food-Security-Forum

Poverty and Public Policy Group, Overseas Development Institute, UK: researches the impact of public policy on poverty issues including food security
Tel: +44 (0)20 7922 0386
See website for a full listing of academic staff emails
www.oodl.org.uk/pppg

Programme Against Malnutrition (PAM), Zambia: links rural NGOs, Government and the donor community
Tel: +260 (0)1 235 941/2
Email: pam@zamnet.zm
www.pam.org.zm

Research on Poverty Alleviation (REPOA), Tanzania: specialises in economic and social research
Tel: +255 (0)22 270 0083/277 2556
Mobile: +265 (0)741 326 064
Email: repoa@repoa.or.tz
www.repoa.or.tz

Tanzania Food and Nutrition Centre (TFNC): conducts research into malnutrition
Tel: +255 (0)22 211 8137/9
Email: tfnc@techcenter.tz www.tanzania.go.tz/tfnct.html

Tegemeo Institute of Agricultural Policy and Development, Kenya: conducts policy research on agriculture and natural resources
Tel: +254 20 271 7818
Email: egereton@tegemeo.org
www.tegemeo.org

Useful websites

African Journals Online (AJOL): provides access to African published research. Access to online summaries is free at www.ajol.info

Development Gateway: join different topic groups and download research papers and other documents at http://topics.developmentgateway.org

Eldis: a gateway to development information at www.eldis.org

Google Scholar: a search service for accessing academic research across the web at http://scholar.google.com

Id21: a free development research reporting service for UK-based research on developing countries at www.id21.org

Panos London: web section on international trade talks, with features on the impact of agricultural reform at www.panos.org.uk/tradingplaces

South Asia Research Network (SARN): promotes the production, exchange and dissemination of research knowledge at www.sarn.ssrc.org

Southern African Regional Poverty Network (SARPEN): promotes debate and knowledge sharing on poverty reduction processes and experiences in Southern Africa at www.sarpn.org.za

Research cited

Fiona Samuels and Sara Simon, 2006 – www.odl.org.uk/PPPG

Poverty and Inequality/publications.html

Shadrack Mwakalila and Christine Noe, 2005 – www.repoa.or.tz
Michael Whyte and Betty Kyandondo, 2006 – Copenhagen and Makerere Universities www.anthro.ku.dk or michael.a.whyte@anthro.ku.dk