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Food:

*An issue of security,
governance and justice*

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Food – our most basic need?

MOST OF US HAVE SEEN – and heard – a hungry baby crying for food. In order to stop the crying we do all we can to feed the baby and fulfil its needs. This perhaps most basic of all our needs stays with us all our lives, but our expressions of hunger get more refined as we mature. Still, if we are hungry long enough, it makes us tired, bad-tempered – and angry.

When food is scarce, the risk of outbreaks of violence increases. But also the reverse occurs, with hunger, and even starvation, as one of the grim effects of violent conflict. Droughts, flooding, and other effects of climate change are other potential triggers of food insecurity.

Rising food prices, either because of bad harvests or sheer speculation, often cause loud, sometimes violent, protests. The nexus between a demand for social and political change and calls for more just access to food at affordable prices is obvious worldwide.

The Green Revolution, once seen as the solution to the world's food problems, has failed. When global corporations buy locally cultivated seeds from small African companies, they separate the small farmer from his/her seed and threaten genetic biodiversity.

Collective international efforts are underway to achieve more just food policy. Read about biopiracy, food justice, and other aspects of the vital issue of food in this issue of *New Routes!* Your comments and input are, as always, most welcome!

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In spite of the Green Revolution sometimes being promoted as an effort to support African smallholder farmers, the authors of this article warn against it as a theft of the African genetic wealth by global seed corporations. The green revolution project ties African 'food security' to global 'food value chains', not to domestic production and consumption. Privatised seeds must be bought at high cost by African farmers who cannot replant, save or exchange them among themselves.

Green Revolution for Africa – food security or invasive policy?

Andrew Mushita and Carol Thompson

From 2007, the Bill and Melinda Gates and Rockefeller Foundations established the Alliance for a Green Revolution for Africa (AGRA). Today, that private foundation initiative has not only become formal USA foreign policy but integral to the G8 and United Nations' approach to the problem of food security across the African continent. Rajiv Shah, Director of the USA Agency for International Development (USAID) and a medical doctor, who learned about agriculture while working for the Gates Foundation, expressed a new Obama Administration policy by directly linking national security with food production: "You cannot have stability and security as long as regions and countries and communities are deeply food-insecure."¹

Just ahead of the May 2012 G8 meeting, President Obama unveiled the plan to have governments partner with global corporations to provide food security,

stating, "It's a moral imperative, it's an economic imperative and it's a security imperative."² Explaining an agricultural initiative as a 'moral imperative' echoes another human rights 'imperative' for the USA to 'prevent atrocities'. The latter was given by President Obama as the reason for sending American soldiers to Central Africa (northern Uganda) from October 2011, with authorisation to shoot to kill in order to stop Joseph Kony of the Lord's Resistance Army. Scholars across the USA and Central Africa have expressed concern over this unilateral intervention, asking instead, that the USA assist in financing peace-keeping initiatives of the African Union.³ Similarly, scholars and food producers across the African continent question this latest 'securitisation', of food production, as a way to address African hunger.

AGRA, and now official American policy, proposes to engage large global

corporations in food production on African soil, using African land, water and labour. Increased production will come from economies of scale, marketing of

The green revolution project ties African 'food security' to global 'food value chains', not to domestic production and consumption.

seed technologies, and coordination of food policies within regions of Africa, all with the goal of linking the more prosperous small commercial farmers and urban consumers to the global

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food value chain. 'Food security' thus refers to linking Africa's biodiverse, local foods to the global market. Yet global agricultural markets are controlled by a very few corporations, as shown here:

<i>Global</i>	<i>Market share</i>	<i>By</i>
Seed market	58 %	Monsanto-USA DuPont/Pioneer-USA Syngenta-Switzerland Groupe Limagrain-France
Agrochemical market	57 %	Syngenta-Switzerland Bayer-Germany BASF-Germany Monsanto-USA
Food processing	58 %	Nestlé-Switzerland Pepsi-USA Kraft-USA ABInBev-Belgium
Food retailers	56%	Wal-Mart-USA Carrefour-France Schwarz Group-Germany Tesco-UK

Source: ETC Group. 2011. *Who will control the Green Economy?* (December):22, 25, 37, 39.

African smallholders threatened

Foreign control over domestic food production is neither tolerated by Europe nor by the USA, a major reason why both continue to subsidise their farmers. The Uruguay Round in the 1980s to form the World Trade Organisation (WTO) did not proceed in agriculture until Europe grew enough food for regional autonomy. The current Doha Round of the WTO has been stalled for over a decade, over agricultural subsidies and protection, mainly by the USA, the European Union and Japan.⁴ In spite of this long history, the green revolution project ties African 'food security' to global 'food value chains', not to domestic production and consumption. Such an agenda prioritises feeding Wall Street, more than African people, through expanding the corporate market on the continent. It threatens African smallholder food producers and their food sovereignty.

One manifestation of this threat is the unexpressed goal of AGRA and of USA policy: to access African genetic wealth for gene technologies and animal/plant breeding for corporate profit. African farmers and governments freely share their gene accessions; receiving that gift

is not theft. However, AGRA promotes policies that access the genetic wealth without recognition – neither for the indigenous knowledge nor for the genetic parent materials – or benefit sharing

with those who cultivated and bred the plants and animals over centuries, if not millennia.⁵

AGRA's technological approach to food production differs from the 1960s 'green revolution' in only one way: hybrid seeds developed for increased yields during that era remained in the public domain, to be freely exchanged among all farmers. Today, AGRA-sponsored seeds are most often privatised by the corporate seed breeder. The farmers must buy the expensive seeds and cannot replant the next generation, nor save or exchange the seeds among themselves for further experimentation. Every year the farmer must return to the 'owner' of a living organism to access a fundamental input for production. Patenting of living organisms is recognised by USA law and advanced through its bilateral trade agreements, while the American government refuses to become party to the International Treaty for Plant Genetic Resources for Food and Agriculture (IT-2004) that ensures farmers' rights to save, exchange, and breed any seeds. The IT also disallows patents for 64 crops and fodders, a very small number, but one representing

the majority of crops providing human nutrition.

African farmers refer to the patenting of living organisms as biopiracy, for it gives sole ownership to the corporation that inserted one gene, without recognising the innovations of thousands who developed the cultivar in the first place. Patenting, however, has become only a minor expression of the theft of African genetic wealth, for the 'green revolution' approach has come up with several other ways for accessing the genetic treasures, with no recognition or benefit sharing. The methods for access operate at the international, regional, national, and community levels – while benefit sharing occurs at none.

Ignoring international law

At the international level, the IT calls for sharing commercial profits from any germplasm taken from the public seed banks (International Agricultural Research Centres-IARCs), setting up Standard Material Transfer Agreements (SMTAs) to trace the seeds from the international depositories to new strains sold for commercial profit. While the IARCs provide over 694,000 seeds for *free* access, the SMTAs are not functioning for lack of funding and enforcement.⁶ Beyond the issue of patenting, the failure of corporate seed breeders to abide by the mechanisms for benefit-sharing envisaged by international law demonstrates how facilitated access can undermine reciprocity and ultimately lead to theft.

The corporate and government partners justify this ignoring of international law by claiming that it is inoperative until governments domesticate the law into their own legislation. The requirement of 'facilitated access' to germplasm imposes on governments the burdens of implementation and enforcement, however, without ensuring the financing for these administrative tasks. Corporate profits are made off smallholder farmer breeders, while their governments are blamed for lack of enforcement of international law. The treaty was to acknowledge the 'interdependence' of the gene-poor, capital-rich North with the gene-rich, capital-poor South, but the flow of precious resources is all in one direction.

At the same time, Gates Foundation funding is diminishing the public service of these public seed banks.

Since 2007, the Gates Foundation has financed many different projects of the IARCs: both ICRISAT (International Crop Research Institute for the Semi-Tropics, including sorghum and millet)

Foreign control over domestic food production is neither tolerated by Europe nor by the USA.

and CIMMYT (International Centre for Maize and Wheat Improvement), for example, receive 45-55 percent of their annual funding from the Gates Foundation and its allies.⁷

One of the results, discovered in Zimbabwe, is that the ICRISAT/Matopos research station no longer freely shares its foundation seed with smallholder farmers, who originally supplied the

station with the genetic wealth of their sorghums and millets; without them, there would be no ICRISAT. The farmers for several years have successfully grown out foundation seed, according to strict quality controls for certification, to produce commercial seed for small seed companies. From 2010, the new policy, enacted as Gates funding increased, requires these breeders to buy back foundation seed, originating from their own cultivars. The reciprocity of freely sharing seed among breeders, a practice encouraging experimentation and innovation, has been turned into a market transaction even within the public seed banks. Instead of increasing benefit-sharing, the Gates Foundation funds policies to eradicate it.

At the regional level, access without recognition or benefit-sharing may also occur through financing seed research to gain corporate control over seed bred from African cultivars. The Comprehensive Africa Agriculture Development Programme (CAADP), a project

of the African Union, but promoted by AGRA, conducts programmes to increase research collaboration across the continent. CAADP accepts AGRA's promotion of the global market as the central mechanism to provide African 'food security'. Although CAADP refers to smallholder farmers, its proposals and workshops ignore indigenous knowledge and farming practices for biodiverse food production. The research agendas are top-down, coming from the corporations wanting to 'train' African scientists and agronomists.

Regional seed laws, uniform across many African countries, can allow foreign corporations to procure permission to introduce a new seed in just one country and then it can be marketed across the region without interference from specific national environmental standards. Individual country laws in Southern Africa have curtailed the spread of genetically modified (GM) seeds from the commercial South African market into the rest of the region. One way to



PHOTO: PAUL JEFFREY

Planting seeds in a community agriculture project outside Kamina in the Democratic Republic of the Congo. The project increases food security in poor communities, especially for women and children.

disseminate undesired seed, however, is to create one seed law for the whole region. If the GM seed enters South Africa legally, a uniform seed law, minimising customs inspections, will facilitate genetic pollution across Southern Africa, diluting national biosafety laws and their enforcement. AGRA and its partners are working hard to have the Southern African Development Community adopt a uniform seed law for its 16 member countries.

Global usurpation of local wealth

At the national level, other methods of access without recognition include the purchase of shares in local seed companies by global corporations to gain entry into their seed banks. Monsanto has a five percent share of Seed Co, originally a Zimbabwean cooperative and now the major private seed corporation in Zimbabwe, Mozambique, Malawi and Zambia. Zimbabwe has been breeding its own varieties of maize, adapted to local conditions, since the 1930s. As a shareholder, Monsanto can access that knowledge and wealth, along with indigenous varieties of sorghum and millet. In May 2012, the South African Court of Appeals ruled against strong civic organising to prevent Pioneer Seed (DuPont) from acquiring South Africa's largest national seed company, Panar Seed. The court is allowing the merger to proceed, turning over those indigenous genetic treasures to the single private American corporation.⁸ Although 'legal', this global corporate usurpation of local genetic wealth greatly diminishes any hope of African food sovereignty.

With climate change threats to food production, national gene banks are regaining international attention and

The 'green revolution' strategy is not about saving starving Africans.

again, 'facilitated access' is the rule. Plants readily shared, as African governments do, increase the wealth for all, for they abundantly reproduce; new cultivators will create new cultivars. It is when the shared materials are privatised without recognition or benefit-sharing that access becomes biopiracy.



PHOTO: TONE WINGE

Some of the products from the participatory plant breeding project in Nepal that have reached the market. Local Initiatives for Biodiversity, Research and Development, a civil society organization, has been a pioneer in promoting on-farm conservation of agricultural biodiversity in Nepal since 1997.

Finally, at the local level, corporate gene hunters in 'joint collection missions' visit fields of African farmers in search of their newest varieties, already adapted to climate change. The corporations seek to learn about field performance where smallholder farmers are growing as many as 20 different crops on one hectare, each one carefully placed to suit the micro-climate of one corner of the field versus another. Corporate agents also move across open fields in order to collect 'wild' plants, only able to determine what to gather by relying on local indigenous knowledge shared by communities. It is not clear what is 'joint' about these collection missions, for the expertise is entirely African, whereas the benefits accrue only to the corporations, as they co-opt complex knowledge and freely acquire genetic materials absolutely essential for their experiments and projects. Although these collections are frequently being undertaken across the continent, the international community only learns of the one or two cases where local knowledge is acknowledged, such as the *hoodia* plant gathered by the San people (but

only after a law suit exposed the theft by Unilever).

Calls for farmers' rights

African farmers' networks organising at every level, from local to global, were the first to alert the international community about the seizure of genetic materials, at the World Social Forum in 2007.⁹ As early as 1999, all African governments proposed a *unanimous* resolution rejecting patents on life to the WTO meeting in Seattle, but the Clinton Administration refused to put it on the agenda. Today African governments and civic organisations counter the patenting and other private usurpation of seeds conserved in the public sector with persistent calls for the realisation of farmers' rights (to plant, exchange, and breed any seeds), enshrined in the IT.

In Southern Africa, Zimbabwe's unity government passed Statutory Instrument 61 in 2009 to regulate access to genetic resources and indigenous knowledge. The law requires prior informed consent from local communities before any removal of genetic material can take place. Workshops are being

held to inform others of how their governments can adopt similar laws.¹⁰ In 2010, Africans were key in finalising the Nagoya Protocol of the Convention on Biological Diversity (CBD) on 'Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization'. Legal instruments, therefore, do exist to curtail the theft, by recognising food sovereignty, based on farmers' rights (IT), standard material transfer agreements (IT), and prior informed consent of local communities (CBD and Nagoya). But implementation and enforcement require funding. 'Philanthropic' foundations and corporate partners are instead funding new ways to access and privatise Africa's genetic wealth.

On the ground in Southern Africa, African farmers have long formed seed communities, where they conserve their heirlooms not only *ex situ* (on a shelf, in

The green revolution project ties African 'food security' to global 'food value chains', not to domestic production and consumption.

containers) but *in situ*, deciding which seeds to grow out when. Leaders of the local seed banks are elected, and communities select certain farmers to propagate chosen seeds for the next season. Women form farmer field schools, which can meet as often as three times per week, as they help each other resolve problems arising from soil degradation or pests or lack of water. Growing as many as 20 crops on one hectare requires teaching each other complex knowledge and skills. African smallholder farmers have rejected genetically modified seeds for foods, finding their own breeding brings better results at much less cost. They do not need Monsanto's latest patented 'drought resistant' maize (MON87460), for they grow the more nutritious sorghums that endure drought conditions better than any maize. Of course, African farmers would welcome government assistance, similar to what their European and American counterparts receive, to

improve storage and local marketing, to provide agricultural extension services – to facilitate their farmers' rights and choices.

The 'green revolution' strategy is not about saving starving Africans. To summarise the new methods of access, which provide neither for recognition nor benefit sharing: first, AGRA finances those who access free genetic materials but refuse to honour the standard material transfer agreements, enshrined in international law. Second, AGRA and other Gates Foundation projects finance the removal of foundation seed from smallholder seed breeders, turning public seed banks into marketers. Third, through programmes like CAADP and regional uniform seed laws, AGRA takes control over regional agricultural policies to advance commercial agriculture with the goal of increasing global corporate profits via biotechnology, allied with chemical fertilisers and pesticides. Fourth, at the national level, corporations integral to the 'green revolution' are becoming owners of local seed companies whose genetic treasures have been collected for decades, while also penetrating national gene banks. Just a few dollars of ready capital gain entry to priceless heirlooms and indigenous knowledge about their nutrition and healing benefits. Finally, among communities, gene hunters use local knowledge to collect treasures conserved in the fields, for this parent genetic material from 'wild relatives' is absolutely essential for the genetic biotechnology industry to continue to profit. AGRA projects do not recognise, and rarely refer to, traditional ecological knowledge.

The green revolution for Africa, a project not only of private foundations but also of the USA government and the G8, advocates the securitisation of African food production by linking it to the global market, while remaining silent about the active privatisation of Africa's genetic treasures, taking place without recognition or benefit sharing. This looting is against international law, but continues unabated, indeed, without public discourse. 🌿

- 2 *Ibid.*
- 3 African Studies Association Board of Directors and the Association of Concerned Africa Scholars, USA. 2012. 'ASA Resoluuion on Crisis of Central Africa,' ASA News 43.2, 14 May. www.asanewsonline.com, accessed 10 June 2012.
- 4 Andrew Mushita and Carol Thompson. 2007. *Biopiracy of Biodiversity – International Exchange as Enclosure*. Trenton, NJ: Africa World Press, Chapter 5.
- 5 For example, the Tuli cattle from Zimbabwe, highly prized for both its resilience in harsh climates and its beef flavour, is estimated to have been bred for over 7,000 years. Andrew Mushita. 2003. 'Bioprospecting and Commercializing Traits of the Golden Beast of Zimbabwe – The Case of the Tuli Indigenous Cattle', Policy Paper, Harare: Community Technology Development Trust.
- 6 By the end of 2011, eight countries had pledged \$10 million for the treaty's Benefit-Sharing Fund, but the agreed goal of raising \$116 million by 2014 seems remote. ITGRFA. 2011. Implementation of the Funding Strategy of the Treaty Funding, Resolution 3/2011, *Strategy for The Implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture*. [ftp://ftp.fao.org/ag/agp/planttreaty/publi/funding_strategy_compilation_en.pdf](http://ftp.fao.org/ag/agp/planttreaty/publi/funding_strategy_compilation_en.pdf) Accessed 2 February 2012.
- 7 Community Technology Development Trust. 2010. *A Public Trust Betrayed? Policy Changes by CGIAR Centres Giving New Meaning to 'Foundation Seed.'* Unpublished report, October. AGRA allies include, among others, the USA *Feed the Future* initiative, promoted both by the State Department and the Department of Agriculture, the World Bank's *Global Agriculture and Food Security Program*, which is implementing the G-8 pledge from the L'Aquila Summit in July 2009, the Davos World Economic Forum's *New Vision for Agriculture*.
- 8 Pioneer Seed began in the 1930s by accessing American maize, bred and developed in the public sector through government agricultural extension services. Pioneer simply put its brand name on a few varieties and packaged them in colourful packets. More than 80 years later, it continues its policy of 'accumulation by dispossession' (Harvey 2003) of the public domain, extending it to the African continent. David Harvey. 2003. *The New Imperialism*. Oxford: Oxford University Press, Chapter 4.
- 9 World Social Forum. 2007. "Africa's Wealth of Seed Diversity and Farmer Knowledge – Under Threat from the Gates/Rockefeller 'Green Revolution' Initiative," Statement by African Civil Society Organizations, Nairobi, Kenya (January 25). <http://www.grain.org/article/entries/3804-africa-s-wealth-of-seed-diversity-and-farmer-knowledge-under-threat-from-the-gates-rockefeller-green-revolution-initiative>, accessed 12 February 2012
- 10 Nyasha Chishakwe and Regis Mafuratiidze. 2010. *Access to Genetic Resources, and the Sharing of Benefits arising from their Use (ABS), Trainers' Manual*. Harare: Southern Africa Biodiversity Policy Initiative.

1 BBC, 2012. 'Obama unveils US Food Security Plan for Africa,' 18 May. www.bbc.co.uk/news/world-us-canada-18119024, accessed 7 June 2012

Food security has more recently emerged as a global and persistent issue and is currently being linked to poverty and various crisis situations. However, food security is not a new concept. Over the past decades it has been given space on the agendas of international institutions and in global negotiations, although the contexts and the associated understanding of the concept have varied. In order to make progress in global food security, a first step is to reconceptualise it, by focusing more on the broader power relations which largely determine the realisation of individuals' right to food.

Food sovereignty:

A question of sustainable production and equitable distribution

Kjell Havnevik

In the 1970s the world saw increasing food prices and a reduction in global food stocks. Concern was raised about the global provision of food, and the focus of conferences and ways of resolving the problem became directed towards increasing global food stocks. Strategic grain reserves were subsequently promoted by international institutions and donors in developed and developing countries. The goal was to prevent natural disasters, adverse weather and climate conditions, and low agricultural production in the context of an increasing global population, from undermining the global supply of food. The solutions were considered to be technical and the focus was on the volume of food production and its storage. We could call this *the abundance aspect* of food security. However, no attention was paid to the sustainability aspects of food and agricultural production.

In the early 1980s, however, new knowledge about food security was attained, based on the experiences of the major famine in Ethiopia. It turned out that the production of sufficient amounts of food to feed the population of the country was not the major problem. Rather, it was the case that food production within the country was unevenly distributed, transport between deficit and surplus areas was difficult, and people, even in areas of sufficient food production, did not have the incomes or other means to access the food available.

At the theoretical level the analysis of food security, led by the Indian economist Amartya Sen, came to focus on food entitlements, i.e. understanding food security in a context that went beyond the volume of production and to include the analysis of mechanisms through which people could *access* food. Such entitlement or access mechanisms could be wage labour that provided money to purchase food, ownership or user rights to land to produce food, or the ability to attain food through relationships at family or community levels. Hence food security could not be guaranteed through abundance of food only, but socioeconomic and cultural aspects had to be added to the analysis.

Nutritionists and anthropologists came to add further elements to the understanding of food security. Their research on the dynamics within households led to the realisation that the distribution of food was uneven also within the households. Thus food security for all has to be taken to the individual level. Although in Africa women were responsible for providing the major share of food for the household through own production or purchases, studies showed that men and children were given first priority in family food consumption. Hence in times of food shortage, seasonal or permanent, food would be unevenly distributed within the family. Nutritionists were, through their research, also able to show that lifestyles

and external conditions prevailing during food consumption and digestion also impacted on the ability of the human body to absorb the nutritious elements of the food. Hence in situations of social instability and tension, within families or related to conflicts and wars, the food intake would overstate the calorific value of the food consumed.

A further aspect emerging in connection with food security was food safety, i.e. issues related to food storage, processing and preparation. The focus turned to the requirement of clean water, sanitation and hygiene. The concern was to increase the quality of the food and to prevent the spread of illnesses and pathogens from the food to those consuming it. This is especially a problem in those urban areas where food cultivation and animal rearing take place alongside each other. Research shows that as much as 20 per cent of the urban food intake is produced in the urban areas themselves, indicating the scope of the problem. Another aspect of food security has surfaced in connection with forced migration and concerns the cultural acceptance of food, e.g. some religions do not allow the consumption of pork. In addition, food acceptance among individuals or groups can also be conditional on the source of the food, e.g. consumers' perception that the impact of food production itself on the environment and people, are not acceptable.



PHOTO: UN PHOTO/ROZBERG

Food stalls at an outdoor food market in Dakar. Shortage of food may appear even in areas of sufficient production because of uneven distribution or transport problems. People may also have too small incomes to buy enough food for their needs.

An initial definition of food security would thus include the following components: (i) *abundance*, i.e. sufficient production of food for all; (ii) *adequacy*, i.e. that the food produced is adequate in terms of its *nutritional value* and that the human body can absorb that value through digestion; (iii) that the food is safe in terms of its storage, preparation and consumption, i.e. *food safety*; (iv) that the food is *culturally accepted*; and (v) that people command entitlements that enable their *access* to food.

A wider context of food security

Such a definition of food security is, however, rather descriptive, and needs to be connected to critical global developmental processes and issues in order to advance a better understanding of the determining factors of food security and its impact. The aspects of food security identified above will in the first instance be related to environmental sustainability, social justice and food supply.

Environmental sustainability is connected to how food is produced, to the

scale and the character of production in terms of use of land, soils, water, forests, energy and other natural resources and its effects on biological diversity, environmental services and ecological systems. The production regimes of food have direct and/or indirect effects on the climate through changes in land use. Environmental sustainability in the wider sense is also connected to the distribution of resources and benefits between generations and between human beings and other species which inhabit the world. Environmental sustainability is thus closely linked to the reproduction of ecological systems that are necessary for sustaining life. The greatest future challenge for humanity is that the dominant system of production and consumption, that of Western capitalism, cannot be expanded to and sustained on a global scale in its present form. The system can only be sustained through high and increased levels of consumption and resource exploitation on a global scale, which will damage ecological systems and the provision

of their services and cause dramatic climate change.

This challenge is also central to food security and takes us to the broader issue of *social justice*. Currently global food production can provide every human being with sufficient food for a healthy life. In spite of this, about 14 per cent of the seven billion people inhabiting the world find themselves in a situation of malnutrition or hunger. The number of food insecure people in the world has increased from a level of 800 million in 1990 to nearly one billion in 2012. This shows that one of the major Millennium Development Goals, MDGs, to reduce the number of hungry people in the world to 400 million by 2015, is beyond reach. Food security which historically was seen as a problem of the developing south has now become a problem also for the developed and transition countries. The prominence of food security on the global political agenda in the last few years is not only associated with its global nature but also connected to the character of food

as a commodity. Food is necessary for sustaining life. Hence, food insecurity can easily lead to political tension and conflicts. Experience shows that the global challenge is not only to produce enough food to feed everyone in the future, but also to distribute the food currently being produced in a globally equitable manner.

Global economic *inequalities and social injustices* are important contributory causes of the rise in global food insecurity, since they involve a certain distribution of power and assets that affects access to food. In terms of global incomes and poverty, two regions are falling behind, South Asia and Africa. At the same time, a recent report by UNDP (July 2012) stated that global poverty will be reduced to half in 2015, compared to the level of 1990 and in accordance with the MDGs. But poverty reduction globally is not very closely connected to changes in global food insecurity, which is on the increase. In rural Africa poverty is closely related to lack of assets, insecure land tenure systems, low agricultural productivity and low incomes. Recent trends are in the direction of large scale external investments in the production of food and energy for export, which alienate smallholders from their land and thus further deepen their food insecurity. This may not be illegal in African countries where the state has the ultimate ownership of land. But it indicates that an alliance is being forged between the state and domestic elites in Africa on the one hand, and international commercial interests, both state and private, on the other. Donors and African smallholders find themselves excluded from this alliance.

Fragile and declining access mechanisms

In response to economic hardships, African smallholders are diversifying their economic activities. However, this takes place within a context where the mechanisms ensuring their access to land and natural resources are both fragile and weakening. When rural diversification fails, people migrate to urban areas or other countries/continents in the hope of generating additional income. However, recent economic hardships in Europe have led to a return of African migrants to their home countries, and both development assistance and remittances to the continent are falling drastically. A

mechanism for accessing food that could be seen as a last resort is the procuring of food through familial and social relationships and community networks. Such access mechanisms, dependent on reciprocity and redistribution, still function in the African countryside, but they are weakening.

The deterioration of global food security has also taken place in spite of human rights, including the right to food, having become increasingly manifest on international agendas. The fundamental right to be free from hunger enjoyed separate recognition in the United Nations International Covenant of Economic, Social and Cultural Rights (ESCR) of 1966. The Covenant entered into force in 1976, and by 2002 145 countries had ratified it, while 20 countries had inserted the right to food into their constitutions. The Covenant states that, "The right to food is realized when every man, woman and child, alone or in community with others, have the physical and economic access at all times to adequate food or means for its procurement".

The principal obligations imposed on states by the ESCR involve taking a number of steps to progressively achieve the full realisation of the right to adequate food, including the obligations to: (i) respect, i.e. the state is not to take any measures that prevent access to adequate food, (ii) protect, i.e. the state is to ensure that enterprises or industries do not deprive individuals of their access

to food and (iii) fulfill, i.e. the state is to (a) facilitate and proactively engage to strengthen people's access to food and (b) to provide for the fulfillment when individuals or groups for reasons beyond their control are unable to access food. An International Code of Conduct on the human right to adequate food was launched in 1997 and has widespread support among non-governmental organisations that advocate on behalf of the hungry.

Abundance is not enough

Although abundance is a necessary condition for food security to be fulfilled, it is far from sufficient. *Food supply* encompasses, in addition to production, trade that can enable the distribution of, and access to, food as well as technical and knowledge related innovations that increase the productivity in food- and agricultural production. The last decades have seen emergency food aid play an increasing role in the face of environmental disasters, conflicts and wars. Food supply is also dependent upon the existence of adequate infrastructure for the distribution of available food and on proper conditions in order to ensure food safety.

Food supply can also be enhanced through international trade. However, conventional international trade theory builds upon certain assumptions, many of which do not hold up in real life. For instance, the assumptions of no externalities, stable prices, equal dynamic



PHOTO: WENDY STONE/IRIN

Dried maize in a basket in a market place in Vihiga, Western Kenya. African smallholder farmers at present produce 90 per cent of the food on the continent but have limited possibilities to influence their own situation.

comparative advantages and no cross-border mobility of factors of production have been shown to poorly reflect the world of today. It could be argued that absolute advantages are gradually becoming more important than comparative advantages in trade. This would recast the whole trade arena, where gains would flow to countries holding, or being able to create, such absolute advan-

“People, even in areas of sufficient food production, did not have the incomes or other means to access the food available.”

tages. The history of trade between the rich and developed and developing countries shows, both at the theoretical and practical level, that trade rather must be understood in conjunction with concepts such as power and hegemony. What real choice did Africa have to acquire positive externalities, e.g. in the areas of technology and industry, given that their productive systems were basically imposed on them from outside? In a historical perspective trade has never been a level playing field.

As regards trade in food, recent developments show that important stakeholders and states no longer have confidence in the “free trade doctrine” for ensuring their own safe food supplies. This has led to a rising global interest in farmland (World Bank 2011), e.g. in Africa, with the goal to produce food for export to the investing countries themselves. In this connection, Bilateral Investment and Trade Agreements are being signed to protect the external investments and ensure a stable flow of food for export. Since food and energy security have risen to become top political priorities globally, the search for land for production of food and energy for export has become a global process which is strongly impacting on Africa.

It is claimed that around 50 per cent, or around 200 million hectares, of “available” global land reserves exist in Africa. What will happen when such external investments for food or energy, mainly with sugar cane as a feedstock,

seek the well watered areas that these crops require? If all of the 40 million hectares of land that were acquired by external interests in Africa in 2009 come under cultivation, a staggering volume of water would also be required for irrigation. The Oakland Institute has estimated that if the annual rate of land acquisitions in Africa continues at 2009 levels, the demand for fresh water from new land investments alone will overtake the existing supply of renewable fresh water on the continent by 2019.

As to the potential for increasing food production and supply, the spread of new biotechnology innovations have been advanced as an option. Biotechnology is, however, not likely to bring about greater sustainability in world agriculture. It may well increase agricultural productivity, but at the expense of sustainability and food security. Although it is possible that certain biotechnologies could increase agricultural sustainability or food security, or even generate economic development, this is unlikely, since they were created and will exist in a world in which these issues are at best secondary for those who control their development. New technologies often lead to new ways of appropriating, substituting and standardising living nature so as to make it more conducive to the goals of agribusiness. As such they are ‘changing the rule of the game’, by creating a situation where intellectual property rights have been extended to living organisms and global biodiversity has become a resource for incorporation into new processes and products. Smallholders are losing their power and influence over seed production, which is being monopolised by global corporations.

From food security to food sovereignty

The above discussion has raised issues related to *power, rights and sovereignty* in relation to food security. This shows that the aspects of food security as identified earlier cannot in themselves explain why food insecurity is so widespread globally. There is evidently a problem related to the sharing and distribution of the food. In the example from Ethiopia during the 1980s we saw that famines occurred because poor people could not access food. Furthermore, it has been indicated above that current trends of large scale external investments in Africa for food

and energy for export will lead to major alienation of rural smallholders from land and water.

Smallholders in Africa and the world are facing asymmetrical power relations that only to a limited extent enable them to influence their livelihoods. Since African smallholders currently produce 90 per cent of the food on the continent, this puts food security at a risk at all levels. For smallholders to change the current development trajectory, they need to organise globally and press for technological and market developments that address their own aspirations and needs, increase their influence over land and its allocation, and ensure trade with the external world in mutually beneficial ways. They also need to be protected by the state according to the Covenant of Economic, Social and Cultural Rights.

The increasing neglect of smallholder agriculture in Africa and on other continents prevails among international financial institutions, aid donors, and global commercial and state interests, which are often in alliance with domestic African elites. This exclusion of smallholders will undermine the core food production base of African agriculture and society.

The current concept of food security, as described in this article, is not addressing the needs and aspirations of rural smallholders. Neither does it reflect well the discussion on the right to food, which is a central aspect regarding people’s possibilities to sustain and influence their own lives. It should therefore be reconceptualised with a stronger focus on understanding the power relations affecting all aspects of food security. This will provide a better understanding of why food insecurity occurs locally and globally, as well as of the roles and interconnections between developed and developing countries. The development, and effective use, of a new concept, *food sovereignty*, is necessary for developing strategies and policies that incorporate a form of structural change that can lead to a world where food is both sustainably produced and equitably distributed. 🌿

With the increasing globalisation of today's world, governments, especially in the global south, have to a large extent lost their power to influence food security in their respective countries. Major factors in this development are the structural adjustment policies and international trade regulations of the last decades. In large parts of the world climate change is making the situation even more critical. The need for reform is urgent, and since the 1990s there has been a significant trend towards the creation of alternative structures to fight the root causes of the food crisis.

From food crisis to food governance?

Nora McKeon

"Prices are rising every day and people don't know what to do. It's like having matches near cotton that can catch fire at any moment," warned the Secretary General of the National Confederation of Workers of Burkina Faso just before the food riots of February 2008 broke out.¹ "The pot is empty, President Garcia", women shouted on the streets of Lima in an effort to pin accountability on an identifiable actor. "Without corn there is no country" was the slogan in Mexico, where the NAFTA experience had taught those who suffered its consequences to connect effects to more palpable causes.² Whatever the level of political sophistication of people's diagnoses, it was evident that something had gone dramatically wrong in countries around the world. That something had to do with food governance: decision-making, rules-setting and authority-wielding related to collective food security or, some would say, food sovereignty.

In a globalised world food governance has become an almost hopelessly complex task. To start with, it involves multiple strata of decision-making. Nation states have lost control over the aggregate body of factors that determine the food security of their populations. The structural adjustment policies imposed on governments in the global south from the mid 1980s played a large role in this process of disempowerment, followed by international trade regulations affecting agriculture with the establishment of the World Trade Organization in 1995. Food governance has become a complex web of often contradictory formal policies and regulations, compli-

cated by unwritten rules and practices that are not subject to political oversight. At the same time its remit has expanded. While issues of agricultural production formerly monopolised the agenda, today access, quality and ecological concerns are equally relevant. The 1996 World

 ***In a globalised world food governance has become an almost hopelessly complex task.***

Food Summit focused on hunger in the developing countries. Now it is recognised that dysfunctioning of the world food system affects the North as well, and under-nutrition is not the only problem. More people globally suffer from over-weight and obesity than hunger, and diabetes type 2 kills some 3.8 million people a year³.

Global crises have joined hands in a 21st century dance of death. The unsustainability of a production model based on intensive use of chemical inputs has been dramatically highlighted by climate change. The globalised food system is dependent on the ability to discount the energy cost of whisking food around the world before it ends up on a supermarket shelf. The financial crisis has prompted speculation in food commodities, a major contributing cause of price volatility. The commodification and the financialisation of natural re-

sources is translating into phenomena like "land grabbing", whereby large areas of land are converted to the production of crops to be processed into agrifuels or exported to rich, food deficit countries, expelling local farmers and pastoralists in the process.⁴

The eruption of the food "crisis" – a misleadingly conjunctural term given its decades-long genesis – unequivocally unveiled a vacuum in global governance. In the absence of an authoritative and inclusive global body deliberating on food issues in a transparent manner, decision-making in this vital field was being carried out – by default – by international institutions like the World Trade Organization and the World Bank for whom food security is hardly core business, by groups of the most powerful economies like the G8/G20, and by economic actors like transnational corporations and financial speculators subject to no political oversight whatsoever.

Three major inter-related aspects of mal-governance needed to be addressed. First, the current architecture of world food security governance is fragmented, incoherent, opaque and unaccountable. The Bretton Woods Institutions (BWI) and the World Trade Organization (WTO) are market-oriented and rich country-dominated⁵. UN system institutions like the Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD)⁶ and the UN Human Rights Council are more inclusive and temper neo-liberal approaches with an emphasis on food security, rural poverty and a

rights-based orientation, but they wield less power than their BWI sisters. A host of other international negotiating forums impact on food security directly or indirectly and have not been sufficiently integrated into food security discussions. Food security governance suffers also from inadequate and top-down articulation among different levels of public authority. It includes components that largely evade the public institutional architecture. The impact on food issues of expert policy networks or of private sector self-regulatory mechanisms along the food chain are just two examples of the difficulty of enforcing public policy control on food security governance. Assignment of responsibility for decision-making and its consequences has become practically impossible.

Secondly, within this labyrinth of unaccountable governance private sector actors have carved out an unacceptably determinant and unregulated space for themselves.⁷ Horizontal and vertical integration in the food chain has generated intense corporate concentration with significant political impact.⁸ Regulatory capacity has not kept pace

with global integration of markets⁹ and corporations often play a key role in establishing the very rules that seek to govern their activities.¹⁰ The fault is not to be laid so much at the door of the private sector, which is simply seeking to realise its objective of earning profits for shareholders, as at that of governments, who are failing dismally to fulfil their mission of defending common interests and public goods.¹¹

Thirdly, the policies proposed by today's governance system are sorely in need of a complete overhaul. The paradigm which has piloted the world to today's compound crisis – based on market liberalisation and productivist green revolution technology – is backed by a winning combination of economic and political interests and is hence particularly difficult to unseat.¹² Corporate actors play an important role in framing issues both through their direct lobbying and media work and, indirectly, through the academic research they fund.¹³ Beyond the factor of complicity with corporate interests, policy makers are often culturally unprepared to question their understanding of the issues

and to learn from local experience that shows that other approaches can work. A striking illustration of this limitation is the continued negative image of small-scale family farming, although it produces food for over 70 per cent of the world's population, and of agro-ecology despite demonstrations of its capacity to feed the world and nourish the environment.¹⁴ Public policy desperately needs to be able to draw on new ways of gathering and assessing evidence, liberating science from the pursuit of technical fixes that ties it to commercial interests.

From talk-shop to an inclusive UN-forum

During 2008 a sharp divide emerged over how to fill the governance gap. The UN Secretary-General established a High Level Task Force on the Global Food Security Crisis that constituted an administrative response to an exquisitely political problem. The G8, for their part, threw up a veritable smoke screen of rhetoric about an elusive 'Global Partnership on Agriculture, Food Security and Nutrition', promising billions of dollars of new investment in agriculture¹⁵



PHOTO: UN PHOTO/LOGAN ABASSI

A Brazilian UN peacekeeper puts out fire of a burning tire near the Haitian National Palace. Burkina Faso, Peru, Mozambique, Mexico, Algeria and Haiti are but some examples of countries where spiking food prices have led to riots and street fighting.

and ever more advanced technological fixes for whatever ails society. The only proposal that put policies and politics at the centre was championed by a number of predominantly southern governments allied with FAO and with civil society organisations and social movements. Their plan was to transform the Committee on World Food Security (CFS)

Agricultural Producers' Organizations (ROPPA) at the regional level.¹⁷

The civil society forums held in parallel to the two World Food Summits convened by FAO in 1996 and 2002 gave a strong impetus to global networking by rural social movements. By 2002 the principle of food sovereignty, introduced by La Via Campesina in 1996,

to be exploited by the food sovereignty movement when the food crisis erupted.

When the process of reforming the CFS got underway in April 2009 it was opened up to all concerned stakeholders. Small-scale food producers facilitated by the IPC were enabled to interact with governments on an equal basis. The legitimacy and the cogency of their proposals amplified their impact, and in the end they made a fundamental contribution to shaping the new forum.



PHOTO: FAO/GIULIO NAPOLITANO

During the Committee on World Food Security meeting on the Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests, Civil Society representatives show the signatures of Dakar declaration and bring a vegetable basket to the chairperson.

based in FAO from an ineffectual talkshop into an authoritative, inclusive UN forum deliberating on food security in the name of ensuring the global right to food. The challenge was to effectively fill the global governance gap rather than simply papering it over and continuing to conduct business as before.

The opportunity for reform was there, but equally important was the fact that organisations representing those sectors of the population most affected by the food crisis were equipped to take advantage of it. The period from the mid 1990s has seen an explosion of alternatives to the dominant paradigm and attacks on the institutions that defend it on the part of a new generation of civil society actors. Among these the most politically significant are the rural social movements that began to mobilise in the 1980s in reaction to the devastating effects of neo-liberal policies on agricultural production and rural livelihoods.¹⁶ Prominent examples of these are La Via Campesina, at the global level, and the Network of West African Peasant and

had become the assembly's battle cry. The Forum entrusted the mandate of carrying forward its action agenda to the International Planning Committee on Food Sovereignty (IPC), a network in which people's organisations have the deciding voice with NGOs playing a supporting role.¹⁸ Since then the IPC has facilitated the participation of over 2,000 representatives of small food producers' organisations in FAO policy forums where they had never set foot before, championing the right to food and food sovereignty, local people's access to and control over natural resources, agro-ecological food production, and the defense of local markets as an alternative paradigm to free trade and green revolution technology. The thematic advocacy work has been underpinned by an insistence on civil society's right to autonomy and self-organisation in its interface with intergovernmental policy forums and by networking and capacity building for people's organisation.¹⁹ This global policy space and almost a decade of experience in occupying it were ready

The reform document of the Committee on World Food Security: Some important features²⁰

- Recognises the structural nature of the causes of the food crisis and acknowledges that the primary victims are small-scale food producers.
- Defines the CFS as "the foremost inclusive international and intergovernmental platform" for food security and includes defending the right to adequate food in its mission.
- Brings civil society (with emphasis on organisations of those most affected) and other non-state actors into the room as full participants. Affirms civil society's right to autonomously self-organise to relate to the CFS.
- Enjoins the CFS to negotiate and adopt a Global Strategic Framework (GSF) for food strategy in order to provide guidance for national food security plans as well as for intergovernmental and non-state actors.
- Empowers the CFS to take decisions on key food policy issues, and promotes accountability by governments and other actors for applying them.
- Supports the CFS' policy work by a High Level Panel of Experts and acknowledges the expertise of producers and practitioners alongside that of academics and researchers.
- Recognises the principle of "subsidiarity" and the need to build links between the global CFS and regional and country levels, where governments have committed to establishing multi-stakeholder policy spaces.

The final reform proposal, adopted by acclamation on 17 October 2009, includes some important points which civil society and social movements fought hard to defend against the attacks of those governments who wanted to keep the new CFS as toothless as possible.

Heated discussions

It looked good on paper but could it make a difference in practice? The way in which the CFS is addressing the contentious issues of investments and land offers an illustration. Already at the first session of the reformed CFS in mid-October of 2010 a strong confrontation took place. G8 powers took the line that the surge in large-scale foreign investment in developing country agriculture, including for land acquisitions, was to be welcomed as a contribution to solving the food crisis. All that was needed was to “discipline” it with a code of conduct – the ‘Principles for Responsible Agricultural Investment’ (PRAI) – which had been formulated in closed-door discussions by the World Bank and other multilateral institutions and on which the CFS was now asked to put its stamp of approval. On the other side, the IPC network and other civil society organisations denounced the PRAI as a move to legitimise the corporate takeover of rural people’s territories.²¹ They supported a different route to global rules-making, taking off from the need to defend small-scale producers’ and local communities’ access to the natural resources on which their livelihoods and their cultural and social heritages are based. The instrument they had in mind was the Voluntary Guidelines on Responsible Governance for Tenure of Land, Forests and Fisheries (VGs) that FAO was developing in broad consultation with governments and civil society in all regions.

Civil society intervention in the intense negotiations was decisive in obtaining agreement that the VGs be negotiated and adopted in the CFS and that the Committee decline to endorse the PRAI.²² These outcomes can be largely attributed to the innovative format of the CFS whereby political decisions are made in plenary sessions in which civil society and social movements are full participants rather than in closed door drafting committees as is normally the case in intergovernmental forums.

The engagement of all actors deepened, in acknowledgement of the strategic importance of the CFS, as the negotiations on the VGs evolved, from July 2011 to March 2012. The US agreed to act as chair. The Africa Group, largely absent at the outset although their region is a prime target for land grabbing, made a remarkably successful effort to strategise and defend its positions. Latin American countries, where tenure laws are in revision, and the giant China, where land grabbing is an explosive internal issue, came on board, as they realised that they would be obliged to apply the VGs to their own situations once the ink was dry on the paper. The Middle East galvanised over the issue of tenure rights in occupied territories. The private sector network, representing corporations and financial actors, fought to legitimise and protect foreign investment in alliance with some G8 governments, while the EU, generally speaking, defended a rights-based approach and a focus on smallholders and indigenous peoples. The civil society negotiation team based its engagement on an autonomously developed vision of what the guidelines should look like. They agreed on a politically acceptable baseline outcome and laboriously drafted and defended alternative wording. The testimony and proposals brought to the debate by organisations of those most directly menaced by violations of their rights to land and other natural resources were particularly effective and opened up the way to building government-civil society alliances.

The final text of the VGs was formally adopted with a standing ovation at a Special Session of the CFS on 11 May 2012. Civil society’s assessment was essentially positive. Battles had been won on critical issues like protection of customary tenure, strong reference to human rights, strict definitions of what consultation with communities implies, priority to restitution and redistributive reforms, the obligations of states to regulate the operations of their corporations beyond their own territorial boundaries. At the same time, “the guidelines do not explicitly challenge the untruth that large-scale investments in industrial agriculture, fisheries and forests are essential for development”.²³ Yet the very fact that, for the first time in history, global guidelines on tenure of land and other resources had been negotiated

and adopted in an intergovernmental forum was grounds for satisfaction. The hegemony of the International Financial Institutions and their market-led approaches to land issues had been dethroned. That this had taken place with an unprecedented degree of participation and inclusiveness was felt to augur well for the authority of the CFS and for expanded democratisation of decision-making processes at the international level more generally. The transit from food crisis to food governance is far from secured, but more has been accomplished in the new Committee on World Food Security in a short period of time than most hoped – or feared – was possible. 🌿

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 - 22 Instead it was agreed that an inclusive consultation on principles for responsible agricultural investment would be launched under CFS auspices once the VGs had been approved. CFS (2010: para. 26).
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The Zambezi River Basin in Southern Africa is particularly challenged by climate change and its consequences in the form of political unrest, economic disturbances and the risk of increasing food prices. The countries in the region have similar histories, yet also quite different political and socio-economic systems, as well as varying capacities to face and cope with the effects of climate change in a broad sense.

Zambezi River Basin:

A risk zone of climate change and economic vulnerability

Ashok Swain, Ranjula Bali Swain, Anders Themnér and Florian Krampe

Climate change is expected to hit sub-Saharan Africa harder than many other parts of the world and will bring increasing challenges for the governments and people of this region. Dominated by the 3,500 kilometer long Zambezi River, over 128 million inhabitants of the eight states that are part of the Zambezi River Basin are dependent on this “Great River” directly or indirectly as a source of food and water. Zambezi plays an indispensable role in the southern African socio-economic life. Additionally, those countries that depend heavily on the Zambezi river system share a complex historical and political development during the twentieth century.

We investigate the effect of climate change on this basin by mapping climatic forecasts against socio-economic and political analysis in the Zambezi Basin. Based on this approach, attempts are made to determine regions within the Basin that are more likely to experience collective violence and popular unrest because of the anticipated impact of climate change.

Vulnerability to climate change in the basin has been measured taking into account the impact of existing socio-economic and political factors. Besides the ecological impact, the study argues that socio-economic and political problems are disproportionately multiplied by climate change. Additionally, climate change correlates considerably with problematic political structures and dynamics, because these affect the

governance of resources, and hence, are linked to a weakened capacity of societies to mitigate and adapt to the impacts of climate change, as well as to face economic hurdles (rising food prices, etc.)

Geography and climate

The Zambezi Basin is already experiencing drastic changes to its climate. In recent years the annual rainfall in the region decreased considerably, which in turn affected the annual flow levels of the Zambezi. Temperatures are predicted to rise by 5°C for some regions in

“Mozambique, Namibia, Zambia and Zimbabwe use over 70 per cent of their fresh water resources for agriculture.”

the Basin, thus increasing evaporation even further. Particularly Zimbabwe, which has historically suffered serious droughts, is very vulnerable to evaporation, with water reservoir surface areas reduced by almost half.

Contrary to the expected droughts in parts of Zimbabwe, Mozambique is dealing with heavy rains and cyclones that frequently hit the country. The conse-

quence is fast rising river levels, causing more harmful floods to valuable farmland along the lower Zambezi shores. With its long coastline and about 40 per cent of its population living and working in coastal districts, Mozambique is particularly vulnerable to tropical storms. The results are already visible today with serious erosion destroying local infrastructure and farmland

The overall consequences for the agricultural sector give rise for concern. In total the countries of the Zambezi Basin (excluding Tanzania) have 2.17 million km² of agricultural land, of which just 202,900 km² is arable. Notably, Zimbabwe, Malawi and Zambia have increased the amount of agricultural land between 1990 and 2007. Mozambique holds the largest amount of agricultural land in relation to total land area. But as a consequence of increased agricultural land, there is also an increased need for irrigation to sustain agricultural production and mitigate the variability of rainfall. In the entire basin, agriculture is the dominating consumer of water. According to the Food and Agriculture Organization, Botswana uses just 41 per cent of its water resources for agriculture, while 18 per cent goes into mining and energy production. In comparison Mozambique, Namibia, Zambia and Zimbabwe use over 70 per cent of their fresh water resources for agriculture. Mozambique, in particular, uses 87 per cent of its water for agriculture, while just 2 per cent goes to the industrial sector.

The dependency on water for food production in the basin area affirms concerns that the Zambezi Basin will be strongly affected by climate change. Water allocation issues, population and economic growth, the expansion of irrigated agriculture water transfer and climate change are expected to cause use of water runoff to rise to 40 per cent by 2025.

The economic impact of climate change on southern Africa is compounded by its agriculture-based economies (the agricultural sector accounts for 60 per cent of employment and more than 50 per cent of the gross domestic product (GDP)), its reliance on traditional technology and its dependence on only a few agricultural exports. Climate change is expected to lead to a 50 per cent decline in agricultural output by 2020. This would not only endanger the food security situation but also increase the vulnerability of small-scale farmers. The chronic hunger situation is expected to worsen due to declining water resources, resulting in a 5-8 per cent increase in arid and semi-arid lands by the 2080s.

Agricultural productivity, food security and droughts

The precarious food situation of the southern African region is the result of various factors, including: unfavourable climatic conditions (erratic rainfall, drought and floods), poor and depleted soils, environmental degradation, failed sectorial and macro-economic policies, inadequate support systems, and political upheavals^{1,2}. The subsistence farmers in Africa are especially vulnerable when annual crops fail. This is because, first, locally produced food becomes unavailable or scarce. Second, they cannot purchase food available in the market due to the loss of agricultural income, which is their only source. In recent years, food imports by both governments and the private sector have significantly increased. However, a growing fraction of the southern African population cannot afford food even at subsidised prices. Extreme poverty further aggravates the situation, resulting in millions relying on relief food.

Analysing the food situation in southern Africa, the World Food Programme has identified seven factors that contribute to the food crisis in the region. Two of these factors are directly

related to climate change. Severe dry spells and drought are causing problems for Malawi, Mozambique, Zambia and Zimbabwe. Lesotho, south and central Mozambique suffer from heavy rains and floods. Other factors include: disruption to commercial farming in Zimbabwe, depletion of strategic grain reserves in Malawi and Zambia, poor economic performance in Lesotho and Zimbabwe, delays with the importation of maize, particularly from South Africa, and sharp rises in prices of staple foods in Malawi, Mozambique, Zambia and Zimbabwe.

Droughts and floods also have a major impact on the economic health of southern Africa. These natural hazards can frustrate several years of development efforts. For instance, Zimbabwe's GDP fell by 3 per cent and 11 per cent after the 1983 and 1992 droughts, respectively. The 1991/1992 drought over southern Africa resulted in crop losses and the death of cattle herds, led to widespread food shortages and devastated the fragile economies of various countries. Regional maize production in 1992 was approximately 5 million tons (the lowest since 1961), putting an estimated 30 million people at the brink of famine. This was 60 per cent below the 1991 level (an already below average production year) and the 1991-2000 average. In Zimbabwe the drought also resulted in the death of an estimated 423,000 cattle (roughly 10 per cent of the total cattle).

Extreme poverty further aggravates the situation, resulting in millions relying on relief food.

In 1995, following a regional drought, the cereal production was only 15.7 million tons, while the direct consumption needs were 23.3 million tons. Only half of the previous year's production (9 million tons) of maize was produced in the entire region. This was comparable to that of the early 1960s. Of the 7.6 million ton deficit of all cereals, maize deficits accounted for 4.9 million tons. Since 2001, consecutive dry spells in some areas of southern Africa have led to serious food shortages in many

countries. In 2001/2002 six countries, namely Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe, had a food deficit of 1.2 million tons of cereals, and non-food requirements at an estimated cost of US\$611 million. The 2002/2003 drought resulted in a food deficit of 3.3 million tons, with an estimated 14.4 million people in need of assistance.

Precipitation variability

Water-related problems that already exist in the region are likely to worsen as a result of climate change. Increased rainfall will result in an increased incidence of flooding in many areas. Reduced runoff aggravates existing water stress, reduces land quality, lowers the quantity of water available for domestic and industrial use, and limits hydropower production. Agricultural drought (inadequate availability of water for crops) causes 10 to 50 per cent of annual yield losses on 80 per cent of the area planted with maize in southern Africa. Below-normal rainfall years also occur more and more frequently, resulting in poor harvests especially due to the lack of early-maturing and drought-tolerant varieties. The shortage of dry-season fodder has also become a major constraint for livestock production, further impacting the food and income security in the region. Even though the effect of climate change on water scarcity may be relatively minor, it has the potential to have international consequences and become a source of conflict.

Environmental degradation caused by soil erosion, desertification, deforestation and inappropriate agricultural practices remains a major threat to agricultural sustainability. Abalu and Hassan estimate that 80 per cent of rangelands and rain fed croplands in southern Africa are degraded³. The forest cover is also rapidly declining. In the 1980s about 664,000 hectares of forest were cut down in southern Africa compared to a reforestation rate of about 92,000 hectares.

Sea level rise

Saltwater intrusion and coastal erosion through sea level rise constitutes another threat. However, its effects will only be felt toward the end of the 21st century. Rising global temperatures will lead to an increase in sea levels, which implies greater exposure to flooding that



PHOTO: GUY OLIVER/IRIN

A woman peels cassava in a village close to the northern Zambian town of Mpulungu. The production of the more drought-tolerant cassava has increased since the 1990s, while maize production has shown a down going trend.

damages infrastructure, roads and erosion from flooding. The costs of such events are not trivial. Collier and Goderis estimate that a typical shock, such as flooding, reduces the GDP by 0.4 per cent in a developing country.⁴

In Zimbabwe, Mugabe and the ruling party utilise natural resources for political purposes. The Zimbabwe-Bulawayo water transfer scheme aims to divert water from the Zambezi and help to supply Bulawayo (one of the economically strongest cities of Zimbabwe) with water. Bulawayo was strongly affected by the drought in 1991/92. However, the matter of the pipeline appears to be a political tool to pacify the citizens in that region, because it is always brought up during election times, but has still not been implemented. The political dimension becomes more evident when considering that the former rival party, Zimbabwe's African People's Union (ZAPU), of Mugabe's Zimbabwe African National Union (ZANU) had its

stronghold in Matabeleland, of which Bulawayo is the capital. Following extensive use of force, ZAPU signed a peace accord with Mugabe's regime in 1988, which resulted in ZAPU merging with ZANU, forming the one dominant party in Zimbabwe, ZANU-PF. Considering the resurrection of ZAPU in 2008, following the recent power sharing agreement between the Movement for Democratic Change and ZANU-PF, the political potential of the Matabeleland water situation becomes evident. In addition, Matabeleland is ethnically Ndebele, while Mugabe is Shona and the water rich highlands are dominated by his ethnic group.

Weak institutions

Southern Africa seriously suffers from having weak institutions. This makes for example water management more difficult, as there is none of the institutional infrastructure that would be necessary to mediate between competing interests.

Mozambique has weak state institutions, corruption in the state system, and a lack of control and/or marginalisation of the rural population. To overcome this problem, the government's strategy of decentralisation attempted to reach the rural population better. However, the situation with the two former civil war factions (FRELIMO and RENAMO) is dominating the government and opposition, and tensions are often played out in politics.

Zimbabwe underwent an economic structural adjustment programme (deregulating the economy, reducing deficits and creating incentives for manufactures) under the assistance of the World Bank and the IMF. As a consequence of the reduction of subsidies, food costs increased as transport costs and agricultural production costs increased. The unemployment rate increased as well. Zimbabwe's conflict with the IMF and the dispossession of white farmers in 1999 have since then

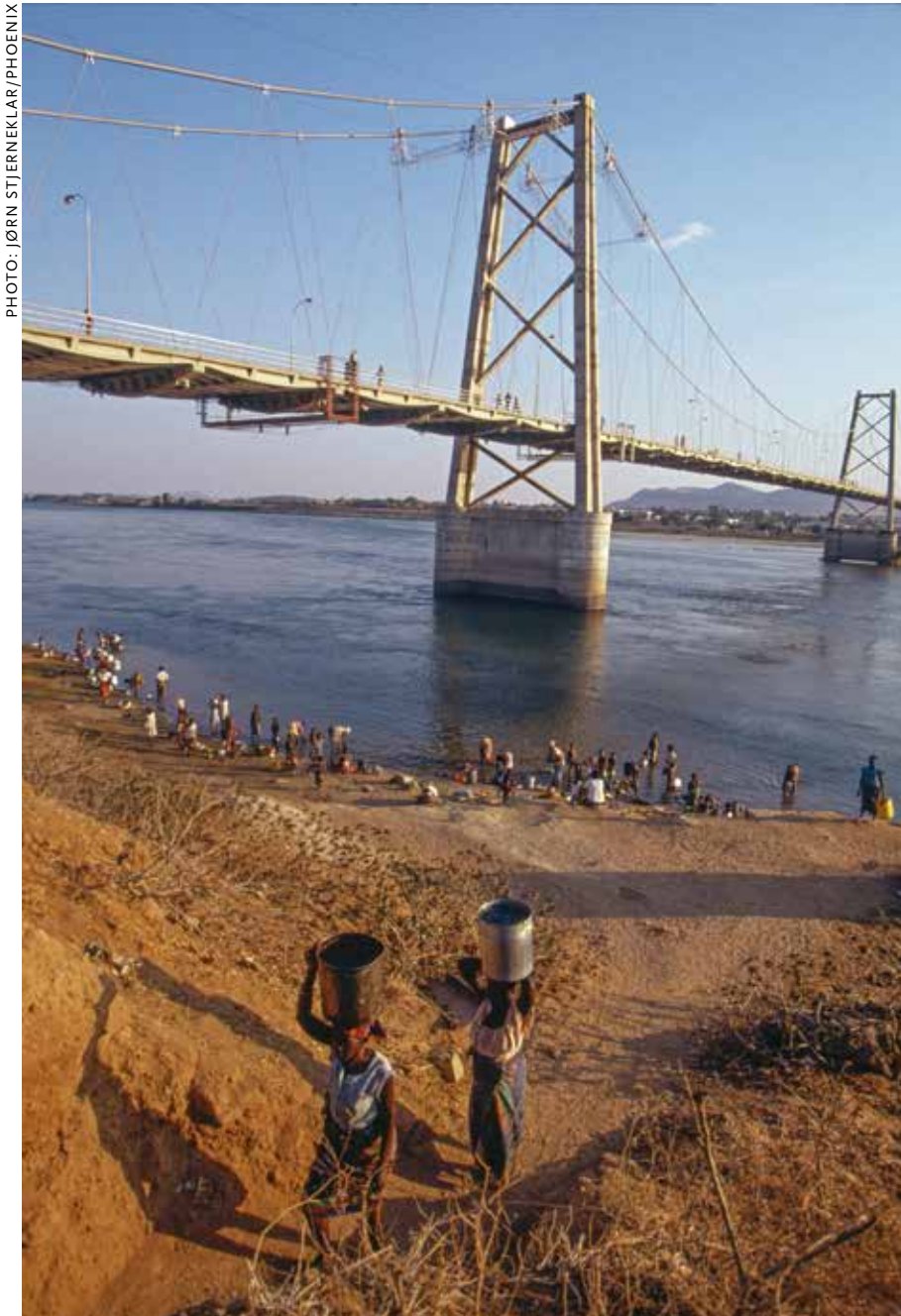


PHOTO: JØRN STJERNEKLAR/PHOENIX

People fetching water from the Zambezi River in Tete, Mozambique. Over 128 million inhabitants of the eight states that are part of the Zambezi River Basin are directly or indirectly dependent on the river as a source of food and water.

resulted in increasing food insecurity, economic instability and political crisis, which in turn has contributed to further weakening of its state institutions.

To date, in Angola, Mozambique, Zimbabwe, Namibia and South Africa the former liberation movements remain in firm control of domestic politics and the economy. The ruling movements hold on to their beliefs from their previous periods of conflict, first and foremost the liberation struggles in southern Africa and the following years of transition. Maintaining these beliefs allows them to justify their own use of violence and atrocities, maintain

their identity and constituency, and to marginalise the opposition.

As political parties these movements consolidated their rule by means of clientelist regimes. Examples of this have been particularly visible in Zimbabwean politics over the last decade. This is not a strong foundation for lasting peace and stability, but rather represents the impact of decades of intractable conflict on the political elites.

Concluding observation

Climate change will have a significant impact on the socio-economic system of the Zambezi Basin, and thus affect

the life of millions of poor people in the region. However, it is unlikely that the socioeconomic impact of climate change will cause conflict on its own. The quality of governance, particularly the role of elites, institutions and social identities, are crucial and can make the difference between adaptation and confrontation.

Exposure to climate change of the regions has been measured, taking into account the impact of existing socio-economic and political factors. Taking note of the ecological impact, the study focuses on socio-economic and political problems that are multiplied by climate change impacts. We have sketched how weak and partisan political structures adversely affect the governance of natural resources and, hence, are linked to a weakened mitigation and adaptation capacity of societies in response to the negative effects of climate change. Bad leaders, weak institutions and polarised social identities – that were maintained over years due to a lack of reconciliation in the aftermath of civil wars and overall liberation struggles – appear to have the potential to be the tipping points for causing conflict. 🌿

This article is a brief presentation of the broader study "Climate Change and the Risk of Violent Conflicts in Southern Africa". The full report, including all references and an extended analysis of the situation in Mozambique and Zimbabwe is available online.

- 1 During normal years South Africa and Zimbabwe are the net food exporters, while all the other Southern African countries are net importers. A drought may occur over large areas of southern Africa and still have no major impact for regional food security as long as South Africa and Zimbabwe are not affected. However, when these two countries are affected, as was the case in 1992, food has to be obtained from outside the region which takes longer and is costlier.
- 2 Van Rooyen and Sigwele. 1998. Economic Aspects of the South African Flower Industry. *Agrekon*, Vol 37, No 4
- 3 Abalu, G. and Hassan, R. 1998. Agricultural productivity and natural resource use in southern Africa. *Food Policy* 23: 477-490.
- 4 Pinstrup-Andersen, P., Pandya-Lorch, R. and Babu, S. 1997. A 2020 vision for food, agriculture, and the environments in southern Africa. In L. Haddad (ed): *Achieving Food Security in Southern Africa*. IFPRI, Washington, DC.

This article shows the link between social unrest and the price of food. The results imply that the Arab Spring reflects not only long-standing political failings of governments, but also the sudden desperate straits of populations unable to afford food. US government support for corn-to-ethanol conversion and future market deregulation enabling unlimited financial speculation in food commodities are causes of high food prices that need to be addressed. Otherwise, high food prices are likely to be persistent and lead to increased suffering and widespread social disruption. Avoiding global food crises and associated social unrest requires rapid and concerted action.

Hungry and angry:

Food riots and social unrest — a volatile combination

Marco Lagi, Karla Z. Bertrand and Yaneer Bar-Yam

A 17th century English proverb declares that “a hungry man is an angry man”. Here we describe research at the New England Complex Systems Institute in Cambridge, Massachusetts, USA, that confirms this adage scientifically¹.

Social unrest may reflect a variety of factors, such as poverty, unemployment, and social injustice. Despite the many possible contributing factors, the timing of violent protests in North Africa and the Middle East in 2011 as well as earlier riots in 2008 coincides with large peaks in global food prices. We are able to identify a specific food price threshold above which protests become likely. Our observations suggest that protests may reflect not only long-standing political failings of governments, but also the sudden desperate straits of vulnerable populations. Indeed, we show that food prices are the precipitating condition for social unrest.² Vulnerable populations are generally considered to be those supporting themselves on roughly \$1 a day, most of this going towards the cost of food. If food prices remain high, there is likely to be persistent and increasing global social disruption. Underlying the food price peaks we also find an ongoing trend of increasing prices. We expect this trend to put food prices persistently above the threshold in 2012-2013, even without price peaks. This implies that avoiding global food crises and associated social unrest requires rapid and concerted action.

In 2011 protest movements arose across North Africa and the Middle East. These protests are associated with dictatorial regimes and are often considered to be motivated by the failings of the political systems in the human rights arena. Here we show that and identify a specific global food price threshold for unrest. Even without sharp peaks in food prices we project that, within just a few years, the trend of prices will reach the threshold. This points to a global danger of spreading social disruption.

Global interdependence

Historically, there are ample examples of “food riots”, with consequent challenges to authority and political change, notably in the food riots and social instability across Europe in 1848, which followed widespread droughts³. While many other causes of social unrest have been identified, food scarcity or high prices often underlie riots, unrest and revolutions. Today, many poor countries rely on the global food supply system and are thus sensitive to global food prices. This condition is quite different from the historical prevalence of subsistence farming in developing countries, or even a reliance on local food supplies that could provide a buffer against global food supply conditions. It is an example of the increasingly central role that global interdependence is playing in human survival and well-being.

We can understand the appearance of social unrest in 2011 based upon a hypothesis that widespread unrest does not arise from long-standing political failings of the system, but rather from its sudden perceived failure to provide essential security to the population. In food importing countries with widespread poverty, political organizations may be perceived to have a critical role in food security. Failure to provide security, including food security, undermines the very reason for existence of the political system. Once this occurs, the resulting protests can reflect the wide range of reasons for dissatisfaction, broadening the scope of the protest, and masking the immediate trigger of the unrest.

Human beings depend on political systems for collective decision making and action, and their acquiescence to those systems, if not enthusiasm for them, is necessary for the existence of those political systems. The complexity of security in all its components, from protection against external threats to the supply of food and water, is too high for individuals and families to address themselves in modern societies. Thus, individuals depend on a political system for adequate decision making to guarantee minimum standards of living. This is particularly true for marginal populations, i.e. the poor, whose alternatives are limited and who live near the boundaries of survival even in good times.

The dependence of the population on political systems engenders its support of those systems, even when they are authoritarian or cruel, compromising the security of individuals while maintaining the security of the population. Indeed, a certain amount of authority is necessary as part of the maintenance of order against atypical individuals or groups who would disrupt it. When the ability of the political system to provide security for the population breaks down, popular support disappears. A lack of security occurs when individual survival is threatened, whether by violence or by an inability to obtain necessities. Conditions of widespread threat to security are particularly present when food is inaccessible to the population at large.

In this case, the underlying reason for support of the system is eliminated, and at the same time there is “nothing to lose”, i.e., even the threat of death does not deter actions that are taken in opposition to the political order. An attention-attracting event can then trigger death-defying protests and other actions that disrupt the existing order. Widespread and extreme actions that jeopardize the leadership of the political system, or the political system itself, take place. All support for the system and allowance for its failings are lost.

The loss of support occurs even if the political system is not directly responsible for the food security failure, as is the case if the primary responsibility lies in the global food supply system.

Higher food prices, larger protests

The role of global food prices in social unrest can be identified from news reports of food riots. Figure 1 shows a measure of global food prices, the UN Food and Agriculture Organization (FAO) Food Price Index⁴ and the timing of reported food riots in recent years. In 2008 more than 60 food riots occurred worldwide in 30 different countries, 10 of which resulted in multiple deaths, as shown in the figure. After an intermediate drop, even higher prices at the end of 2010 and the beginning of 2011 coincided with additional food riots (in Mauritania and Uganda), as well as the larger protests and government changes in North Africa and the Middle East known as the Arab Spring.

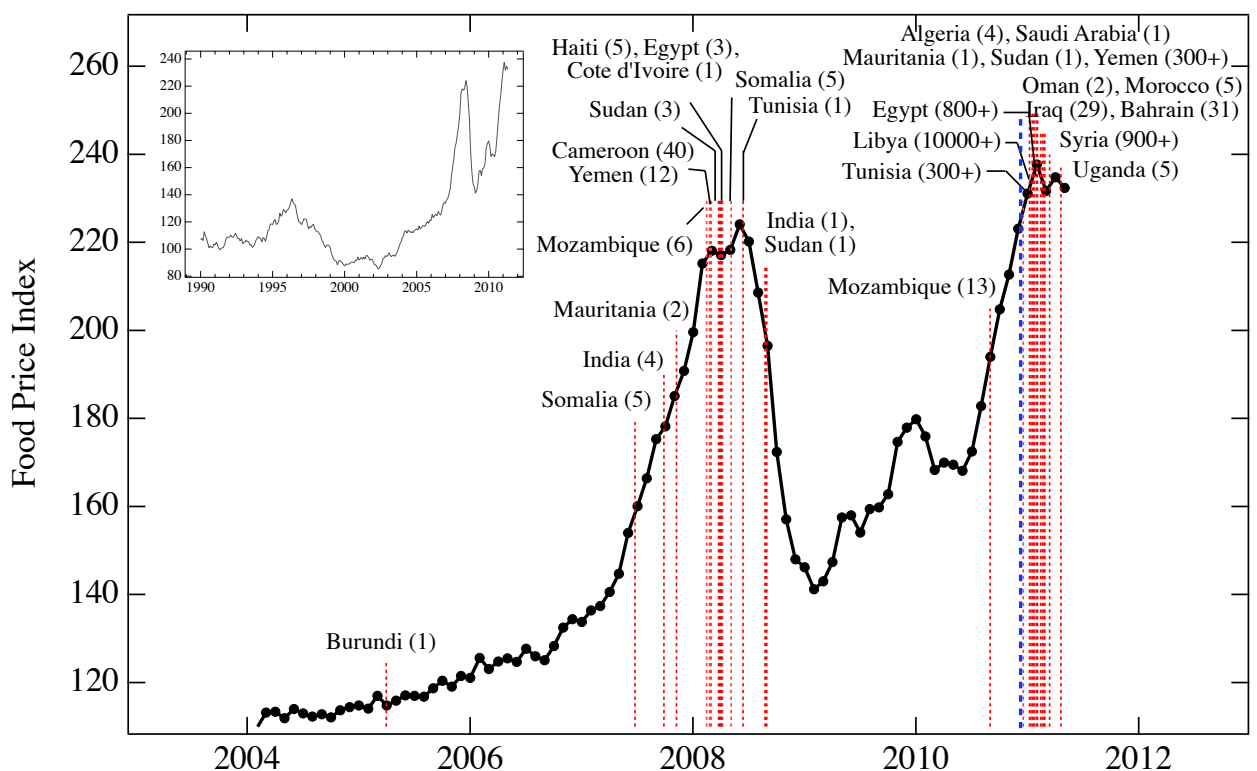
There are comparatively fewer food riots when the global food prices are lower. Three of these, at the lowest global food prices, are associated with specific local factors affecting the availability of food: refugee conditions in Burundi in 2005, social and agricultural disruption in Somalia and supply disruptions due to floods in India. The latter two occurred

in 2007 as global food prices began to increase but were not directly associated with the global food prices according to news reports. Two additional food riots in 2007 and 2010, in Mauritania and Mozambique, occurred when global food prices were high, but not at the level of most riots, and thus appear to be early events associated with increasing global food prices.

These observations are consistent with a hypothesis that high global food prices are a precipitating condition for social unrest. More specifically, food riots occur above a threshold of the FAO price index of 210. The observations also suggest that the events in North Africa and the Middle East were triggered by food prices. Considering the period of time from January 1990 to May 2011, the probability that the unrest in North Africa and the Middle East occurred by chance at a period of high food prices is less than 1 in 20. This conservative estimate considers unrest across all countries to be a single unique event over this period of just over twenty years. If individual country events are considered to be independent, because the precipitating conditions must be sufficient for mass violence in each, the probability of coincidence is much lower still.

We expect that ongoing global food prices above the price threshold should

Figure 1.



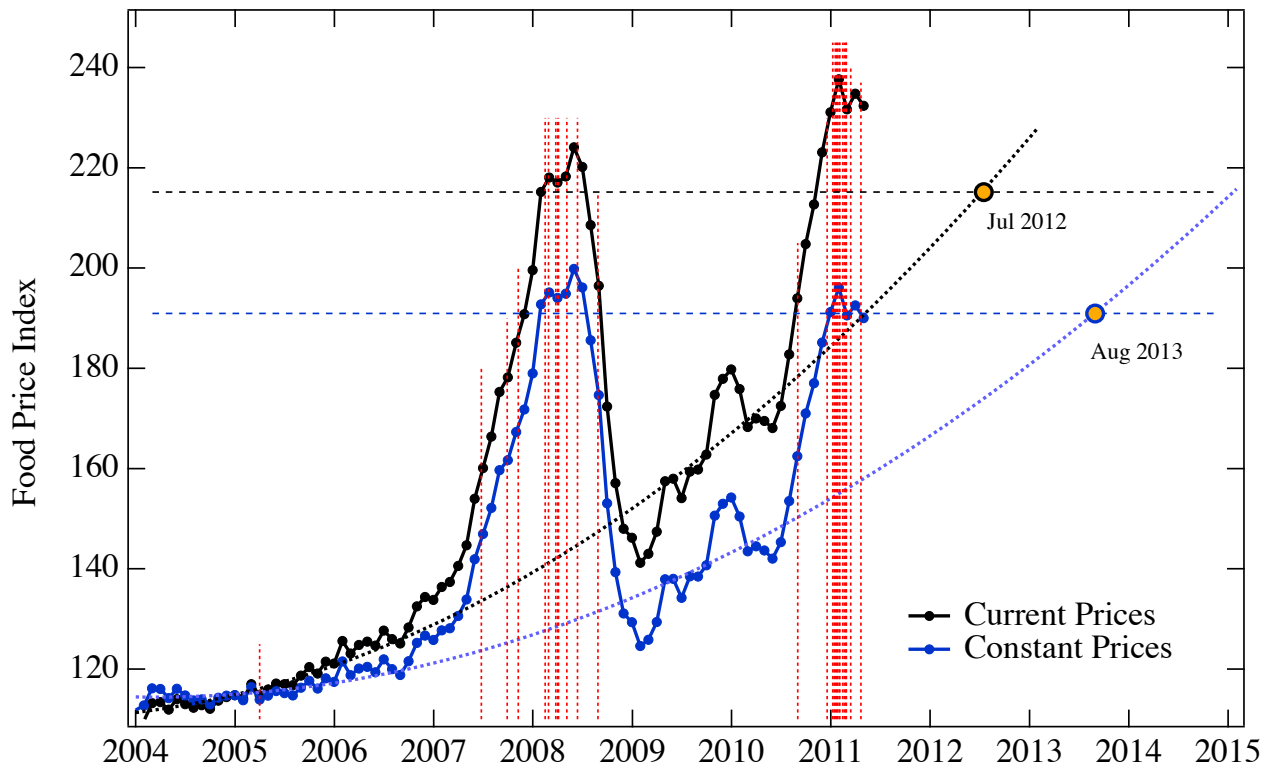


Figure 2.

lead to persistent and increasingly widespread unrest. The food price situation remains dire; only in June 2012 did the FAO price index finally drop below the critical threshold of 210. As predicted, we have seen continued unrest in many nations across the Middle East and in Africa, including deadly conflicts in Egypt, Saudi Arabia, Yemen, and Somalia. A civil war rages in Syria. Of further concern, in recent work our analysis predicts a third price spike by the end of 2012⁵, which we expect to create more global unrest.

Given the sharp peaks of food prices we might expect the prices of food to decline to reasonable values between the peaks. However, underlying the peaks in Fig. 1, we see a more gradual, but still rapid, increase of the food prices during the period starting in 2004. It is reasonable to hypothesize that when this underlying trend exceeds the threshold, the security of vulnerable populations, who can barely support themselves, will be broadly and persistently compromised. Such a threat to security should be a key concern to policymakers worldwide. Social unrest and political instability of countries can be expected to spread, as the impact of loss of security persists and becomes pervasive, even though the underlying causes are global food prices and are not necessarily due to specific governmental policies.

While some variation in the form of unrest may occur due to local differences in government, desperate populations are likely to resort to violence even in democratic regimes. A breakdown of social order as a result of loss of food security has been predicted by the English economist and demographer Thomas Malthus and others based upon historical events and the expectation that global population increases and resource constraints will lead to catastrophe. As shown in Figure 2, the underlying trend of increasing prices would have reached the threshold of instability in July 2012 without considering inflation, and will do so by August 2013 if we correct prices for inflation. The amount of time left until the often warned-of global food crisis strikes appears to be very short. Consistent with our analysis, large populations are reported to be in distress, as described in UN reports about the growing crisis⁶. Short term variations may yet cause prices to increase or decrease, but we expect extensive disruption in 2013 if policy actions do not address the underlying causes.

Investor speculation and ethanol production

While there have been several suggested origins of the food price increases, our analysis reveals the dominant ones to be investor speculation and ethanol produc-

tion⁷. The two parts of the dynamics of prices can be directly attributed to the two different causes: the price peaks are due to speculators causing price bubbles, and the background increase shown in Fig. 2 is due to corn to ethanol conversion. This intuitive result is made quantitative by the analysis in our paper.

Both factors in food prices can be linked directly to recent US governmental actions. Speculator activity has been enhanced by deregulation of the commodities markets that exempted dealers from trading limits, and subsidies and other policies have been central to the growth of ethanol conversion.

The importance of food prices for social stability points to the level of human suffering that may be caused by increased food prices. The analysis we presented of the timing of peaks in global food prices and social unrest implies that the 2011 unrest was precipitated by a food crisis that was threatening the security of vulnerable populations. Deterioration in food security led to conditions in which commonly occurring events may trigger widespread violence. The condition of these vulnerable populations could have been much worse except that some countries controlled food prices in 2011 due to the unrest in 2008.

Food price controls in the face of high global food prices carry associated costs.



Rocks and debris litter the streets Port-au-Prince, Haiti, following three days of protest against escalating food prices in 2008. With the present trend of rising food prices, there is a global danger of spreading social disruption.

Because of the strong cascade of events in the Middle East and North Africa only some countries had to fail to adequately control food prices for events to unfold. This understanding suggests that re-considering biofuel policy as well as commodity market regulations should be an urgent priority for policymakers. Reducing the amount of corn converted to ethanol, and restricting commodity future markets to bona fide risk hedging would reduce global food prices. The current problem transcends the specific national political crises to represent a global concern about vulnerable populations and social order.

Our analysis of the link between global food prices and social unrest supports a growing conclusion that it is possible to build mathematical models of global economic and social crises. Identifying a signature of unrest for future events is surely useful. Significantly, prior to the unrest, on December 13, 2010, we submitted a government report analyzing the repercussions of the global financial crises, and directly identifying the risk of social unrest and political instability due to food prices (see Fig. 1). This

report, submitted four days before the initial human trigger event, the action of Mohamed Bouazizi in Tunisia, demonstrates that it is possible to identify early warning signs before events occur.

Prediction is a major challenge for socio-economic analysis. Understanding when and whether prediction is possible is important for science and policy decisions. It is better to address conditions in which violence is likely and thus prevent it than to merely develop warning systems that enable determination of when an event will occur. Our predictions are conditional on the circumstances, and thus allow for policy interventions to change them. Whether policy makers will act depends on the various pressures that are applied to them, including both public and special interests. 🌿

The authors thank Blake Stacey, Amaç Herda delen, Andreas Gros, and Shlomiya Bar-Yam for helpful comments on the manuscript.⁸

For a full list of references, please see references in note 1.

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- 8 This work was supported in part by AFOSR under grant FA9550-09-1-0324, ONR under grant N000140910516.

Plant genetic diversity is essential for food production and is crucial for the ability of farmers to produce pest and drought resistant crops. In order to promote the conservation and development of such genetic diversity, the Farmers' Rights Project was established at the Fridtjof Nansen Institute, Norway, as a follow-up of the so-called Plant Treaty, adopted by FAO.

Farmers' Rights Project:

Furthering agrobiodiversity as a means of poverty alleviation

Regine Andersen and Tone Winge

Farmers' rights related to crop genetic resources are an essential precondition for maintaining crop genetic diversity, which is the basis of all food and agriculture production around the globe. Genetic diversity provides the pool in which plant traits can be found that meet the challenges of crop pests and diseases, of marginal soils, and – not least – of changing climate conditions. Genetic diversity is vital for spreading risks for smallholder farmers. The world's farmers are the custodians and developers of crop genetic resources. Their rights in this regard are crucial for enabling them to continue to perform this vital role for local and global food security, as a central means in the fight against poverty. Therefore Farmers' Rights became a cornerstone of the International Treaty on Plant Genetic Resources for Food and Agriculture (the Plant Treaty) that was adopted in the Food and Agriculture Organization (FAO) in 2001 and entered into force in 2004.¹

The Farmers' Rights Project at the Fridtjof Nansen Institute, Norway, was set up in 2005 to support the implementation of these rights under the Plant Treaty through research-based guidance. This long-term project conducts research and surveys, facilitates consultations at national and international levels, provides capacity building and advice, and disseminates information on its website www.farmersrights.org. This article presents some of the research results of the Farmers' Rights Project.

The idea of specific rights for farmers emerged in the early 1980s as a countermove to the growing demands for plant breeders' rights, as voiced in international negotiations under the 1983 International Undertaking on Plant Genetic Resources. The purpose was to draw attention to the unremunerated innovations of farmers, which were seen as the foundation of all modern plant breeding. In 1989, farmers' rights were for the first time formally recognised by the FAO Conference. In 1993, the FAO started the lengthy negotiations on what was to become the Plant Treaty. Farmers' rights were recognised as an important matter, but proved difficult to negotiate due to the strong and diverging interests of the various stakeholders. A breakthrough was achieved in 1999, when the negotiators agreed on the treaty provisions on farmers' rights.²

The Plant Treaty aims at the conservation and sustainable use of crop genetic resources, their accessibility, and the sharing of benefits arising from their use. In the Plant Treaty, the parties recognise the enormous contributions of farmers in conserving and developing plant genetic diversity, and in making this diversity available. The Treaty stipulates that responsibility for realising farmers' rights rests with the national governments, which are free to choose measures according to their own needs and priorities.

Although the provisions of the Plant Treaty represented a substantial step forward, these rights were not specifically defined, and there was only a

list of potential measures to provide the point of departure for implementation. These measures include the protection of traditional knowledge, equitable benefit-sharing, participation in decision making and the right to use, exchange and sell farm-saved seed. There was great uncertainty as to what these measures actually entailed. Thus, clarifying the contents has been a major task in the Farmers' Rights Project.

As developing a joint understanding across countries on these contents was essential to enable progress in the international follow-up of implementing farmers' rights, the project chose a participatory approach, seeking information from stakeholders of all categories and from all regions of the world, and presenting preliminary results for discussion at conferences of the parties of both the Plant Treaty and the Convention on Biological Diversity. Global consultations on farmers' rights conducted in Ethiopia in 2010 were part of the process. By applying this approach, the project has contributed to shaping the international understanding of farmers' rights that prevails today (see below), and paving the way for resolutions by the Governing Body of the Plant Treaty to promote national-level implementation, as further detailed below.

Ownership and stewardship approach

Based on document analysis and data collection from an international stakeholder survey³, a conceptual framework

was developed in the first year of the project. It distinguished between two basic approaches to farmers' rights among key stakeholders: the 'ownership approach' and the 'stewardship approach'. Promoters of the ownership approach seek to protect traditional knowledge related to plant genetics against misappropriation by breeders, to establish benefit-sharing between providers and users (breeders) of specific genetic resources and to provide intellectual property rights for farmers' varieties. Promoters of the stewardship approach seek to protect traditional knowledge against extinction through encouraging its sharing and further use. They understand benefit-sharing as the sharing of benefits between all farmers engaged in the conservation and sustainable use of plant diversity and the society at large (food consumers), and work to secure and expand the legal space for farmers to continue as stewards and innovators of agrobiodiversity.

Whereas these approaches can be conflicting, there are also possibilities to combine them, based on an interpretation of the context of the Plant Treaty and its history. As regards the protection of traditional knowledge, what matters is protection against extinction, and this requires protecting by sharing. However, it is possible to share traditional knowledge while also ensuring that it will not be misappropriated – for example, through certain ways of cataloguing and registering plant varieties and the associated knowledge.

It is also possible to ensure benefit-sharing in the wide sense, through the compensation systems provided for in the Plant Treaty and through development cooperation. There are many examples of projects and activities which constitute benefit-sharing in practice. As yet, development cooperation offers the most promising possibilities in this regard. However, the benefit-sharing mechanism under the Plant Treaty has provided for increased benefit-sharing in recent years. Nevertheless, great uncertainty remains as to how to achieve further development of this mechanism.

Providing legal space for farmers to continue their conservation and innovation of genetic resources is vital to food security, today and tomorrow. Ensuring such legal space constitutes one of the greatest challenges for the implementation of farmers' rights. This requires, in contrast to current global political

trends, that national legislation does not prohibit the saving and sharing of seeds among and between farmers. At the same time, it is possible to establish intellectual property rights to farmers' varieties along with legal space, as long as such rights are not exclusive. This means that the resources can still be shared among and between farmers.

In recent years, the stewardship approach has been gaining ground, whereas the ownership approach has lost support among stakeholders of all categories. A survey conducted as part of the 2010 Global Consultations on Farmers' Rights showed that a majority of the respondents believed that in their own countries it was more important to save what remained of traditional knowledge from becoming lost than protecting it against misappropriation.⁴ This development seems conducive to the further realisation and strengthening of farmers' rights under the Plant Treaty, as the stewardship approach is more in line with the objectives of the Treaty.

Successful experiences

The project has identified several success stories from projects, activities and policies which constitute examples of best practices in the realisation of farmers' rights. To facilitate identification, a conceptual framework was developed to define best practices within each of the categories of farmers' rights. The identified success stories were then studied in depth, to extract lessons for others as well as to analyse the role of civil society organisations. The case studies from selected countries in Asia, Africa and Latin America show that achievements are being made in implementing all of the measures for the realisation of farmers' rights covered in the Plant Treaty.

Examples from the realisation of the rights of farmers to save, use, exchange and sell farm-saved seed include legislation from India and Nepal, showing how it is possible to create and improve the legal space for farmers' customary rights related to seeds within existing or evolving legislative frameworks. Examples from the protection of traditional knowledge include a community registry combined with a community gene bank and participatory plant breeding in the Philippines, a potato catalogue project in Peru, farmer-scientist collaboration in Ethiopia, and the Seeds of Survival Project in Mali. These stories

show how traditional knowledge can be protected by sharing, thereby also contributing to the maintenance of crop genetic diversity. Some of them also show how this can be done while at the same time protecting this knowledge against misappropriation.

Examples of benefit-sharing measures include community seed fairs in Zimbabwe, participatory plant breeding in Syria and an integrated approach to adding value to crops in Nepal. These highlight various avenues to benefit-sharing – like the shaping of conducive incentive structures, facilitating market access, creating reward systems, and recognition of farmers' contributions to the global genetic pool. Most importantly, these stories show how such measures benefit those farmers who are engaged in maintaining and further developing crop genetic diversity. In some cases, their livelihoods have been greatly improved.

All of these examples include various forms of farmer participation in decision-making. Particularly noteworthy are the cases from Nepal and India, which show the importance of capacity building as a basis for farmers' participation in decision-making at the national level and highlight strategies that can be applied to achieve influence on decision-making.

A first presentation of some of the success stories was made in a report from 2008⁵ and on the project website. Since then, the examples have been used in many presentations to show that realising farmers' rights is not only possible but is actually happening. This has created considerable optimism and has probably helped reduce the gap between stakeholders who are still hesitant to farmers' rights under the Treaty and other groups. A more thorough presentation of the success stories, with several additional stories, is to be published in book form as *Realising Farmers' Rights to Crop Genetic Resources: Success Stories and Best Practices*, forthcoming at Earthscan. The book will be launched at the next session of the Governing Body of the Plant Treaty in 2013, and will, it is hoped, serve to create even wider optimism.

An important finding is the link between farmers' rights and development, which is a central driving force in each example. Protecting and promoting the rights of farmers as regards crop genetic resources is vital for ensuring the liveli-

hoods of small-scale farmers throughout the developing world. This finding and its implications were noted by the UN Special Rapporteur on the Right to Food, Olivier de Schutter, in his report to the UN General Assembly in 2009: *Seed Policies and the Right to Food: Enhancing Agrobiodiversity and Encouraging Innovation*.⁶ This also greatly helped to disseminate findings from the project.

Economic benefits

In most cases, NGOs and farmers' organisations have played a central role. However, the strategies applied, and the ways in which farmers are involved, have varied – with differing degrees of success. In some cases we have seen that the information provided to farmers on the situation of farmers' rights was exaggerated in order to motivate their involvement in activities and measures. In the long run, such a strategy has proved less successful. In other cases we have found that the anticipated economic benefits for farmers, based on research, were highlighted as a motivating force. In several cases, this has proven a successful strategy. We have also seen examples of how NGOs and state entities

seek to link up in order to upscale best practices from the local to the regional level, aiming towards the national level.

We have found many examples at the national and local levels which can be regarded as models for the further up-scaling and realisation of farmers' rights. Much has been achieved internationally with regard to developing a joint understanding of farmers' rights, their importance, and the steps required for their realisation. Nevertheless, there remain major incentive structures and regulations that are often detrimental to the conservation, sustainable use and further development of crop genetic diversity on-farm, and represent serious hurdles to the full realisation of farmers' rights.

Unless farmers' rights can be realised, humankind will not be in a position to maintain and further develop our plant genetic heritage and ensure that future generations will enjoy the benefits of this treasure so vital to food security and survival. The realisation of farmers' rights is underway: its future depends on awareness of the challenges, on political priority, and on informed international cooperation. 🌿

- 1 More information about the Plant Treaty can be found at its website: <http://www.plant-treaty.org/>
- 2 See Andersen, Regine (2008): *Governing Agrobiodiversity: Plant Genetics and Developing Countries* (Aldershot, Ashgate) and Regine Andersen (2005): *The Farmers' Rights Project – Background Study 1: The History of Farmers' Rights: A Guide to Central Documents and Literature*, FNI-Report 8/2005 (Lysaker, Norway: The Fridtjof Nansen Institute) (available here: <http://www.fni.no/doc&pdf/FNI-RO805.pdf>)
- 3 See Andersen, Regine (2005): *Results from an International Stakeholder Survey on Farmers' Rights*, FNI Report 9/2005 (Lysaker, Norway: The Fridtjof Nansen Institute) (available here: <http://www.fni.no/doc&pdf/FNI-RO905.pdf>)
- 4 See Andersen, Regine and Tone Winge (2011): *The 2010 Global Consultations on Farmers' Rights: Results from an e-mail-based Survey*, FNI Report 2/2011 (Lysaker, Norway: The Fridtjof Nansen Institute)
- 5 See Andersen, Regine and Tone Winge (2008): *The Farmers' Rights Project – Background Study 7: Success Stories from the Realization of Farmers' Rights Related to Plant Genetic Resources for Food and Agriculture*, FNI Report 4/2008 (Lysaker, Norway: The Fridtjof Nansen Institute)
- 6 See United Nations (2009): *The right to food. Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation* (New York: The United Nations) (available here: <http://www.farmersrights.org/pdf/RighttoFood-No942473.pdf>)

PHOTO: TONE WINGE



Rice diversity at a market in Nepal. The value of agricultural biodiversity for Nepalese farmers and the importance of conserving it have been established by research and development initiatives undertaken in the last ten years.

A food and nutrition crisis, by some experts claimed to be the result of climate change, is currently affecting millions of people across the Sahel. At the same time fighting and unrest tear the region. Is the food crisis related to the outbreaks of violence and if so, how? The situation is especially bad in Mali, where tens of thousands of people flee from violent conflict to neighbouring Mauritania. An emerging trend is the development of social security schemes, including cash grants for purchase of food and other commodities.

Violent conflict worsens food crisis in the Sahel

Thomas Ekelund

According to the UN Food and Agricultural Organization (FAO), nearly 19 million people in the Sahel region are facing food insecurity and more than 1 million children under the age of five are at risk of severe acute malnutrition¹. The region covers parts of Senegal, southern Mauritania, Mali, Algeria, Niger, Chad, Eritrea and the southern part of Sudan. It is bordered in the north by the Sahara and in the south by savannah. A nutritional survey conducted by the Mauritanian Ministry of Health highlights that among children of 6 to 59 months, the rate of acute malnutrition in the country reaches, already since July 2011, an average of 11.1 per cent and severe acute malnutrition 1 per cent. More than 25 per cent of the continent's 856 million people are undernourished.

Several factors have contributed to the situation. Low rainfall during the planting period in 2011 has led to a significant drop in food production in many parts of the area. The Sahel receives on average about 700-900 millimetres of rain per year, but last year ended with less than 400 millimetres. According to FAO, cereal production in the Sahel region in 2011 was on average 25 per cent lower than in 2010 and as much as 50 per cent lower in Mauritania. A shortage of fodder for livestock, a reduction in remittances from migrant workers in several countries, environmental degradation, displacement due to fighting, and worsening chronic poverty are other factors that strongly contribute to the deteriorating situation.

Although the situation is often explained as the result of a changing climate due to environmental degradation, it is worth noting that the tropic Sahel area and sub-Saharan Africa in general have large natural variations in rainfall. Changes from 40 per cent increase to 40 per cent decrease in rain is common and has been the pattern throughout the 20th century, even before there were suspicions that global warming could affect the climate.

In Mauritania, more than 65 per cent of the workforce lives off agriculture, which constitutes almost 20 per cent of the GDP. The livestock production involves about 60 per cent of the population and constitutes 12 per cent of the GDP. These figures indicate that a decrease in rainfall has dramatic consequences for the agro-pastoral situation². The urban areas depend largely on food imports, and increasing prices on the international market is strongly reflected on the domestic food markets.

Armed conflicts

In late December 2010 a rebellion in Tunis marked the start of several uprisings in the Arab world. The Libyan civil war began with the arrest of a human rights activist in Benghazi in February 2011 and ended with the capture and killing of Gadhafi in October 2011. The Gadhafi forces included a few thousand Tuareg fighters from the Sahel, mostly from Mali and Niger. Mali has since May 2006 been engaged in an internal armed conflict in the north of the country between the government and

a number of ethnic Tuareg non-state armed groups. The Tuareg live across the Sahel, from Mali to Niger to southern Algeria. Many of those involved in the rebellion are thought to have fought for Gadhafi, a long-term supporter of their claims for greater independence, in the Libyan conflict. When Gadhafi was killed in October 2011, significant numbers returned home.

The Tuareg have been fighting for independence since the end of the 19th century. Mali has experienced major Tuareg rebellions in 1962-64, 1990-95 and 2007-2009 and the current one is ongoing since January 2012. The first Tuareg uprising in 1963 was brutally crushed by the Malian army. The 1990 uprising ended in an Algerian brokered peace treaty and the National Pact of 1992. On 23 May, 2006, a new rebel group attacked Malian army installations. Algeria once again stepped in to broker a new peace deal and a new treaty, known as the Algiers Accords, which basically restated many of the demands made in the National Pact. Greater autonomy for the Kidal region, greater recognition of the Tamasheq language and culture in the national media and in education, economic development in the region, a functional airport for Kidal and a special tax regime for the north to encourage investment were all part of the deal.

In the six following years north-eastern Mali lived under an uneasy peace and Tuareg war lords kept attacking the army and taking hostages, keeping the spark of revolution alive. The imple-

mentation of the Algiers Accords was constantly hindered and on 17 January this year, it all started again.

Tuareg fighters returning from Libya to sub-Saharan Africa triggered a coup in Bamako, the capital of neighbouring Mali. The coup came in the aftermath of a series of losses suffered by Malian armed forces at the hands of the Tuareg, newly armed following an influx of weaponry from Libya. Mali had struggled to end the escalating militancy by the Tuareg nomads, who took up arms demanding greater rights for their people. The renewed fighting in northern Mali between government forces and Tuareg rebels resulted in more than 200,000 people being uprooted, with the majority seeking safety in Niger, Burkina Faso, Mauritania and other neighbouring countries while, according to UNHCR, about 150,000 are internally displaced.

The human rights situation remains alarming with reports of sexual violence and other war crimes committed on both sides during fighting in the north. The Tuareg rebel group, the National Movement for the Liberation of Azawad, started its attacks in five different locations in the north of Mali in early 2012. The Malian authorities have accused al-Qaida in the Islamic Maghreb of being involved in the fighting.

In July this year Libya went to the polls in the country's first election in nearly five decades. An estimated 1.7 million Libyans cast votes for the General National Congress, which will name Libya's new prime minister and cabinet, as well as draft a constitution.

Conflicts: a reason for hunger?

According to the Africa Human Development Report 2012, food insecurity is both a cause and an effect of violence and conflict.³ The report mentions different reasons for food insecurity in conflicts: warring parties cut local communities off from supplies from other areas or disrupt food production – often blocking cultivation directly. Production is often imperilled by land mines or the wanton destruction of plots and crops. Transport and market transactions are disrupted, resulting in the collapse of food markets. Household assets are often stolen or destroyed during conflict, or sold at prices below their ordinary value to prevent hunger and starvation in the aftermath of violence.

Interstate war and civil conflicts are the most obvious manifestations of violence. But there are other types of conflicts that may be just as grave threats to human security. During the Tuareg rebellion in northern Mali, drought,

aggravated by the government's embezzlement of relief supplies and food aid, was a significant source of grievance that motivated young men and women to take up arms.

According to a World Food Programme (WFP) occasional report,⁴ so called communal competition over scarce resources like water and land can turn into conflict. Communal conflicts, involving armed groups but not the government, are common in the Sahel when recurrent, long-lasting droughts have undermined cooperative relationships between migratory herders and sedentary farmers, leading to food insecurity and increased competition for water and land between farmers and herders.

When people are forced to leave the fighting in the affected areas in Mali they either flee within the country or cross the borders into neighbouring countries. The fighting in Mali has left more than 150,000 people internally displaced, and a similar number have fled to Mauritania and neighbouring countries. Looking closer at the situation in Mauritania, displacement is probably one of the larger factors causing food insecurity. Families with limited incomes, often with small businesses or shops in urban areas in Mali, are uprooted due to fighting and thereby left without incomes and hence without food. Farmers or pastoralists leaving their lands are consequently leaving the little food security they had behind. Even if many refugees try to bring their sparse cattle herds when fleeing, it will probably not ensure the family's food security. When they leave business behind, it is almost always permanently, with only small chances of coming back or actually recuperating what once was owned.



PHOTO: THOMAS EKELUND

Massouda Mint runs a small business selling vegetables in the Teyarett department in Nouakchott, Mauritania. She was the first woman to sign up for the cash transfer project run by the Lutheran World Federation in a joint anti-malnutrition venture with the World Food Programme.

Camp Mbere in Mauritania, located 50 km from the Malian border and spread out over a surface area of some 570 km², has received an average of between 500 and 1,000 refugees per day since the beginning of February, some days even more. According to the Lutheran World Federation, which manages the camp, in mid-June the camp population was over 65,000, of which more than half were children. The camp population comprises over 12,000 families, with each unit allocated a parcel of 50 km², putting enormous pressure on already stretched resources.

Mbere one and Mbere two, villages surrounding the camp area, were facing the drought long before the fighting in Mali began. Villagers describe the situation as desperate even before the arrival of more than 60,000 refugees. A refugee camp like Mbere is a safe haven for thousands of families forced to flee their homes but also stretches resources on the ground. Running a camp is all about trying to find local or close markets, but in a situation like the one in Sahel the market is severely undercut by the forces of nature. Food is hard to get.

Food instability a cause for conflict

Again, according to the Africa Human Development Report, instability in agricultural production can have destabilising effects. In difficult economic times, competition for scarce agricultural resources also increases cultural and ethnic tensions that spur sporadic violence and conflict. The report states that:

“When food prices soar, social tensions can flare into violence. Food riots in urban areas show how powerless citizens can react to a perceived injustice. Recent hikes in food prices sparked demonstrations and riots in Burkina Faso, Cameroon, Côte d’Ivoire, Guinea, Mozambique, Senegal and Uganda, with thousands taking to the streets.”⁵

Governments that fail to make food available to their people at affordable prices are in danger of causing political instability. In fragile environments such as in the Sahel and the Horn of Africa durable peace depends on mediating the underlying competition for water and land.

Like always, the link between resources and conflict is context-specific and varies according to a country’s level of development and the strength of its political institutions and social safety nets.

According to a paper presented by World Food Programme last year “food insecurity is neither a necessary nor a sufficient condition for violent conflict. The report states that food insecurity, especially when caused by a rise in food prices, is a threat and impact multiplier for violent conflict. Food price stabilisation measures and safety nets are critical instruments to prevent violent conflict. Food assistance can contribute to peace-building, restore trust in governments and rebuild social capital.”⁶

Cash to feed the family

As mentioned above, safety nets and social security systems are instruments to prevent violent conflicts and an efficient tool to partly provide food security. Over 860 million poor people in developing countries have been included in various forms of social security schemes, such as child support and retirement pensions, during the recent decades. Food subsidies and other forms of “safety net” are replaced with a reliable and predict-

Families are uprooted due to fighting and thereby left without incomes and hence without food.

able way to give people money directly in their hands and allow them to cover their own immediate needs.⁷

The World Bank’s recently presented Strategy for Social Protection and Labour states that the central part of the World Bank’s mission is to support the development of social protection in developing countries. Based on a series of examples the report shows how social security can reduce poverty and inequality, increase security and contribute to increased development and growth. This must be considered as a welcome shift in policies and proof of the importance of safety nets.

The World Bank emphasises the need to go from today’s often-fragmented programmes of assistance to a wide harmonised system. And there are examples of success: instead of again and again providing relief, Ethiopia has developed a flawed, yet extremely important social security system. A combination of cash

grants and public works programmes that reach 8 million people prevented Ethiopia from being as hard hit as other countries during last year’s hunger crisis in the Horn of Africa.

Food is available on the market, but due to high prices and low incomes often not available for those with great needs. The poorest and most vulnerable families are therefore given cash to buy food suitable for the family. The case of Ethiopia is an example of an emerging trend. Social security schemes are developed in an increasing number of poor countries, and humanitarian assistance is increasing in the form of cash grants. There are great benefits from cash assistance: it gives choice and dignity to the recipients, it is cheaper to communicate, and it stimulates local food production and local businesses.

In cases where the government does not distribute cash grants directly, cash-transfer projects are often implemented by civil society. In Mauritania for example, where an estimated 700,000 people are experiencing food shortages, several NGOs provide vulnerable families with cash to purchase food for a six-month period beginning in June. The project is a joint venture between the WFP and five NGOs, targeting a total of 11,500 households with an estimated 55,000 individuals.

Under the project, the families selected in nine urban and rural districts will each receive 15,000 Mauritanian Ouguiya (around USD 50) per month for six months. To ensure that the cash stays within the family, it is given to the women who buy food and other necessities. With this kind of assistance, people will have the freedom to buy what they actually need and not just get what others think they need. 🌿

1 FAO Executive Brief, The Sahel crisis, 2012

2 ACT Alliance Appeal, Mauritania, 2012

3 African Human Development Report, 2012

4 World Food Programme Occasional Paper 24 – Food Insecurity and Violent Conflict: Causes, Consequences, and Addressing the Challenges. 2011

5 African Human Development Report, 2012

6 World Food Programme Occasional Paper 24 – Food Insecurity and Violent Conflict: Causes, Consequences, and Addressing the Challenges, 2011, p. 13

7 Church of Sweden Report 3 2011, On social security systems as a method to fight poverty and hunger.

Food security and violent conflict are interconnected. Availability, access and utilisation of food often deteriorate with the destabilising effects of violent conflict. But the conditions that determine food insecurity, competition over scarce resources, and high levels of poverty are also key drivers of violent conflict. In post-conflict situations the development of a sustainable agricultural system is an effective way to reduce poverty and secure peace.

Breaking the cycle of conflict and hunger in Africa

Pedro Conceição and Sebastian Levine*

A greater focus on food security – the ability of people to afford and access sufficient, safe and nutritious food to meet their dietary needs and food preferences so they can lead an active and healthy life – has been triggered in recent years by increasing and highly volatile global food prices and food-related riots in many developing countries.¹ Increasingly food security is viewed as an integral part of national security, especially after rising food prices were identified as one trigger for Tunisia's unrest and for riots across much of northern Africa in 2011.² For Sub-Saharan Africa the food security challenge is particularly daunting. More than one quarter of the population in the region lives in hunger³ and more than 40 per cent of pre-school children are malnourished, a share that is expected to rise in the coming years.⁴ Africa is also home to more than half of all fragile states in the world.⁵

The ongoing food security crisis in the Sahel-region of West Africa and the 2011 crisis in the Horn of Africa are recent examples of how millions of Africans are unable to meet their basic right to food. These examples are also vivid reminders of the complex interlinkages between hunger, conflict and social instability. While the incidence of violent conflict has decreased in recent years, there are real risks that the vicious cycle of conflict and hunger will be reinforced in the near future, as growing populations, environmental stresses and the local effects of the changing global



PHOTO: MOHAMED AMIN JIBRIL/IRIN

At Bakara market, Mogadishu, the largest open market in Somalia, daily essentials are sold, including vegetables and staple food. During the civil war it largely expanded and has become notoriously known as a market of weapons.

climate are adding pressure to already fragile food systems in Africa.

But how does conflict affect food insecurity? How do food insecurity, instability and violent conflict interact? What can be done to strengthen the positive linkages between peace and food security in Africa? These are some of the key questions examined in this article.

Conflict deepening food insecurity

Violent conflict and social unrest destabilises food systems and all the core

elements of food security: availability, access and utilisation.

Availability of food is affected when warfare destroys crops that are ready for harvesting, food that is stored or livestock from which families draw nourishment and financial security. Other effects are potentially even more devastating and longer-lasting, when agricultural equipment is damaged, farmers displaced and fields rendered unusable for growing crops and rearing cattle. FAO has estimated that Sub-Saharan Africa lost nearly USD 52 billion in ag-

* The opinions expressed in this article are those of the authors and do not represent UNDP or its member states.

ricultural output as a direct result of conflict between 1970 and 1997, a figure that corresponds to 75 per cent of all official development assistance received by the conflict-affected countries.⁶

Even when farmers are not displaced or when their village is spared direct fighting, production can be imperilled by land mines or the wanton destruction of plots and crops. Household assets that are not stolen or destroyed during conflict are often sold at distress prices to prevent hunger and starvation in the aftermath of violence.

Access to food is restricted when rural roads and local market facilities are made unusable, either because of general insecurity or direct damage. When violent conflict disrupts transport and market transactions, food markets collapse and households are unable to buy or sell food. When warring factions cut local communities off from supplies from other areas, local food insecurity is intensified. The effects are felt by urban residents who do not grow their own food, but also among smallholder farmers, whose productivity is often too low to meet all their food needs and who are therefore net buyers of food.

Violent conflict also severely affects the *use of food*. This is critical as food security depends not just on food being available and accessible, but on the proper utilisation of food: eating a diverse diet, avoiding nutrient losses during food preparation, having clean water and adequate sanitation and energy to ensure basic hygiene for food preparation, storage and consumption, and ensuring basic capabilities in health and education. A shortfall in any area can lead to malnutrition and even short spells of malnutrition can have long-term ramifications for children and their families.

A two-way street

While conflict has direct and indirect effects on all the dimensions of food security, there is some evidence that the chain of causality also goes in the other direction. This relationship is stronger in those states where primary commodities make up a large proportion of their export profile. Some of the countries that have been most severely affected by conflict in the recent past are commodity-rich countries that are also afflicted by widespread hunger, such as DRC, Sudan and Sierra Leone. The mixture of hunger – which can fuel grievances – and

the availability of valuable commodities – which can finance rebel activities – is an explosive combination.⁷ Abnormal variability in rainfall and the hardships (grievances) that follow are telling predictors of violent conflict even beyond natural resource rich countries.⁸ According to FAO conflict over land and resources, and fragile institutions, are among the root causes of crises and conflict.⁹

In hard economic times, competition for scarce agricultural resources such as water and land also increases, fueling social, cultural and ethnic tensions that spur sporadic violence and conflict. When food prices soar, social tensions can flare into violence. Food riots in urban areas show how powerless citizens can react to perceived injustices. Recent hikes in food prices sparked demonstrations and riots in Burkina Faso, Cameroon, Côte d'Ivoire, Guinea, Mozambique, Senegal and Uganda, with thousands taking to the streets. But clearly these relationships are not mechanistic. Many countries that experienced steep increases in food prices did not see public protests, and many sought to ease hardships by expanding measures of social protection, such as subsidising basic food stuffs, providing cash transfers or expanding public works programmes for food or cash.

There is some optimism that violent conflict has receded over the last decade with the reduction in outbreaks and recurrences of violent conflict in sub-Saharan Africa. The average number of violent conflicts in Africa increased from 4 a year in the 1960s to 14 a year in the 1990s, but decreased to 10 a year in the 2000s.¹⁰ However, emerging challenges posed by population growth, environmental degradation and climate change are likely to destabilise food systems directly as well as indirectly by increasing the propensity for violent conflict. According to one set of estimates, in order to meet the demands of a global population expected to grow to 9 billion in 2050, food production in Africa must double.¹¹

Food security promoting peace

Food aid continues to play a critical role in mitigating the most severe consequences of conflict and in stabilising volatile conditions. Countries in Sub-Saharan Africa remain highly reliant on emergency food aid from abroad. Food aid will remain critical in conflict and

post-conflict settings, especially if challenges related to delivery and targeting and potentially adverse effects on local markets can be managed. However, in the longer-term continued reliance on food aid should not be an option. Building resilience to withstand shocks must be the goal, especially in post-conflict societies where the risk of relapse into conflict is greater.¹²

In Africa's largely agriculture-based economies, raising the productivity of small-holder farmers and building more resilient food systems must remain a priority. Securing the peace is a first critical step. In Liberia, just five years after hostilities ended in 2003, cereal production had returned to pre-war levels. The recovery in agriculture in Rwanda has been even more remarkable. Crop production has increased almost six times since the genocide in 1994, as the government has made agricultural development a centre-piece of its post-conflict recovery and economic growth strategy.

This is part of a general picture. Agricultural growth underpinned by productivity gains can reduce poverty far more effectively than can growth in the rest of the economy.¹³ Here rural poverty is widespread and much of the labour force lives in rural areas, increasing farm productivity has the potential to drive greater economic growth¹⁴ and poverty reduction,¹⁵ accelerating food security and some of the conditions for social stability. In addition to boosting agricultural productivity there are also vast possibilities for increasing land under cultivation. Peace and stability would facilitate that process. About 60 per cent of unused land available for cultivation is in "fragile" states (see note 7 for definition), and almost 40 per cent is in Sudan and the DRC alone.

Agriculture also plays a key role in post-conflict recovery, especially by absorbing demobilised combatants and enabling displaced farmers to return to their land, improving their food security and restoring their livelihoods. Programmes targeting returnees, providing them with inputs and assets that have been lost during the conflict, such as seeds, tools and livestock, are often faced with substantial challenges, such as leakage of funds and procurement of sub-standard material. While such challenges are hard to eliminate completely, mainly due to the limited capacity of both

the government and community-based institutions that run these programmes, it is possible to make such interventions more efficient by empowering farmers.

There are distinct gender elements to breaking the conflict-hunger cycle. Women make up almost half of the agricultural labour force, a share that can be higher in post-conflict settings where large numbers of men have been maimed or killed during war, and it is therefore crucial that post-conflict reconstruction, agricultural production and agribusiness programmes target both men and women with extension services, credit and other types of support.

Investing in agricultural productivity

All this requires determined efforts by national governments and the international community to break with past practices. African governments need to reprioritise spending by meeting their commitments under the Comprehensive Africa Agriculture Development Programme to spend at least 10 per cent of their annual budgets on agriculture. By investing in innovation and new technologies it is possible to boost agricultural productivity across Africa without replicating unsustainable practices that many countries in other regions are now struggling with. African governments also need to do more to strengthen regional cooperation (e.g. ex-

pand intra-regional trade, develop grain reserves and enhance policy coordination), build social protection systems (e.g. “smart” subsidies, employment-guarantee schemes and cash transfers) and, more generally, to strengthen the institutions that secure peace and deepen democratic governance.

International development partners could also do more to support African small-holder farmers and to re-enforce the positive effects on poverty reduction and social stability that an agriculture-led development strategy generates. Key priorities should be to reduce the trade restrictions that prevent the integration of African agriculture into the world economy, remove wasteful subsidies to farmers in high-income countries and to biofuel producers, and reverse the decline in financial and technical assistance to agriculture in sub-Saharan Africa. Mustering the political will to overcome these internal and external barriers will not be easy, but it will be essential to breaking the cycle of conflict and hunger in Africa. 🌱

1 The definition of food security is from FAO (1996) Rome Declaration on World Food Security, World Food Summit, 13-17 November 1996, FAO, Rome.
 2 Fraser, Evan, and Andrew Rimas. “The Psychology of Food Riots: When Do Price Spikes Lead to Unrest?” *Foreign Affairs*, January 30, 2011

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 14 While there is a rich literature on this topic, recent empirical evidence comes from Luc Christiaensen, Lionel Demery, and Jesper Kuhl. 2011. “The (evolving) role of agriculture in poverty reduction – An empirical perspective.” *Journal of Development Economics* 96 (2011) 239-254. They show that as average income rises, the importance of agriculture in driving growth falls, with nonfarm rural income, manufacturing, and services playing a greater role, as industrial and urban economic activities progressively pull the rest of the economy. But for low levels of income, particularly in Africa, the agricultural sector plays the leading role in driving overall economic growth.
 15 For recent evidence see Alain de Janvry and Elisabeth Sadoulet. 2010. *Agricultural Growth and Poverty Reduction: Additional Evidence*. The World Bank Research Observer, vol. 25, no. 1 (February 2010): 1-20. See also World Bank (2007). “World Development Report 2008: Agriculture for Development.” Washington, DC.



An aerial view of an area outside Maseru, Lesotho, shows the great number of unplanted fields. The potential for cultivation is great in large parts of Africa where increased productivity would help reduce rural poverty.

PHOTO: EVA-LOTTA JANSSON/IRIN

LPI News

New initiatives in DRC, Somalia, Ethiopia

LPI is about to sign new cooperation agreements related to its work in DR Congo. A joint application with the Swedish-based organisation Kvinna till Kvinna to the Swedish Postcode Lottery, a project for three years in South Kivu, eastern DRC, has been approved. In another, Dutch-funded consortium, LPI will continue to work in Southern South Kivu as part of the International Security and Stabilization Support Strategy. The project is coordinated by UNDP.

Work in Somalia is similarly expanding with new donors and partners. A two-year application to the EC has been approved for a community resource management project in Hiran and Middle Shabelle, carried out by LPI and its Somali partner the Zam-Zam Foundation. The project, related to water provision and local conflict transformation, will also be supported by the German agency Bread for the World.

A proposal to the Swedish Mission Council for LPI's work in Ethiopia has been approved. LPI has two staff persons in Addis Ababa and works in collaboration with the Addis Ababa University. A research publication with case studies on traditional mechanisms for conflict resolution in different regions of Ethiopia is in the pipeline for late 2012.

“Pax Grand Lac” – joint meeting LPI and partners

The three Congolese partners, Action pour la Paix et la Concorde, Réseau d'Innovation Organisationelle and Action Solidaire pour la Paix, have met for a joint work planning conference with LPI. “Pax Grand Lac” was a four-day meeting that included an evaluation of the partnerships as well as discussion of on-going conflict transformation projects and work on the context analysis for Eastern DRC.

– The overall evaluation was very positive, reports LPI Resident Representative Pieter Vanholder. Many important decisions were taken and



PHOTO: LPI

Staff from LPI and the three partner organisations meeting in Bukavu

engagements made. It is important to take these moments to refresh the dynamics among partners and between LPI and partners.

Peacebuilding in Somalia: Interest in new approaches

Following the publication of a series of analytical papers written by Professor John Paul Lederach and PhD students

at the Kroc Institute, Notre Dame University, USA, a range of policy meetings have been jointly arranged in the US, Europe and Africa.

The book “Somalia: Creating space for fresh approaches to peacebuilding”, which was published in January, is out of stock and has been re-printed. The publication has been presented in Washington and New York, in a range of meetings with agencies, USAID, scholars, the US Congress and Senate and members of the UN Security



PHOTO: 3P HUMAN SECURITY

David Cortright, Director of Policy Studies at the Kroc Institute for International Peace Studies at Notre Dame University addresses the Conflict Prevention and Reconciliation Forum in Washington on the Future of Building Peace in Somalia. Also in the panel, from the left: Michele Cesari and Shamsia W. Ramadhan, Life @ Peace Institute Nairobi, and Laura Weis, Kroc Institute.

Council, as well as in Addis Ababa at a convention of counter-terrorism practitioners and in meetings with EC officials in Brussels. In Nairobi, a meeting has been held with Muslim leaders at Jamia Mosque.

The policy initiative has in a short time attracted the attention of agencies specialising in counter-terrorism as well as Islamist leaders, both in Kenya and Somalia.

– Both sides seem to have a positive attitude towards our work and intentions, says Michele Cesari, LPI Resident Representative in Nairobi. We have now more requests to continue presentations and conversations in Kenya. We'll follow up soon with a meeting with Kenyan-Somali MPs and Somali presidential candidates.

LPI panel and workshop on identity and conflict transformation

LPI convened a group of experts working on conflicts worldwide to present their work in a panel on Transforming Identities: Methods and Processes for Conflict Transformation at the annual world congress of the International Political Science Association on 8 July in Madrid. A workshop the following day allowed the participants to further share insights and best practices on methods, processes, techniques, and analytical tools that facilitate the transformation of identities and relationships, and to explore how these transformations influence the distribution of power and perceptions of justice.

Dr. Dee Aker (Kroc Institute for Peace and Justice at the University of San Diego) co-chaired the panel with LPI Programme and Research Advisor, Dr. Nikki Slocum-Bradley. Other participants included Dr. Barry Hart (Center for Justice and Peacebuilding, Eastern Mennonite University), Dr. Jay Rothman (ARIA Group and Bar Ilan University), and Dr. Lee Smithey (Swarthmore College), while LPI's Programme Director, Mark Rogers, acted as discussant.

In addition to fostering collaboration with key partners, this initiative contributed to LPI's strategic priority to strengthen links between conflict transformation theory and practice. The papers presented will hopefully be published in a new journal from the

Bar Ilan University later in the year and in the interim can be found on the LPI server.

Kenya project: Pasture and water major conflict issues

The Inter-religious Council of Kenya and LPI are engaged in a conflict transformation project in Marsabit, northern Kenya. The initial baseline



One of the over 200 interviews in the Marsabit baseline study.

study, engaging over 200 people in interviews, has identified fighting over grazing land and water points, as the major conflict issues in the area.

Next steps in the project are a research phase to be followed by validation at different levels in the communities and a concluding round table conference. The conflict transformation project carried out with a participatory action research methodology is engaging all in all 12 communities and six additional group stakeholders.

New Advisory Council formed

Following the change to a smaller Board of Directors (introduced in New Routes 1/2012), which meets more frequently, a global LPI Advisory Council has been formed. In addition to the seven board members, selected peacebuilding experts have been invited to join the council which will meet for the first time in Nairobi in October this year.

Among the members are Dr. Thania Paffenholz from the Graduate Institute of International and Development Studies in Geneva, Right Reverend William Kenney, Auxiliary Bishop of Birmingham, Ms. Amina Mohamed, Assistant Secretary General at the United Nations Environment Programme in Nairobi, Mr. Hippolyt Pul, All Africa Justice and Peace Working Group, Ghana, and Florence Mpaayei from the Nairobi Peace Initiative Africa.



Dr Thania Paffenholz, one of the members of the LPI Advisory Council.

– I am delighted that LPI board and staff will have this opportunity to get highly professional guidance for our peacebuilding work, says LPI President Rev Gustaf Ödquist. To have these experienced academics and practitioners meet with us on an annual basis will be very helpful.

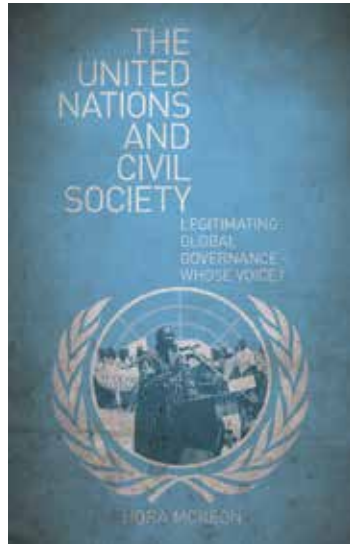
PHOTO: IRCK

PHOTO: LPI

Reviews and resources

Global governance of food security

The United Nations and Civil Society. Legitimizing Global Governance – Whose Voice? by Nora McKeon. London and New York: Zed Books, 2009



This is an interesting case study by someone with experiences from within the system. The author has been with the Food and Agricultural Organization (FAO) of the United Nations with particular responsibilities to cultivate links to civil society actors, often referred to as the ‘Third UN’. The volume was published in collaboration with the United Nations Research Institute for Social Development.

The narrative follows the gradual opening of the UN system during the 1990s through a series of global summits, which all provided hitherto unknown access to civil society representatives. According to the author, this laudable trend and initiative “has failed thus far to move from generic and often episodic participation to meaningful incorporation of these actors into global political process” (p. 2). While civil society organisations (CSOs) have grown into a powerful global force, the neoliberal hegemony has since then advanced and managed to impose a reverse trend, which since the turn of the century has seen geopolitical and economic powers setting the agenda. For the author the challenge remains, that the UN has “to provide a terrain – or rather a series of intercommunicating terrains – on which meaningful confrontation and negotiation can take place” (ibid.).

The book looks at these interactions in a chapter on the FAO engagement with regard to global governance of food and agricultural issues as documented by the World Food Summit processes of 1996 and 2002. It ends with the FAO High Level Conference in June 2008, taking place in the middle of the food crisis. The sobering conclusion is that “the relation of the FAO to civil society is very much a work in progress” (p. 120). Another chapter then sets these experiences into a broader context by reviewing the practices and procedures of the UN system as a result of such interactions and how these were reflected in a growing body of literature

outside of the UN system. The sobering conclusions seem to suggest that the initial momentum obtained during the 1990s suffered serious setbacks with the terrorist attack of 9/11 and the subsequent “war on terror”, which imposed US hegemonic power of definition on any UN-related initiatives and thereby restricted the alliances with independent CSOs. The dilemma experienced during the last decade was that “never had the UN system been more in need of allies if it is to regain a significant role in global governance and refurbish its legitimacy and accountability” (p. 168).

The final chapter summarises the dilemma by pointing to the fact that the UN system is the only international institution able to promote meaningful, in the sense of more legitimate, global governance but fails to make adequate use of the indispensable ingredients offered by civil society. It thereby risks that the latter will, in disillusionment, turn its back on the UN as a forum. But what is needed “is the participation of social actors in the negotiation of meanings, a practice that cannot be dissociated from the effort to build more equitable and inclusive global governance” (p. 189).

Henning Melber

Senior Advisor of The Dag Hammarskjöld Foundation and Extraordinary Professor at the Department of Political Sciences/University of Pretoria

Personal ties that bind

African Conflicts and Informal Power: Big Men and Networks. Edited by Mats Utas. The Nordic Africa Institute and Zed Books, 2012



This collection of country-specific and thematic case studies illustrates in vivid detail the significance of so-called “Big Men” in Africa and the hybrid forms of power they exercise through networks, in violent conflicts and particularly their aftermath. Cases cover Cote d’Ivoire, Liberia, Mali and Sierra Leone in the west, the Democratic Republic of Congo, and Uganda’s border with the DRC.

Academic disciplines and levels of professional seniority are variegated, with contributions coming from conflict/security specialists, political scientists and anthropologists. The editor (himself a big man in this academic field) and the accomplished contributors he assembled have created a coherent web of argumentation, maintaining that Big Men are not marginal to political structures and processes, pointing to how formal political (state) power and informal personal power tend to overlap and interact, and suggesting at certain points how understanding of these realities can inform institutional and policy work.

The volume opens with an able review of the literature on Big Men, from its origins fifty years ago in studies in Melanesia to its relevance today in Africa, as well as on social networks. The editor provides key characteristics of what he calls "Bigmanity". He also discusses aspects of the networks in which Big Men (and even big women) function as nodes, such as their degree of efficiency in achieving determined outcomes, common instability, multi-dimensionality as webs of economic and political power, and frequent inclusion of criminal actors. Citing William Reno and Alex de Waal, the editor critiques top-down interventions that ignore the way wartime militia networks live on in post-war contexts, and ignore local dynamics more broadly.

This well-constructed book may be more satisfying for academics than for peace practitioners, though there are some clear implications for higher-track peace processes and public policies. One in particular, highlighted by Anders Themnér, involves the role that officially demobilized mid-level commanders (subaltern Big Men) can play in post-violence peacebuilding, either as spoilers of processes or potential agents of change.

Gerhard Anders' chapter on big men and international criminal justice provides interesting background and discussion of international criminal tribunals and the tactical interplay between them and elite military men. Charles Taylor – whose judgment was pending as the book went to press – features prominently.

A disturbing element for this reader was an apparent political-realist tendency of some authors to shrug at corruption and the undemocratic functioning of power as mere facts of African life. Also, in this good piece of work, there was not a single African voice among the fifteen contributors.

Tom Bamat

Senior Technical Advisor, Justice and Peacebuilding, Catholic Relief Services, Member of LPI's Board of Directors

Building security after peace agreements

Post-War Security Transitions: Participatory peacebuilding after asymmetric conflicts. Edited by Véronique Dudouet, Hans J. Giessmann and Katrin Planta. Routledge, 2012

After a peace agreement has been reached in a civil war, many challenges remain. The terms of the settlement need to be implemented, the economy needs to be revitalised, and, most importantly, it is necessary to provide security, so that ex-combatants and refugees can return to their homes. The importance of these measures are repeatedly emphasised in international donors' programmes and guide the analysis of conflict scholars, even though we know stunningly little about how these policies are received by the local stakeholders and community representatives.

This is the starting point for this book, edited by three researchers at the Berghof Conflict Research Centre, with contributions on peace processes in Colombia, South Africa, El Salvador, Northern Ireland, Kosovo, Burundi, South Sudan, Aceh, and Nepal drafted primarily by former conflict participants, who since have become academics or journalists. The chapters cover both countries with successful peace processes and those where violence persisted, making it useful for comparison across cases.

The authors are particularly concerned with describing the processes of reforming former rebel forces and state institutions into legitimate security providers in the post-conflict society, giving a local perspective on the challenges and successes in different processes. We learn, for example, that participants (including rebels) in these types of programmes prefer to term this process a "restructuring" of their movement rather than "demobilisation" of forces and "reform" of the security sector. Thus, the signing of a peace agreement is not the end of their political struggle, but is viewed as an opportunity to pursue their goals through different, non-violent, means. This also means that rebel organisations remain committed to the well-being and security of their members even after military operations have ceased, and several chapters identify ex-combatant security concern as the reason for why peace agreements are followed by a resumption of violence.

While the idea behind this project should be applauded as a necessary step towards ensuring that the effect of peacebuilding measures are derived from the local community, the book does not completely succeed in fulfilling this purpose. With the exception of the chapters on Colombia and Nepal, the contributors focus too much on recounting and describing the peacebuilding processes and do not allow space for local reactions to these events. As a result, this book is primarily useful as a guide to programmes for creating legitimate and neutral security institutions in nine post-conflict settings, while it also provides some information on how these reforms are received by local actors. However, the biggest contribution of this volume is arguably its ambitious purpose of giving voice to the actors affected by peacebuilding programmes, and hopefully other scholars, will remain willing to focus on this approach in the future.

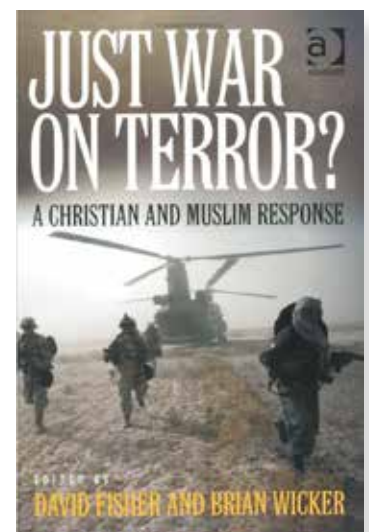
Joakim Kreutz

Assistant Professor, Uppsala University Department of Peace and Conflict Research

How to protect a democracy?

Just war on terror? A Christian and Muslim response, edited by David Fisher and Brian Wicker. Ashgate Publishing Ltd, 2010

Following the 9/11 attacks by Al-Qa'ida, President Bush declared his "war on terror", a concept that opened up new a precedent in international affairs. For example, Western democratic governments found themselves in a balancing act: On the one hand trying to implement policies, ensuring the protection of their citizens



and interests, while on the other not violating national and international constitutions and laws. The notion of “pre-emptive strikes”, for example, was conceived and seen by some as a legitimate way to combat terrorists or potential terrorists. However, this has raised further urgent questions: What is the best way, or best ways, of countering terrorism, not just from a practical but a moral and ethical point of view? Can and should wars against terrorism be conducted? On what grounds and how? Or are there other mechanisms to confront it?

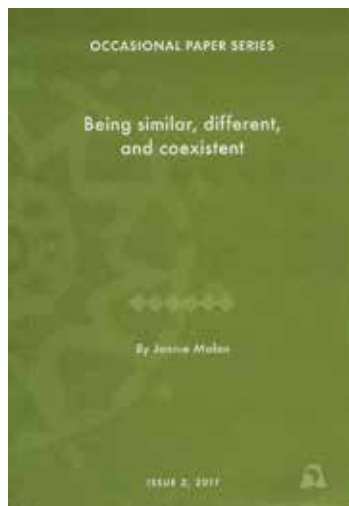
These are some of the questions discussed in “Just war on terror? A Christian and Muslim response”. The issue of whether force can be used to protect a democratic society from attack, while it is also used to promote the spread of democratic values as a way of countering the terrorism, becomes highly interesting. An example indicating that this is not always necessary is the Arab Spring movement from 2011, where positive change was promoted from within rather than enforced from an outside military force

However impressive the list of contributors to this publication might be, the fact remains that only three of the authors seemingly are Muslim and two are women, while the vast majority all hail from a British and American White House-10 Downing Street-military background. The truth is that neither Christianity nor Islam are homogenous religions, hence, the book’s scope and outlook is very specific and thus the publication should be seen as a compilation of one set of responses and opinions amongst many others.

Henrik Halvardsson
Programme Advisor, LPI

Hopeful reflections from South Africa

Being similar, different and coexistent, by Jannie Malan, ACCORD Occasional Paper Series, Issue 3, 2011, Umhlanga Rocks, South Africa



In this small, but vibrant and fascinating book the author shares important findings about conflict transformation. Based on findings in field research in three tough conflict situations in South Africa, he draws his conclusions. The first part is all about wisdom like “Umntu ngumtu ngabantu” which is Xhosa and means “A person is a person through other persons”. That’s it. Malan looks into identity issues and suggests that we have to look at “who-ness” and “what-ness”. The purpose of the booklet is to focus on and propagate coexistence by contrasting it with co-existence.

No doubt, it takes a bit of time to walk along the philosophical path with Malan, but it is enriching. He expands and juggles with words and reflections deeply rooted in his comprehensive life-long experience in conflict studies, philosophy and theology. One example: “It is changing from a mindset of turned-againstness to a mindtrend of turned-towardness”. This, says Malan, is a transformation of thinking that leads to a transformation of behaviour. Although he warns that it may not always be seen as irreversible and conclusive...

My thoughts of course go in the direction of LPI and local partners’ work in eastern DR Congo and in the Horn of Africa. Malan helps me to put new words on our engagement and approach – not least the participatory action research – in conflict transformation.

The final part of the publication is all about “learning from people who stopped fighting and started coexisting”. It is about talking, listening and understanding, about mutual-ity that led to trust, relationship building, recognition and respect. According to Malan, projects have shown that it is not only mildly quarrelling couples and neighbours who can become coexistent, but also recklessly fighting warlords and their followers. This is hopeful, to say the least. Although new problems turned up in the communities, follow-up visits showed that all the groups were unanimous in their commitment to sustained peace and coexistence.

Tore Samuelsson
Communications Director LPI

The societal responsibility of religious leaders in Kenya

“Religious presence in Kenyan politics, culture and civil society: peacebuilders or partisans?” A Master thesis by Shamsia Wanjiru Ramadhan. Notre Dame University, Indiana, 2010

“Religious leaders in Kenya are as ethnically and politically divided as the Kenyan society is. ... In a real sense during the 2007 election campaigns they were unable to differentiate between religion and ethnic identity, undermining religious peacebuilding in Kenya.” This is the conclusion Shamsia Wanjiru Ramadhan draws in her Master thesis after having analysed the role of religious leaders in Kenyan politics and society since the colonial period. She observes that they found it impossible to “transcend and transform ethnic identity despite their higher calling”. She further questions their inability to look for the “greater good”, while holding rigidly on to sectarian interests in the constitutional process in 2010, exemplified through the controversy around the inclusion of “kadhi courts” (a traditional institution to arbitrate inheritance, family, and succession for Muslims).

Religious leaders in Kenya have a history of being active and dynamic promoters of human rights and democratic principles. Their “Ufungamano” initiative, in which religious leaders of different traditions came together to promote a constitutional review, was renowned throughout the African continent and beyond. The National Council of Churches of Kenya was praised for its civic education campaigns during the slow democratisation process throughout the 90s, leading to the “Rainbow” election in 2002. When

political oppression was significant, religious leaders and organisations were able to jointly work for human rights and democratic principles. They were not alone in this struggle. Human rights and other civil society organisations operated as activists, and religious organisations played important roles as constituencies through which this activism could be played out.

Ramadhan observes that ethnicity has always been a factor in Kenyan politics, but that ethnic and political alignments of religious leaders and organisations became more obvious when the “common enemy” was gone. Therefore there was not sufficient glue to keep them together in times of crisis in the 2007 elections, and they did not manage to play significant constructive roles when violence broke out.

In her thesis Ramadhan discusses peacebuilding theories, and explores the specific roles religious leaders may play in peacebuilding processes. She finds that their potential is significant, not least due to their broad constituencies and their spiritual and moral authority in African societies. Therefore she expresses her disappointment at what happened in Kenya around the 2007 elections.

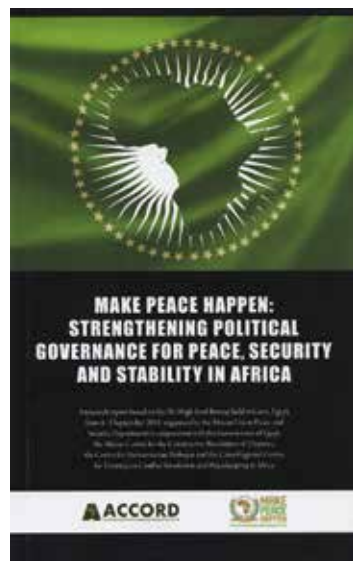
Ramadhan makes interesting and valuable attempts to analyse what happened, and she makes a number of prescriptive observations about what should have happened. It would have been interesting if she had attempted to explore more in depth why religious leaders acted as they did – or why they did not act. Motivation and value-priorities form important premises for how and which decisions are made. How did they navigate between their religious calling and their societal responsibilities? This analysis would probably have required interviews with a sample of religious leaders and other stakeholders in the Kenyan political and social environment. This could be an interesting follow up of the valuable research presented in the thesis.

Stein Villumstad
General Secretary European Council of Religious Leaders

Peace efforts in Africa

Make Peace Happen: Strengthening Political Governance for Peace, Security and Stability in Africa. ACCORD Research Report, 2012

If you want to follow the developments related to peacemaking in Africa, try to get hold of this research report, published by ACCORD in South Africa with Make Peace Happen (www.makepeacehappen.net) and support from the Ministry for Foreign Affairs of Finland. It is



based on the AU high-level retreat for some 150 participants held in Cairo, Egypt in September 2011.

It deals with numerous issues like the role of social media, strengthening the role of regional organisations and the gender dimension of governance and not least the “youth bulge” – no less than 60 per cent of the youth in Africa are unemployed. This poses a threat to peace on the continent and is a driver of conflict. The concluding Cairo declaration includes a recommendation to enhance the tripartite partnership of government, civil society and the private sector, not least to promote youth-focused and women-focused initiatives.

Tore Samuelsson
Communications Director, LPI

Food insecurity – a determining factor

Food Insecurity and Violent Conflict: Causes, Consequences, and Addressing the Challenges, by Henk-Jan Brinkman and Cullen S. Hendrix. World Food Programme, Occasional Paper n° 24, 2011

Food insecurity – especially when caused by a rise in food prices – is a threat and impact multiplier for violent conflict. It might not be a direct cause and rarely the only cause, but combined with other factors, for example in the political or economic spheres, it could be the factor that determines whether and when violent conflicts will erupt.

Food insecurity is thus linked to increased risk of democratic failure, protests and rioting, communal violence and civil conflict. Violent conflicts, in turn, create food insecurity, malnutrition and – in some instances – famine.

Food price stabilization measures are important tools to prevent food prices from rising and causing unrest. Safety nets are critical instruments that can mitigate the effect of short-term spikes in food prices on food insecurity, helping to prevent violent conflict and contribute to long-term development. Safety nets have the added advantage of mitigating horizontal inequalities, which are one cause of conflict.

This paper provides an overview of the link between food insecurity and violent conflict, addressing both traditional and emerging threats to security and political stability. It discusses the effects of food insecurity on several types of conflict, and the political, social, and demographic factors that may exacerbate these effects. It also gives examples of ways in which the international community can assist in breaking this link and build peace.

Available at <http://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp238358.pdf>

The act of putting into your mouth what the earth has grown is perhaps your most direct interaction with the earth.

Frances Moore Lappé,
Diet For A Small Planet, 1971

LPI AND ITS PERIODICALS

Life & Peace Institute (LPI) is an international and ecumenical centre based in Uppsala, Sweden, that supports and promotes nonviolent approaches to conflict transformation through a combination of research and action, and hence contributes to the prevention and mitigation of violence as a precondition for peace, justice, and nonviolent coexistence.

The Institute's conflict transformation work is based on an understanding that conflict is a natural part of societies that has the potential for both constructive and destructive change. It also builds on the premise that peace can only be achieved through the active involvement of the communities in conflict themselves.

LPI's operational focus is on Africa, and more specifically on the Central Africa and Horn of Africa regions. In addition to the head office in Sweden, LPI has programme offices in Nairobi (Kenya), Bukavu (DRC), and Khartoum (Sudan) and staff working with the Addis Ababa University in Ethiopia.

LPI publishes two periodicals: the quarterly journal **New Routes** and the bi-monthly electronic newsletter **Horn of Africa Bulletin** covering the African countries of the Horn. Free online subscription to both periodicals.

Prices for hardcopy subscription to **New Routes**:
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