Town – Country – Food
Who Will Feed Our Cities?

Brot
für die Welt
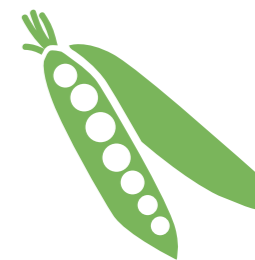
The future needs healthy food in rural and in urban areas

More and more people are moving from rural to urban areas in the hope of finding work and a better life. But this dream often ends in poorly paid, precarious employment and life in slums. More often than not, these individuals do not even earn enough to buy decent quality food. Others find themselves having to work so many hours a day that they no longer have the time to cook a healthy meal with fresh ingredients, leaving them to find sustenance in fatty, sugary food that has little to no nutritional value, while they remain unaware of the impact this type of diet is having on their health.

The most powerful food corporations invest heavily in promoting imported and processed products, especially in newly industrializing and developing countries, claiming that they are better quality, more modern and healthier than traditional local food. Yet regionally sourced products are often far more nutritious. Malnutrition puts over two billion people at an increased risk of disease and severely impacts their everyday lives. Eating healthily presents a huge challenge to impoverished people living in cities, and as there is less space to grow produce, individuals almost always have to buy their food. With the global expansion of large supermarket chains, buying food is not only becoming increasingly difficult but more and more expensive. This expansion forces out actors on the (often informal) local markets used by family-run agricultural businesses, whose locally sourced products do not meet the formal standards of the big supermarkets (e.g. produce needs to be a certain size or be free of imperfections), even though their goods taste perfectly fine, are of good quality and, above all, are affordable. When it comes to feeding our cities, it is vital that emphasis is once again placed on these family-run farms. Currently, these holdings produce up to 80 percent of the world's food, and thus also help feed a large number of city dwellers. In order to ensure that urban citizens have enough good-quality food to eat, governments need to facilitate cooperation between those living in urban areas and rural producers. This aim could be achieved by setting up food policy councils and creating transport routes that are accessible all year round, as well as supporting wholesale markets, particularly on the outskirts of cities where many of the urban poor live.

There are approaches that can be taken to enable the growing urban population to secure its own food supply. One such example is urban agriculture and its successful applications in the Global South. Cuba's urban gardening movement is an exemplary model of ecological food production in cities that could be applied across the globe. This practice is also widespread in South African townships. But urban farming alone is not enough to feed the world's urban populations. To provide everyone with a healthy and balanced diet, particularly the urban poor, access to produce grown by regional nearby farms must be improved. In their efforts to provide citizens with healthy food, governments must also offer social security and education on healthy eating. This also includes enabling people to prepare their food with clean drinking water.

Individuals should have access to an adequate, healthy and varied diet, whether they live in rural areas or cities, and Bread for the World is working together with its partner organizations all over the globe to make this happen. Enabling sustainable access to a diverse range of healthy foods is going to be key. The contributions featured in this publication, which focuses on Bread for the World's 56th, 57th and 58th annual campaigns, outline how this access can be ensured and which aspects need to be considered when establishing a network of healthy eating solutions in urban areas. After all, 'sated is not enough': the citizens of our cities deserve better.

Yours sincerely,

Reverend Dr. h. c. Cornelia Füllkrug-Weitzel
President, Bread for the World

Contents

Who Will Feed Our Cities?

Biraj Patnaik[1]

Rapid urbanization over the past decades has meant that there is a growing focus on the question of urban agriculture and who will feed our cities.

Current estimates show that a major part of the food available in the cities comes in from rural areas, or is delivered through global supply chains and imports. Urban agriculture, while not a new phenomenon is now increasingly taking on an industrial scale in a few developed country contexts, but remains a household level activity in most parts of the developing world. Proponents of urban agriculture argue that it has the potential not only to transform the landscape of how food is grown, but also to impact food cultures and consumption leading to healthier eating habits and a greater connection with the food we consume. Skeptics, however, point out that growing all the food that cities need sustainably is going to be a herculean challenge and at best, in the short run, industrial scale agriculture and roof top gardening using hydroponics and other technologies will be able to fill in a few gaps in the food needs of the urban areas.

It is important, though, to step back and look at the growing agrarian crisis in rural areas, and the pressures on land which are in the first place prompting the discussions around urban agriculture. As the well-researched articles in this volume elaborate, the common thread between the crisis in rural agriculture and the threats to urban food and nutrition security remain the same: the corporatization of our food chains. At present, the reasons for both elements of the double burden of malnutrition – under-nutrition and obesity – are caused by the loss of control of communities on what they grow and consume and the distribution chain for food that is controlled by a few corporate interests.

Loss of food sovereignty, due to the corporate takeover of the seed and input industry, GM crops, and land and resource alienation have pushed rural communities to the brink of hunger, and the similar corporate takeover of the consumption side, led by supermarkets and food corporations, have led to the cheap availability of junk food and empty calories which are largely consumed by the poor.

Any discussion on who will feed our cities has to factor in this reality. Because if urban agriculture is to be expanded, it needs to be located within the framework of the right to adequate food and nutrition, and in consonance with the principles of agro-ecology and food sovereignty which are at the heart of people's struggle

A boy prepares and sells food in the narrow alleyways of a Bangalore slum.

to reclaim the food chain from corporations. The reality of urban agriculture today is that, contrary to perception, the producers of food in urban and peri-urban areas are the urban poor. Small plots of land, either in the homestead or around in Asia and Africa, on government land (river basin and flood plains around cities), privately leased land, home gardening and semi-public lands still account for a vast majority of food production in urban areas. These are not necessarily organic nor as of now do they follow agro-ecological principles as a norm, and there remain public safety concerns on the use of waste water, contamination of ground water used for urban agriculture by industrial pollutants and heavy metals, and potential soil erosion.

Yet, with proper planning, re-drafting of zoning laws and policy formulation centered around a more equitable mode of food production and distribution, it is possible to create an architecture for urban agriculture that is based on the principles of agro-ecology. On the other hand, industrial modes of urban agriculture that are taking advantage of technological advances in hydroponics, and availability of vast empty roof-tops, have already taken root in megacities like New York. These technologies are very energy intensive, limited to very

On the outskirts of the city of Jacmel in Haiti, workers tend to a community garden. The vegetables and poultry are mainly for the farmers' own consumption. Any surplus is then sold at the local market.

few crops and dependent entirely on forward marketing linkages, principally with supermarkets, as the distribution chains for the produce. These are primarily restricted now to mega-polises in developed countries but can also spread to developing countries as the technology becomes less capital intensive and super-marketization takes hold in urban centers.

As of now, the urban poor primarily get the more expensive components of their diet – vegetables, poultry and dairy products – from urban agriculture. This is mostly in the developing countries of Asia, Africa and Latin America, which will be host to 75% of urban dwellers globally by 2020 with more than half of the poor living in the cities. It is therefore imperative to rethink the architecture of urban agriculture not just from a economic perspective, which is important, but also from diet, nutrition and ecological perspectives.

Integrated with waste water management, composting, organic agriculture and environment factors, urban agriculture could potentially deal with a number of issues that affect cities today beyond food security, including the greening of our cities, and positive impacts

on micro-climates. Programs integrated with schools and colleges, through kitchen gardens in these institutions wherever land is available, as is being done in rural areas, is likely to change for the better the relationship between food and the consumers which is increasingly commodified – especially amongst urban youth. It also has a huge potential for improving nutritional indices by providing better access to healthier foods and a lower dependence on the super markets.

However, to realize this vision will require unprecedented levels of planning – across sectors, by governments across levels, municipalities, planners, resident associations, small enterprises and shops and urban agriculturists – planning that is acutely lacking from governments currently as corporations and industrial agriculture centered around rural areas continue to dominate the policy discourse in both developed and developing countries.

In the interim, there is an urgent need to address the global agrarian crisis and the loss of sovereignty of farmers (especially small and marginal farmers and women farmers) across the developing world on the natural

resources including land, water, seeds and agricultural inputs. The corporate takeover of agriculture needs to be addressed urgently to ensure that farmers are able to reclaim their control over all aspects of the food chain. Simultaneously, the iniquitous trade regime that allows developed countries – especially the US and the EU – to continue their farm subsidies while developing countries are unable to do so under current WTO regimes needs to be corrected. The setbacks in the implementation of the Nairobi Ministerial of the WTO, that developing countries faced because of the closure of the Doha Round, have re-established the 'trans-Atlantic hegemony' of the US and the EU over global trade. To allow countries to regain the domestic policy space on food security programs will need a re-drafting of the Agreement on Agriculture.

Simultaneous, the battle against obesity and NCDs that threaten to cripple the health of the poor in our cities cannot be won without reducing the corporate takeover

of the consumption end of the spectrum. Curbs on growing super-marketization in the developing world, and comprehensive taxation regimes for sugary drinks and other unhealthy foods are two important steps in this direction. This will have to be accompanied simultaneously by the creation of national 'farm to plate' programs that maximize the share of the producer in every dollar spent by the consumer. State interventions to create publicly funded food distribution and storage networks in order to reduce food wastage during transit, public stock-holding programs for food security, legislation for guaranteeing the right to food and nutrition security and securing the rights of small holder agriculturalists are steps that the government needs to urgently take to ensure food sovereignty.

This volume is a small but much needed step in the right direction to initiate the dialogue on feeding our cities. And it is not about the fture any more. The future is now.

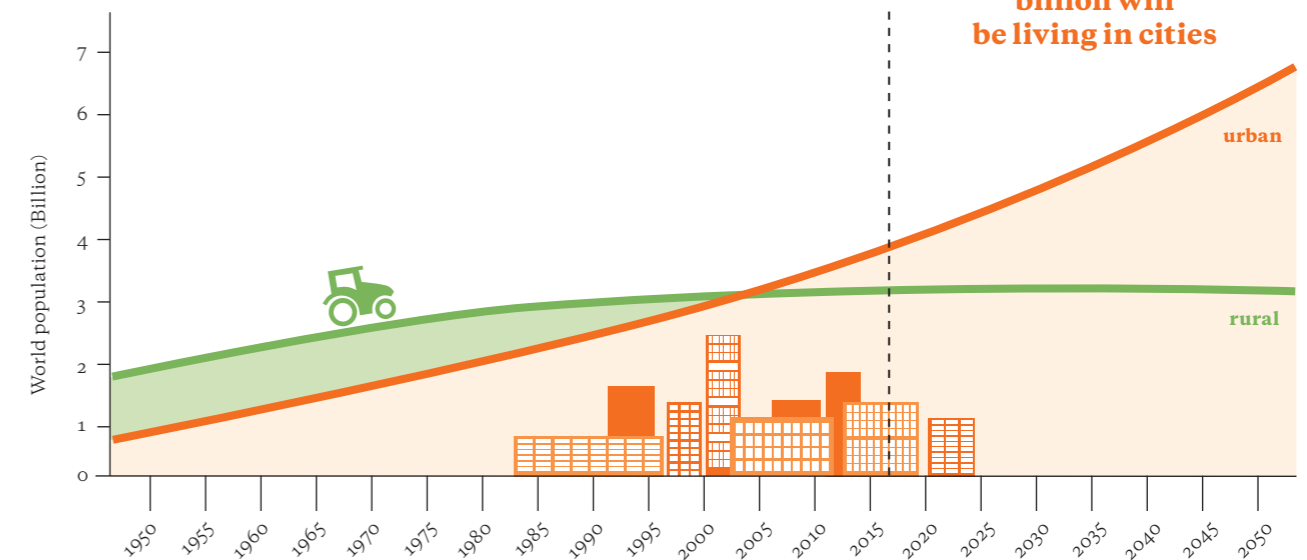[1] *Biraj Patnaik is Principal Advisor to the Office of the Supreme Court Commissioners on the right to food in India. All views expressed here are his own.*

Of the

9,6

billion people predicted to inhabit the earth by **2050**

6,4

billion will be living in cities

Development of the world's rural and urban populations between 1950 and 2050

urban

rural

Source: UN DESA 2015

Insatiable Megacities: can the regional provision of food survive the onslaught of globalization?

Bernhard Walter

According to the UN, there are currently 28 megacities in the world, each one home to more than ten million citizens. By 2030, this number will have increased to 41. The global population of urban dwellers is also on the rise: the number of people living in cities could increase from 4 billion in 2017 to 6.5 billion by 2050. Almost 90 percent of this growth is expected to take place in Africa and Asia (UN Population Division 2014). As the urban population grows, the number of those living in rural areas continues to fall. Securing food for the populations of megacities, which often contain vast informal settlements, is a huge infrastructural and logistical challenge.

Providing fresh food to cities across the globe generally means acquiring such produce directly from rural areas or via intermediaries and wholesale markets. Depending on seasonal availability, other foods are imported from regional or international suppliers. Unless these supplies are kept constantly replenished, food in urban centres can only be guaranteed for a mere three days. An occasional strike in the transport sector is enough to illustrate just how precarious the situation is: such events show how quickly supermarket shelves can be emptied and petrol stations drained as soon as a

constant flow of goods cannot be guaranteed. It doesn't take long before the population resorts to looting and panic buying, and unrest takes hold. How trade and trade channels are structured is thus vital to feeding the world's urban population.

Lagos in Nigeria, Manila in the Philippines or Mumbai in India: many of these megacities are in easily accessible locations on the coast or next to major rivers and can easily procure food from suppliers on the global market. Most of West Africa's coastal cities are heavily reliant on international ports and their imported goods; their populations are inundated with meat, rice, wheat and vegetables from Europe, Brazil and North America. However, in order to prevent these areas from becoming heavily dependent upon international producers and to protect from the price fluctuations inherent to the global market, it is important to also consider how cities are linked with rural regions both in the direct vicinity and further afield. How is the domestic agricultural sector and infrastructure set up? What options are there to exploit national value chains, including processing and storage facilities? What state are the roads in? How much does petrol cost? Is the country neglecting or investing in its rural areas?

Growth of the ten largest megacities – past development and future projections

Source: UN Population Division 2014

The contrast between rich and poor: a slum situated close to apartment blocks in the district of Andheri in Mumbai.

Opening up markets: risk or opportunity?

In many countries of the Global South, domestic cereal varieties such as sorghum and millet are increasingly being pushed out, even though they could play a key role in helping to improve the population's diet. This dependency can be partly blamed on decades of failure to invest in rural regions, which is, to a certain degree, attributable to local producers being undercut by subsidized imports from the EU and the US. South Africa, for example, has witnessed a sharp rise in the demand for easy-to-prepare foods, such as bread and baked goods made from wheat, due to its open market policy, urbanization and shifting consumption habits, as well as an increase in those choosing to eat out and a higher number of women in employment. *(→ Junk food; Dual burden)* Although South Africa is itself a wheat producer, its imports of the grain have steadily grown in recent years. At present, the country imports 60 percent of the wheat it consumes. It took the government until August 2016 to take action to protect domestic production, which it did by increasing import duties. Nonetheless, the Dutch multinational Rabobank estimates that between 2015 and 2025, the total amount of wheat imported by all Sub-Saharan African countries will rise, by up to eleven million tonnes, to more than 30 million tonnes (Agrar-Europe, Bonn 2016): the majority grown in Europe, mainly in France.

The situation looks very different on the Indian subcontinent. Although the Indian agricultural sector enjoys strong global links, the country predominantly exports rather than imports: it is the world's seventh-largest exporter of agricultural goods. In recent years successive Indian governments have also been stockpiling (state-subsidized) food to ensure the country's less well-off

citizens can still have access to locally grown produce. *(→ Overlooked poverty)* India wants to avoid becoming dependent on imported agricultural goods as this may compromise the state's power to act in its own interest. Whilst helping to nurture India's own food growing industry, this country's stance remains a thorn in the side of major agricultural exporters, such as the US, Australia and the EU, who have taken action through the WTO in an attempt to stop India from selling reduced-price food to its poorer citizens. For many WTO critics from the Global South, including Biraj Patnaik from the Right to Food Campaign, the primary question is whether the World Trade Organization should be the body to decide how India should feed its megacities in future and how it ensures its citizens' right to food – aren't these decisions best left to the Indian government?

India has also made efforts to protect its own markets when it comes to milk, choosing – like Kenya – to support domestic producers. By doing so, the state is helping to safeguard people's way of life and fighting poverty in rural regions. Cameroon's decision to place a ban on imported chicken also demonstrates that domestic food production can be increased if support and funding is offered to rural zones and action is simultaneously taken to protect the national market.

Should cities source food regionally or globally? Or both?

The largest multinational corporations in the food and agricultural sector are increasingly influencing how we feed our cities. They have a vested interest in making sure the way food is grown and distributed continues to follow this globalized trend, and are pushing for equal standards to be implemented worldwide so that large quantities of products of uniform quality can be available at all times. This has long been the case for cereals, cooking oils and sugar; these products keep well and are easy to process. But in recent years we have also witnessed substantial growth in the trade of perishable goods, such as vegetables and fruit. Beans, potatoes, asparagus, apples and strawberries – grown in places such as Kenya, Peru, Chile, South Tyrol and the Netherlands – can now be bought by consumers in global cities all year round. Companies spend exorbitant amounts promoting these items, which are sold across the world in global supermarket chains. By allowing wealthy consumers, especially those in the megacities of developing and emerging economies, constant access to a wide range of products, this trend conveys a sense of being part of a modern, international consumer society. But while it brings greater freedom to urban consumers, this development restricts the capacities of producers in rural areas.
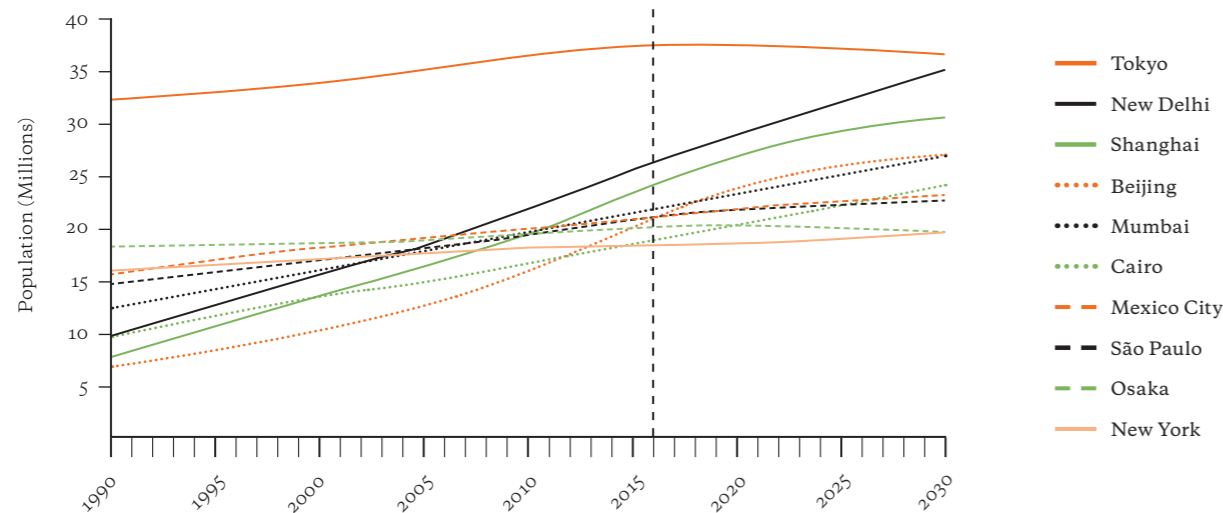
Many are now exploring the ways in which regional and local suppliers can help feed the world's urban dwellers. Cities could, of course, partially feed themselves – i.e, by growing food on fallow land, in gardens, on balconies or on rooftops. The urban gardening movement is inspiring a growing number of people in many cities of the Global North to turn their hand to gardening at home and in community spaces. But in many of the South's urban centres, this trend has long been a key part of a wider urban agricultural strategy that helps to secure the food supplies of various cities. (→ *Urban farmers or hobby gardeners?*) However, despite all the enthusiasm, urban farming alone will never be sufficient to meet the nutritional needs of the world's cities as there simply aren't enough resources or space in the globe's many urban agglomerations to sustainably feed the growing population with ecologically cultivated produce.

Whatever cannot be brought into the cities via international transport routes or produced by the cities themselves can be grown on agricultural land in peri-urban corridors (areas around or near cities). Examples of how this might work in practice can be found as far back as the 18th century, when German agriculturalist and economist Johann Heinrich von Thünen started exploring ideas as to how a city's food supply could be effectively sourced from local regions. Even then, factors such as optimal land use, along with transportation costs and distances (→ *Town – country – food*), were crucial to determining which method of production – for example forestry, animal farming, cereal cropping, vegetables, fruit or berry cultivation – should be set up, and how far away from the city centre (i.e. the market) it should be.

If regional products are to compete against the globalized market, agricultural sectors will have to become more diversified so that they are able to meet consumers' constantly shifting eating patterns and expectations. Reliable supplier and value chains will have to be developed to bridge the gap between the demand in the cities and the produce supplied by rural areas. At the same time, it will be vital to guarantee that farmers, particularly small-scale producers, are actively involved throughout the supply chain and that they are able to charge prices that not only cover their production costs but enable them to invest in their business. However, numerous studies have shown that farmers, especially small-scale producers, are often the weakest link in the chain, and that food companies outmanoeuvre growers by purchasing products where they are cheapest. Moreover, many smallholders are not able to meet the standards demanded by supermarkets. (→ *Supermarkets versus informal markets*) Before our cities' sustenance is sourced from local and regional suppliers, it will first be crucial to ensure that there is adequate storage, processing capacity and transport available for affordable,

Origin of produce consumed by the average city

| 5 % City | 13 % Local area | 18 % Region | 27 % Country | 16 % Continent | 20 % Globe |
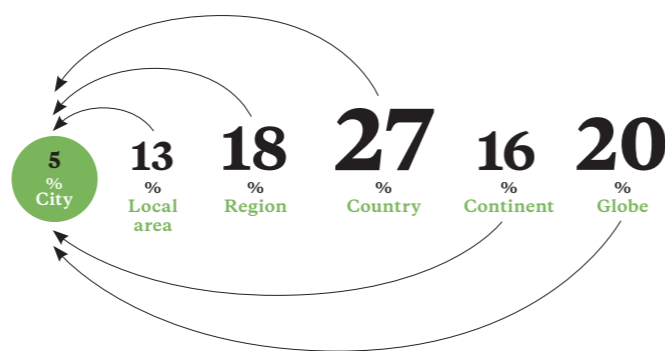
Source: FAO/ISU 2015a

healthy and nutritious food. (→ *Town – country – food*) Food losses and food waste need to be kept to a minimum, and steps must also be taken to ensure a functioning nutrient cycle, i.e. processing human excreta from cities and transporting it to rural regions, where it can be applied as organic fertilizer, thus providing a vital source of plant nutrients.

Does regional food hold the key to solving our cities' future nutritional needs? The answer is probably a mix of produce sourced both globally and regionally. However, for this approach to be fruitful, it will be essential to have rural regions that offer attractive living and working conditions as well as social security systems. Poverty, as well as social and economic inequalities between urban and rural areas, thus needs to be minimized and the linkages between the city and the rural areas need to be strengthened. It is also important to recognize, and adequately remunerate, the extremely vital role women and young people play in boosting the appeal of rural areas. Structural change at the rural level needs to be accompanied by accurate planning and monitoring in order to encourage people to choose to live in rural areas. This is also a major prerequisite for developing the agricultural sector and safeguarding food production. Rural areas need to be able to offer a good quality of life if we are to have any hope of reversing the rural exodus and reducing the migratory pressure on our cities, but it is equally vital that urban areas make sure that all citizens are able to properly exercise their right to food.

Town – Country – Food: how is food transported into our cities?

Luise Steinwachs

Urban spaces are not self-contained economic and social entities. This is clearly illustrated by the fact that cities are unable to produce food in volumes sufficient to feed the urban populations housed within them. Approaches such as urban gardening and urban agriculture may play a crucial role in meeting basic nutritional needs, particularly those of city dwellers living in poverty. Seen more broadly, they are only effective if used to supplement supplies offered by rural producers. At present, cities are still mostly reliant upon rural food production, even though the proportion of industrially produced and processed food is on the rise.

The interconnectedness of rural and urban space is reflected in the fact that the majority of lives are not spent either exclusively in cities or exclusively in rural areas. The crossover between urban and rural creates manifold links and points of integration between city and rural areas.
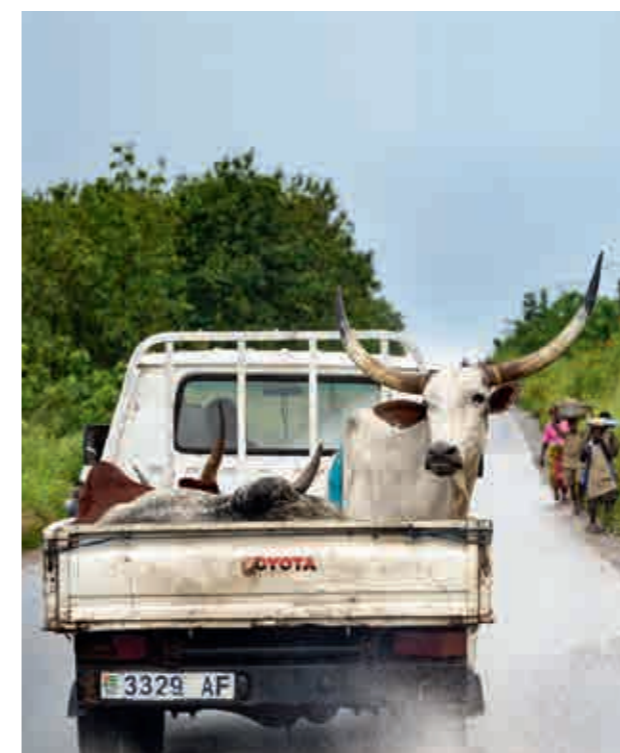
For example, it is common for people, especially in countries of the Global South, to move to a city or a rural area at certain phases in their lives (e.g. childhood, in pursuit of education or work, or during old age). They may also have social links both in the city and in rural areas. City dwellers visit one another, travel, and procure produce from relatives living in the country. What is more, external factors such as the need to find work and secure an income mean they must be flexible. Similarly, there are also rural dwellers who move to the city, build their own networks and often find jobs in the same informal contexts as the rural-to-urban migrants who came before them. Urban spaces offer comparatively more opportunities for formal employment than rural areas and thus increased stability for individual lifestyles. In countries of the Global South, it is often the case that once a person has come to the end of their formal working life, they return to the rural areas.

These individuals often spend months, if not years, preparing for their return by visiting the area, offering gifts or even constructing a new home. If they have access to an income, for example a formal pension arrangement, the money is then distributed among a vast social network. A key element of translocal relationships is land. Women, particularly those living in cities, supplement their income in old age by making repeated trips to the rural areas and performing seasonal agricultural labour. Half of Botswana's low-earning urban population keep livestock or work the land in rural areas (Cohen/ Garrett 2009). In addition to (occasional) cultivation of the land, sometimes with the help of urban-dwelling relatives or by employing paid workers, another factor that stabilizes translocal relations in the countries of the Global South is trade in goods. Food items, mainly industrially produced foods (tomato sauce, soft drinks, alcoholic beverages) and other everyday items that are available at a lower cost in cities are purchased there and transported to rural regions either via bus or brought in by visiting relatives. In return, those living in the cities receive fruit and vegetables from family members living in rural areas. However, these close social bonds, which can be crucial for food security, can be difficult for im-poverished city dwellers to maintain as they often cannot afford the transport costs (Tawodzera 2013).

Watusi cattle being taken to the Togolese capital, Lomé, on the back of a pickup.

Accessing and transporting food

In most cases, city dwellers are left with no other option but to purchase their food. Thus, income and food prices become the primary factors influencing their choice of meal, partially eclipsing other factors such as taste and nutritional choices. Proximity to supermarkets and open

markets, as well as the cost involved in getting there, also play a role. As such, affordable sources of food, for example local markets, may be too far away or hard to reach, while accessible options, such as supermarkets, could be too expensive. Their dependency on meagre financial resources thus often forces impoverished citizens to buy cheap food with a low nutritional value, a high percentage of fat, sugar and salt, and artificial fortifications, which can lead to malnutrition, obesity and other health-related issues. (→ *Junk food*)

Urban agriculture can only marginally contribute to the food security of urban households. Although it can provide nutritious and fresh produce, it does not directly combat the systemic causes of urban food insecurity. It is also unlikely that cities will be able to produce the quantities required to adequately feed their own populations. Urban centres must do more to guarantee food security than just encourage the poorest citizens to grow their own food. The aim should be to create an integrated system that encompasses both rural and urban areas and which also secures access for those living in poverty. It is key, particularly for those on low or irregular incomes, that food is available in small, and thus affordable, quantities and can be accessed close to their homes. Moreover, informal food supply systems create multiple opportunities for those working in transport, trade and distribution to boost their incomes. In South Africa, for example, street vendors constitute 15 percent of all urban employment, and 67 percent of them sell food (FAO 2015a).

Investing in improved supply chains

Bringing food into cities requires several stages in a long supply chain: after items have been produced, they may require intermediate processing before being stored, transported, reprocessed and taken to wholesalers, who then sell them on to retailers, be they shops, street vendors, formal or informal markets, restaurants, snack bars or supermarkets. Within this structure, traders, producers and hauliers may work as collectives. Transport collectives enable individuals to come together and lease larger vehicles, such as HGVs. Distributors may also play their part within this chain by directly purchasing large quantities of goods from holdings. Many of these stages are regulated by official bodies, for example city councils, ministries (for agriculture or transport) and regional authorities to oversee food marketing, and are influenced by subsidies, trade regulations, infrastructure, and commercial standards. Incorporating stakeholders into existing partnerships that are based on trust, past experiences and perhaps even personal relationships is a key element of this complex system.

Transport routes and vehicles are crucial factors in determining whether food – particularly perishable goods – can be delivered on time. Alongside transport options for smaller volumes, for example bicycles, motorbikes and buses, it is mainly HGVs that play a vital role in ensuring deliveries of larger quantities of less perishable produce, such as grain, over longer distances. The advantage of growing goods close to the city is that it reduces the amount of local traffic, thus avoiding further environmental harm. The availability of refrigeration systems or transport options for frozen goods, for example to supply supermarkets, is crucial for ensuring the quality of delivered goods. At present, 30 percent of cereals, 40–50 percent of root crops such as potatoes, fruit and vegetables, 20 percent of oil-bearing seeds, meat, and dairy products and 30 percent of fish either perishes or is wasted globally every year (FAO 2011). An improved infrastructure including access to clean, transportable water, refrigeration and more appropriate packaging and storage solutions are decisive factors that the relevant authorities and government institutions need to do more to support. A lack of guarantees when it comes to safe transportation is driving communities to grow perishable goods predominantly close to the city or on the outskirts of urban areas in the pursuit of faster and shorter transport routes. However, land in these areas is often not made available to small-scale producers; instead, farmland located in urban peripheries is largely used by agricultural businesses to produce goods for export and grow animal feed.

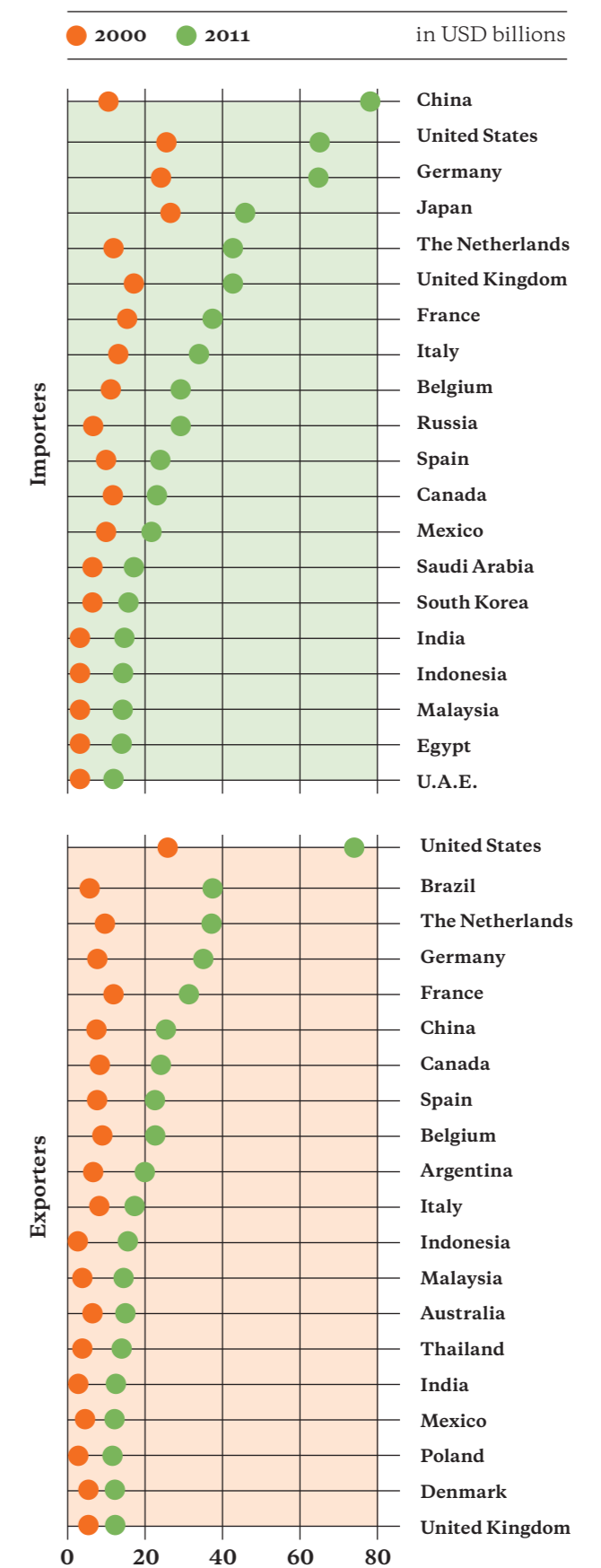### Taking markets to the next generation

As we have seen, urban populations have at least four different methods of accessing food: supplies can be provided by relatives living in the rural areas or via other social contacts; by growing their own produce in a city; through informal systems of food distribution including informal markets; and, lastly, through commercial-based supply. The volume of urban food supplied by supermarkets is increasing globally. In Argentina, Brazil, Chile, South Korea and Taiwan, the market share of supermarkets grew from 10–20 percent in 1990 to 50–60 percent in the early 2000s. In the Greater Manchester area in the United Kingdom, only four super-market chains account for 75 percent of the total food market share (FAO 2015a). A few large-scale local and international companies compete to gain control of – and access the profit generated by – practically every step in the supply chain (essentially from field to plate). Meat, meat products, dairy goods and processed foods make up a substantial part of this market. The emergence of refrigeration systems has also made cities less dependent on rural supply. There is now an expectation that many products should be available all year round,

and items are imported from various parts of the world depending on seasonal availability. The United Kingdom imports half of its food – 30 percent comes from Europe and 20 percent is sourced from other countries (FAO 2015a). Here too there is a close link between rural production and urban consumption, despite the fact that the city is in Europe and the fruit originates from, for example, Granada, Indonesia, Malaysia or Zanzibar; even if it was not grown in the same region, it is still a rural producer who has supplied the good.

As an increasing number of products are being imported, the lack of opportunities for local small-scale farmers to sell their produce needs to be urgently addressed. Currently they face a stark choice, between submitting to supermarketization or disappearing from the matrix of urban food suppliers altogether. (→ *Supermarkets versus informal markets*) It is also crucial to note the number of urban dwellers who supplement their diet with food bought from local producers. In Indonesia, for example, three quarters of the urban population buy their staples from supermarkets but choose local markets and informal traders to purchase local and fresh produce.

The question of whether people will have sufficient access to decent quality food will heavily depend on the availability of informal markets and transport networks that are accepted, maintained and supported by the state. Ensuring such a structure is in place will be the job of administrative entities and public authorities as well as the police. The state needs to assist and stabilize urban food supply systems, for example by supporting farmers' markets in impoverished districts, subsidizing local produce, or providing microcredits and other suitable financial instruments for local traders to create better conditions for improved hygiene and the safe storage of their goods. In light of this approach, securing the food supply of urban populations should also be considered, and provided, as part of social security systems. (→ *Overlooked poverty*)

A comparison of major food importers and exporters: 2000 and 2011

● 2000　● 2011　　　　in USD billions

Importers (from top to bottom): China, United States, Germany, Japan, The Netherlands, United Kingdom, France, Italy, Belgium, Russia, Spain, Canada, Mexico, Saudi Arabia, South Korea, India, Indonesia, Malaysia, Egypt, U.A.E.

Exporters (from top to bottom): United States, Brazil, The Netherlands, Germany, France, China, Canada, Spain, Belgium, Argentina, Italy, Indonesia, Malaysia, Australia, Thailand, India, Mexico, Poland, Denmark, United Kingdom

0　20　40　60　80

Source: FAO 2014c

Supermarkets versus Informal Markets: who is winning the battle to feed our cities?

Francisco Marí

Inviting markets awash with colour and offering a bountiful selection of fruit, vegetables, fish, meat and other products from local producers are still a mainstay of many communities. In developing and emerging countries, they are a key source of food for many cities. Millions of shopkeepers sell produce from small-scale farmers. Countless snack bars, particularly in Asia, are also on hand to turn this fresh food into healthy meals. The entire food production and distribution chain thus provides many with a secure income and access to affordable food. However, in recent years, this form of food provision has been changing – not only in large cities, but in medium-sized urban centres too – and the biggest drivers of this shift are multinational supermarkets and national supermarket chains.

Together with municipal authorities, international and national supermarket chains are trying to eliminate informal markets. They argue that supermarkets improve food safety, and can safeguard the provision of a wide range of food items and ensure their constant availability – all at the lowest possible prices – while claiming that even the poorest city dwellers could benefit. But the reality paints a far different picture.

A store run by supermarket chain Carrefour in Mexico.

'Supermarkets for the poor'

The expansion of international supermarket chains appears unstoppable. Such corporations have already invested vast sums in foreign countries and have successfully focused their efforts on states where the urban middle class, and their buying power, is on the rise. The supermarket share of the total food market has grown substantially, predominantly in Southeast Asia, Eastern Europe, as well as Latin and Central America. Countries where supermarkets had control of less than 5 percent of the market just a decade ago have seen their influence skyrocket to 30–50 percent. In Chile, China, India and South Africa, domestic supermarket chains have emerged that sometimes beat foreign corporations to the punch simply by copying their model – with impressive results. In some Latin American countries, for example Chile, Argentina and Uruguay, supermarkets have managed to gain market shares on a par with those seen in industrialized countries. The same can be said of certain nations in Asia, such as Taiwan, Thailand and South Korea. Supermarket chains might still be in their infancy in southern and eastern Africa, but even here a rapid expansion is already underway.

Large posters advertizing imported fortified products stand right alongside the market stalls of local farmers in the Togolese capital Lomé.

Supermarkets are not just targeting the capital cities of Asia, Latin America and Africa (and the wealthy elites who reside there). These chains are also gradually expanding into medium-sized cities and impoverished residential districts. A key trend is starting to emerge: that of 'supermarkets for the poor'.

Supermarkets are thus becoming drivers of the general commercialization of food taking place both domestically and internationally. In countries of the Global South, they employ a multi-level system that comprises centralized procurement and logistics and decentralized outlets. In eastern Africa, they serve poorer neighbourhoods via convenience stores, i.e. small local shops situated in residential areas selling a very limited range of goods that are specifically selected to match the purchasing power and consumption habits of those living in the immediate vicinity.

The proliferation of supermarkets is based on international supermarket chains actively transferring capital and technology (foreign direct investment). The WTO's Agreement on Trade-Related Investment Measures (TRIMS) and General Agreement of Trade in Services (GATS), designed to liberalize investments and the service sector respectively, were key in this respect. The EU has also recently signed a number of bilateral trade agreements which further ease market access. Germany directly invests in the foreign branches of certain supermarket corporations, and does so under the aegis of bilateral investment protection agreements that the Federal Republic has signed with so-called 'host countries' (more than 170 such agreements are already in place), as well as under protective measures offered by

the World Bank's powerful arbitration institution, the International Centre for Settlement of Investment Disputes (ICSID). These international bodies are designed to enable multinational corporations to exercise their freedom of establishment in other countries and serve as a deterrent for host countries who wish to restrict the activities of such enterprises. The rules of the GATS agreement under the WTO are based on the principle of 'supply and demand' between states, i.e., 'I want access to your retail market, and in return I will grant you access to my software market'. The EU has requested unfettered access to the retail markets of 60 countries via the WTO's GATS council. In 2002 one such request was submitted regarding Thailand. Initially, the Asian country only wanted to allow foreign supermarkets outside of a 15-kilometre radius of city centres in order to protect the small- and medium-sized sellers located there, but it was forced to retract its demand under immense pressure from the WTO's negotiators. Today the supermarket share of Thailand's food market is one of the highest in Asia.

No more space for informal markets?

The so-called 'supermarket revolution' should not be seen as simply an expression of consumer demand. Rather, this is a development that has been encouraged and imposed in order to enhance the profits of multinational food corporations, even with the meagre expenditure of the world's poorest (see Buntzel/Marí 2015).

Throughout this process, city councils have played a shameful role just as they have done in Germany and Europe. Despite the widespread protests of shopkeepers – in Indonesia alone, more than 13 million have expressed their outrage – authorities continue to grant national and international supermarket chains tax incentives and permits to open new stores. To make sure the investments made by these chains deliver the expected returns, informal markets are either brutally pushed out of the city or subjected to harsh restrictions. The social upheaval this causes is simply accepted as part and parcel of the trend. The disappearance of millions of jobs in the food distribution chain has a devastating impact, and nowhere are enough new jobs created to offset the loss. The streamlined systems of metropolitan countries are adopted by supermarkets, or developing countries copy the supermarket model – and imported processed products often start appearing on the shelves.

The fact that small-scale retailers are being squeezed out of cities is not only exacerbating urban poverty – it is also making it harder to ensure the poorest citizens have access to affordable food. The sizes and quantities on offer in supermarkets are not within their budgets.

Rosabeth Rivero runs her own bus company and has a business selling rice on Palawan in the Philippines.

Supermarkets only purchase the best quality of a yield (harvest), which means a rejected item may taste good but be the wrong size or shape by supermarket standards. Until recently, this 'substandard' produce could be sold on to less affluent individuals at a lower price. This helps minimize so-called 'post-harvest losses', i.e. goods that perish on their way to consumers, perhaps due to a lack of refrigeration or transport. But the pro-liferation of supermarkets is now making this impossible. The impact on smallholders is also devastating. Supermarket chains prefer to source their local goods from a small number of large- and medium-sized commercial holdings as small-scale farmers are rarely able to meet the conditions and standards such chains demand. These stipulations can vary. For example, suppliers may be required to have irrigation systems, independent packing and storage space, documented pesticide use and hygiene standards, such as sanitary facilities, or to guarantee a certain quality and/or quantity. They may also have to transport their goods to supermarkets or their warehouses. *(→ Town – country – food)* For those growing vegetables on anything under two hectares of land, predominantly for subsistence purposes, and who then sell any surplus either to informal traders or at urban markets, these conditions are impossible to meet. Such a high level of investment would be required that it would take years to recoup the cost, if at all.

Trust is more important than standardized systems

The supply relationships in place for the (mostly fresh) products sold on informal markets are largely based on trust. When shoppers visit the market, they know the market sellers, who, in turn, know their wholesale retailer. The latter will then be in direct contact with the farmers who wish to sell their goods at market. In smaller cities, particularly in Africa, it is the smallholders themselves or their relatives who go to market once a week to sell their wares. Wholesale retailers also procure goods at markets which they then transport to larger cities during harvest season. This system offers one crucial advantage: regardless of the quality of each individual item, a purchaser can be found who is willing to pay an appropriate price. The standards that exist in such direct value chains are based on size, taste and ripeness. However, the actors involved are increasingly having to adhere to governmental stipulations concerning food safety, especially with regard to perishable goods such as eggs, milk and meat. As everyone knows each other personally, if a problem occurs the perpetrator can quickly be identified and held to account. But given that it is in everybody's interest to uphold lasting business partnerships, each person involved in the chain has just cause to fulfil the desired 'standards'. Should something go wrong, the damage is limited – but this is not the case when it comes to large-scale industrial production. Here it is almost impossible to regain control if there is an outbreak of disease or a spread of pests.

Despite this, supermarket chains continue to proclaim that their production methods are the safest. They force their suppliers in developing countries to produce goods under the same conditions in place in industrialized nations. In order to achieve this, a number of producers are forced into contract farming. However, there are only a handful of medium- to large-sized holdings that can afford such measures, which often require substantial investment. The necessary funding is usually secured with a loan. Seeds and all the other 'ingredients'

required for industrial agriculture first have to be purchased from the contractor. And there is no guarantee that they will be able to sell their goods at a price that covers their costs. There are contract farmers all over the world who complain of being unable to sell their produce due to it allegedly falling short of certain quality standards. Such complete losses can lead to huge levels of debt, or worse: complete financial ruin. The number of producers that actually benefit from their partnerships with supermarket chains remains small, and over time this group is increasingly becoming limited to medium-sized holdings capable of expansion. Others are losing, or have lost, a market for their goods and have yet to see any benefit from the emerging food industry created by the rise of supermarkets. This new sector is often said to boost employment in rural regions – allegedly creating jobs for those smallholders now out of work. However, this claim is based upon the assumption that affected farmers will lay down their tools and become factory workers; these factories rely on locally grown produce, which they then process into convenience food, but even here smallholders cannot compete. That is because the factories usually work in partnership with contract farmers, and here too producers must comply with the high standards that rule the retail value chain. Add to this the pressure applied by imported goods, and the result is employment opportunities that are limited to extremely precarious positions in factories.

The shift towards supermarket-based food provision is also bringing about significant changes in other areas too. In Asia, signs of malnutrition that have long been common in the US and Europe are starting to emerge, particularly among those living in urban areas. The percentage of processed food high in sugar, fat and meat has risen sharply, which has led to a rapid increase in obesity as well as diabetes becoming a national crisis in many parts of the world. *(→ Junk food)* Malaysia and China are particularly affected by this phenomenon;

in Latin America, the impacts of obesity can be most acutely felt in Mexico.

The supermarket industry never tires of stating that smallholder markets have no future. They claim their goods meet the consumption needs of the emerging middle classes who have been effectively persuaded, thanks to clever marketing, that 'modern' food is right for them. At any rate, so the industry argues, time pressure often means they have no other option but to buy from a supermarket. Municipal councils and national governments continue to espouse the same theory, granting more and more permits for supermarket chains. But there are movements bucking this trend. Take India, for example. Here, local authorities are insisting that supermarkets prove that a percentage of their stock is sourced from local, small-scale producers. Other local councils, in African cities such as Dar es Salaam, are modernizing local markets and taking measures to increase the level of hygiene by improving access to electricity and water. Here a decisive factor will be whether these councils are successful in regenerating key markets located on the outskirts of cities. In megacities increasingly paralyzed by high volumes of traffic, temporary storage facilities are needed to shorten transport distances from the fields to the markets. *(→ Town – country – food)*

Preserving neighbourhood markets in the megacities of the South is essential to ensuring food sovereignty and combatting poverty, hunger and malnutrition, and not only for the most economically disadvantaged urban residents. The successful reintroduction of weekly farmers' markets – selling fresh, seasonal produce from local, family-run businesses – in cities in Europe and the US should motivate politicians in the South to take action now to protect their existing informal markets in order to avoid having to fight hard to re-establish them in twenty years' time.

Freshly picked tomatoes, red peppers and other vegetables on sale at a market stall in Ibadan, Nigeria.

Urban Farmers or Hobby Gardeners: does urban gardening live up to the hype?

Stig Tanzmann

Urban gardening is becoming increasingly popular in the big cities of the North. Generally considered to be part of a wider green movement, the trend sees individuals plant kitchen gardens in urban spaces, for example on rooftops or waste land. But urban gardening or urban farming is by no means a practice that began in the North. In fact, in areas of widespread poverty in the Global South, urban agriculture forms part of a broader food strategy.

In Africa, there are an estimated 130 million city dwellers who engage in urban agriculture; in Latin America, the figure is 230 million (FAO 2015b). They plant fruit and vegetables, and rear animals for their own consumption. It is common for city residents to raise their own poultry, and goats and cattle are occasionally kept either to meet subsistence needs, or to raise extra capital. Animals are often kept on open spaces close to the main residence or in other available areas, for example on unused public land. According to the Food and Agricultural Organization, a total of 800 million urban residents worldwide keep livestock; a quarter of them sell their produce at markets (FAO 2014b).

Around 20,000 residents cultivate their own fruit and vegetables within Detroit's city borders.

In megacities, such as Rio de Janeiro, urban agriculture now plays an increasing role in making sure city dwellers generally have enough to eat; the advance of urbanization is causing conurbations to expand so extensively that what was once agricultural land is now being swallowed up by cities. In Buenos Aires there are over 2,000 community gardens. These include individual household and family gardens, and neighbourhood gardens, as well as gardens organised by networks of and for unemployed people. Small plots of land used to grow food or rear livestock are also a common sight in South Africa's townships.
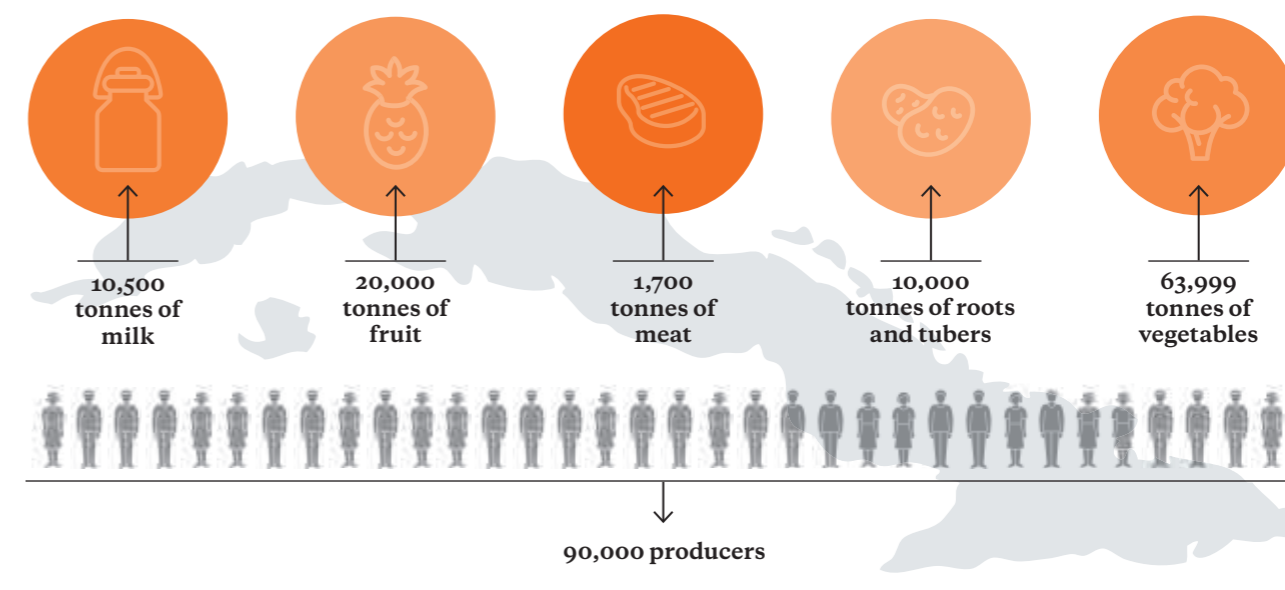
Do urban gardens have the potential to feed the growing number of city dwellers? It is clear that urban farming plays a prominent role during systemic crises or wars, when urban-rural supply chains are cut off or collapse. The following examples highlight how supply shortages can force urban dwellers to seize the initiative and develop their own subsistence farming systems so that they can feed themselves.

Detroit – a network of urban gardens

The economic downfall of the once-great car-manufacturing city of Detroit is a prime example of how crucial urban gardening can be for urban residents. The American dream came to an abrupt end here with the collapse of the car industry, leaving an increasingly deindustrialized metropolis in its wake. The impact this demise had on food security in the city was palpable. Some food items became unaffordable for certain residents or disappeared altogether as Detroit's diminishing economic strength precipitated the large-scale retreat of the existing supply network, which consisted of supermarkets and fast-food restaurants. The city's residents thus decided to take matters into their own hands and began to grow food on former industrial estates. This gradually grew into what is now an impressive network comprising over one thousand urban gardens. Growers first sold their produce on informal markets, and over time, these turned into farmers' markets. Similar projects began to spring up across the United States. As it inherently requires seeds, the urban gardening movement also helps boost and protect communal seed banks (or 'seed libraries'). Both are integral components of the growing resistance in some US communities to industrial farming and the genetically modified organisms (GMOs) used by large corporations.

Volume of food produced annually in Havana, Cuba

| 10,500 tonnes of milk | 20,000 tonnes of fruit | 1,700 tonnes of meat | 10,000 tonnes of roots and tubers | 63,999 tonnes of vegetables |

90,000 producers

Source: IINAS 2015

Havana's agricultural revolution

Cuba is one of the most well-known case studies of urban agriculture in practice. The fall of the Eastern Bloc at the beginning of the nineties precipitated the collapse of the agricultural system that existed across and within the Soviet states and its socialist brother states. Food, goods and oil imports from the Soviet Union, on which Cuba was heavily reliant, vanished almost instantly and the country suddenly found itself without a functioning food supply structure. The result was a dramatic deterioration of Cuba's food situation, especially for those living in cities, who began creating gardens in unused spaces and planting food. This allowed them to increase the volume of food produced in urban regions, particularly in Havana, in a very short period. By the middle of the 1990s, there were already nearly 30,000 plots in the city, which was home to two million inhabitants. Cuba's urban farmers not only use less fertilizer and fewer pesticides, they also plant on very small plots, and adapt their livestock to the constraints of the land. Today in Havana alone, over two thirds of the fruit and vegetables consumed in the city are grown within its boundaries, all thanks to the revolución verde. By making large plots of land available to producers and carrying out scientific research into urban agriculture, the Cuban government has taken active steps to help improve the amount of food that can be grown. One particular focus is the development of agro-ecological production. Overall, 35,000 hectares of land in Havana are used for urban agriculture, the majority of which is organically farmed. The success of Cuba's urban agricultural scheme has inspired many people around the globe. The founders of *Berlin's Prinzessinnengärten* in the Kreuzberg district of the capital, one of Germany's most famous urban gardening projects, also developed their initiative following several trips to Cuba.

15th Garden – life saving for Syrians under siege

A more recent example of how urban farming is linked to political resistance is the 15th Garden network. The activists involved in the network have been working to help spread democracy in Syria for several years and have set up urban gardens in the besieged cities and enclaves of the country so that people can grow food in areas often heavily affected by hunger. The network consists of urban gardens, regionally linked family gardens, self organized farming groups, and farming cooperatives in rural regions as well as farming schemes initiated by refugees living in camps on the other side of the Syrian border. The activists see their goal as working to democratize the food system and to simply ensure that people have access to food again, particularly vegetables. Seeds are exchanged and reproduced, and workshops and courses are organized to educate people on sustainable agriculture and horticulture.

800

**million people
in developing countries
practice urban farming.**

¼

**also sell the produce
grown on their land.**

Source: FAO 2014b

Food policy councils in Berlin and Brazil

The grassroots urban gardening movement in Berlin is undoubtedly linked to the fact that this city is also home to one of Germany's first food policy councils. The aim of these councils is to create a counterweight to heavily agro-industrialized rural regions: members meet with peri-urban rural producer groups to discuss ways in which interests can be more equally met, and the position of rural growers strengthened. This dialogue has the potential to be hugely successful, as impressively demonstrated in Brazil. Here, the national food council, CONSEA (Conselho Nacional de Segurança Alimentar e Nutricional), which comprises representatives from governmental authorities and various civil society groups, has played a role in democratizing the food system, bringing down rates of hunger and malnutrition, and also helping to reconcile the interests of those in the city with those in the country.

All these movements have one thing in common: regardless of their main driving force, they are changing the existing food system from the city outwards. In the process, they turn to traditional agricultural production methods. In some places, the focus is on the richness of rural biodiversity in an attempt to disrupt the monotony of the cities and the nutritional habits that reign supreme. In others, they create new links between producers and consumers, for example via urban food councils. This creates better mutual understanding between rural and urban inhabitants and allows a more diverse range of food to be grown and eaten.

Residents of Jacmel in Haiti plant vegetables in their community garden.

Junk Food for Everyone: can the rise of sugar, fat and empty calories in the Global South be stopped?

Mareike Haase

For those urban dwellers living in poverty, it is becoming increasingly difficult to eat healthily. They are being targeted by transnational food corporations who bring out (often unhealthy) products specially designed for this group that are high in saturated fats, sugar and other refined carbohydrates. This is accompanied by a general trend away from fresh, unprocessed foods and towards industrial, heavily processed, ready-to-eat products. This shift in our eating habits is a direct cause of the world's growing malnutrition problems. In addition, food is becoming less of a social component for people and their communities.

Eating unhealthy food

The latest research shows that globalization, urbanization and economic development have resulted in a rise in the proportion of processed, energy-dense and thus resource-intensive food being consumed in the Global South (Waskow/Rehaag 2011). This is not only due to people thinking ready-to-eat products are a sign of sophistication, modernity and privilege; it is also related to the fact that in order to support and provide for their families in the rural areas, workers migrate to cities, where they often work long days and commute substantial distances and so have less time to shop and cook elaborate meals. Many resort to ready meals that can be made in just a few simple steps. Their diets can range from instant noodles, sugary dairy foods or yoghurts and a wide range of breakfast cereals and biscuits, to burgers and soft drinks. Many of these foods are artificially fortified with micronutrients, such as vitamins or trace elements, so they can then be sold as 'nutritious' products. This ideology of 'Nutritionism' was put forth by the Australian academic Gyorgy Scrinis, and is based on the idea that food can be 'nutri-quantified' and divided into 'good' or 'bad' simply based on the nutrients it contains (Pollan 2009). Seeing food through such a restrictive lens makes artificially adding micronutrients (nutraceuticals) to food – turning a product that was originally low in nutrients into a new, nutrient-rich product – seem like a logical step. However, the interaction between various ingredients, as well as consumers' tolerance levels, are often ignored.

The 'healthy' foods that are making us ill

While consumers in industrialized countries are increasingly choosing regional, certified organic and less

Fast food is on the rise – a fast-food restaurant in the centre of Lomé/Togo.

processed products – not least due to their greater health awareness – the picture is often different in poorer countries. Here a food industry dedicated to the production of heavily processed goods and junk food is attempting to capitalize on untapped potential, with companies such as McDonald's, Nestlé and Danone trying to gain a foothold, mainly in the Global South, where they are trying to win over poorer sections of society (Stuckler/Nestle 2012). Today the market segment for convenience food and soft drinks that contain huge amounts of sugar, fat and salt is almost only growing in these parts of the world. Fast food corporations have even managed to plant their flag firmly in emerging economies, such as China, Brazil and South Africa, where they have already achieved the same market penetration as in industrialized countries (Monteiro/Cannon 2012). Aggressive marketing strategies play a major role in the proliferation of unhealthy junk food

and convenience food, while corporations turn the global shift in consumption patterns to their advantage, claiming that industrially processed food is both practical and nutritious. In so doing, they are accelerating both changes in dietary habits and the disappearance of fresh, homemade food. India is one example. Nestlé offers here workers and schoolchildren quickly prepared lunches in the shape of its Maggi Atta Noodle or Maggi Dal Noodle ready meals. Health claims are also widespread, for example a yoghurt product high in sugar that prevents digestive problems – a claim made by Danone in South Africa. This type of advertizing would have been banned in Europe. These products are also made available in very small packages, making them affordable to even impoverished citizens. In many countries the government regulations are not sufficient to adequately protect consumers from such misleading promises.

'These products are created from substances extracted from whole foods such as the cheap parts or remnants of animals, inexpensive ingredients such as "refined" starches, sugars, fats and oils, preservatives, and other additives. The products are formulated to be intensely palatable and to fool the body's appetite control mechanisms. Many of these products, while legal, are in effect fakes, made to look and taste like wholesome food. They are formulated and packaged to have a long shelf life and to eliminate the need for culinary preparation. They can be consumed anywhere, immediately or almost immediately, and often dispense with the need for tables, chairs, dishes, cutlery, and cups.'

Carlos Monteiro, nutritional scientist (Monteiro/Cannon 2012)

American food corporations immediately conquered the Mexican market after the NAFTA free trade agreement came into force.

The globalization of an unhealthy lifestyle

These changes are having a devastating impact on people's health and on local healthcare systems. The number of those suffering from obesity has doubled globally since 1980 (WHO 2014). By 2025, the number of the world's obesity sufferers will have increased to roughly 228 million; densely populated countries such as India and China are the most affected. 33 million children in emerging and developing countries aged 5 and under are overweight and around the world there are more than 161 million children suffering from 'stunting', i.e. impaired growth caused by malnutrition (UNICEF/WHO/World Bank 2013). Many of these children will endure health complications for the rest of their lives. For those countries affected, the direct consequences of malnourishment and nutritional deficiency constitute an enormous

burden, with individuals, communities and the healthcare system as a whole having to cope with expensive treatment costs. Productivity losses also need to be taken into consideration, for example when those suffering from acute symptoms are unable to go to work. There are also subsequent costs resulting from illnesses caused by long-term malnutrition that need to be factored in. The most well-known 'diseases of affluence' – hypertension, diabetes mellitus type 2, and obesity, along with related heart and circulatory diseases and premature death – are increasing sharply in emerging and developing countries. The globalization of an unhealthy lifestyle has been shown to be one of the key factors for this development (WHO 2015). Healthcare systems need to take the necessary steps to make sure they are able to offer long-term treatment to patients suffering from these chronic, non-communicable diseases. This represents a dual burden on the healthcare services in emerging and developing countries (the double burden of malnutrition). Not only do they have to manage the challenges of hunger and undernourishment, they also have to treat patients who are over-nourished and overweight. The rise in diet-related health problems threatens to undo progress made to reduce poverty. It is estimated that by the year 2025, the high prevalence of chronic, noncommunicable diseases will cost developing and emerging economies over seven trillion US dollars. This amount is several times higher than the funding that would be required to prevent these diseases, for example by putting in place measures to encourage healthy eating (WHO 2014).

Action is thus urgently required. More must be done to curb those manufacturers whose products are causing harm; states need to pass regulations to promote citizens' health. In the summer of 2016, such action was taken by the British government with the introduction of a 'soda tax'. The tax is a levy on soft drinks that contain more than five grams of added sugar per 100 millilitres – and it only applies to industry, which means that it's the producers who pay. The funds generated are to be channelled into initiatives for schoolchildren to encourage healthy living. In 2014, Mexico, the country with the most cases of diabetes worldwide, became the first to introduce a tax on sugary drinks. Initial studies show that it has indeed led to a drop in the number of soft drinks consumed. But there is also a need for strict political guidelines to be applied at several different levels to not only keep the corporations in check but also encourage people to take responsibility. Specific prevention measures need to be set up to help consumers make conscious choices so that they can weigh up the positives and negatives of certain foods and ideally choose not to consume industrially produced, unhealthy products. Only once the turnover figures of the corporations in this sector begin to sink will they reconsider their

As packaged foods are considered modern and affordable, people are increasingly choosing not to cook for themselves.

strategy and invest time and money in other products. After all: 'We want to control what is in our food and how it is prepared. We want it to taste and smell as it should; we want food to be part of our families, our communities and our cultures,' summarises Biraj Patnaik from the Right to Food Campaign (Kruchem 2015).

1/2
a billion overweight adults
are annually costing the global economy roughly

USD 2 trillion

Source: Dobbs et al. 2014

Overlooked Poverty: how can the state help to ensure that city dwellers have enough to eat and a healthy diet?

Nicola Wiebe

City dwellers are particularly affected by fluctuating prices for food and other basic necessities and are therefore reliant on an income. As such, state social security systems can help ensure that people living in cities have access to a healthy diet.

In cities, access to a healthy diet largely depends on whether people have enough money to buy food. As people living in poverty mostly use the money that they receive from state-run programmes such as child benefits or basic social protection to buy food, the temporary or permanent financial assistance that these programmes provide is crucial. At the same time, social protection provides people with either a permanent or – in the case of seasonal workers and people facing incapacity to work – a temporary income; it therefore directly improves people's access to food.

People who live in cities are not usually able to become self-sufficient and can only cover part of their dietary needs by growing their own food. Today, most of the poor urban population is employed in precarious working conditions outside of the agricultural sector and face long working hours. This means that they usually have very little time left to cultivate their own food. (→ *Urban farmers or hobby gardeners?*) Furthermore, mutual support for the urban poor is often provided by others also living on very low incomes. People living in poverty-stricken districts or informal settlements, therefore, are particularly affected by price increases for food or unexpected expenses such as medical costs when illness occurs.

Overcoming the exclusion of the poor

In order to overcome these structural disadvantages, social protection systems are needed that finally guarantee everyone the right to food, health and education. This is the only way to prevent children whose families live in poverty from being born into a situation that prevents them from unfolding their potential and determining their own future. Despite its importance, disadvantaged groups face particular difficulties with regard to accessing social security (such as pensions and health insurance) as these are often linked to formal employment and insurance contributions. As a result, just 22 percent of people throughout the world have adequate social security coverage (ILO 2014). At the same time, it is important to recognize that as women and girls are often employed in sectors such as domestic households

and in informal trade they are less likely to have access to social security. According to the International Labour Organization, nearly 80 percent of Indian women who live in cities work in the informal sector (see Sankaran/ Madhav 2011). (→ *A dual burden*)

Even tax-funded social protection programmes aimed at providing the most basic level of social protection coverage are often unable to reach the people in the worst situations. In addition, people who have moved to cities often continue to be excluded from social protection programmes. One reason for this is the way in which these programmes are arranged: if, for example, access to social protection programmes depends on people being officially registered at a formal address, slum dwellers are excluded from the outset. In most cases, therefore, administrative hurdles prevent people from accessing social protection. Typical problems in this regard include a weak information policy, complicated application procedures, long processing periods and discriminatory treatment (Hopkins/Bastagli/ Hagen-Zanker 2016). This constitutes a service that is diametrically opposed to the needs of people with limited access to information, low levels of education, informal and unstable everyday situations and a lack of self-confidence. These difficulties mean that social protection programmes are not taken up by the poor – despite the fact that they are entitled to use them and would certainly benefit from doing so. As such, Bread for the World promotes social movements – in countries such as India and South Africa – that provide advice to the most disadvantaged groups in society about their rights, and supports them in upholding their individual and collective rights. All of these movements also work at the political level to help ensure that the poorest people in society gain access to social protection.

New opportunities to shape social policy

As part of its responsibility to guarantee food security, governments also develop social protection and social policy programmes related to food. These include school meal programmes, food subsidies, direct distribution of food via social institutions such as nurseries and hospitals, and the establishment of food reserves that help prevent large fluctuations in the prices of staple foods. These policies mean that the public sector has a substantial yet largely predictable requirement for food, and, of course, the need for public procurement. Therefore, governments can shape social policy through smallholder friendly procurement of inputs, and by this means contribute to

reducing poverty in local rural communities while improving sustainable development of national food production. Long-term contracts with smallholder farmers can provide farmers with a stable income and better creditworthiness. This enables them to plan for the future and thus remain in rural areas instead of being forced into the cities.

In practice, however, public procurement procedures rarely exhaust the opportunities that exist to shape social policy; this is also the case in Germany. Decision-making continues to be dominated by the cheapest available price. This issue is compounded by bureaucratic obstacles, such as the inability of smaller groups of producers to meet the minimum order volumes or standardization requirements applied in public tenders. In many cases, these groups do not have the required commercial status or are simply unable to compete (on price) with large-scale agricultural enterprises and imported goods (De Schutter 2014). Clearly, a political decision is needed that shifts the focus to other procurement criteria, such as local, small-scale, ecological methods of production.
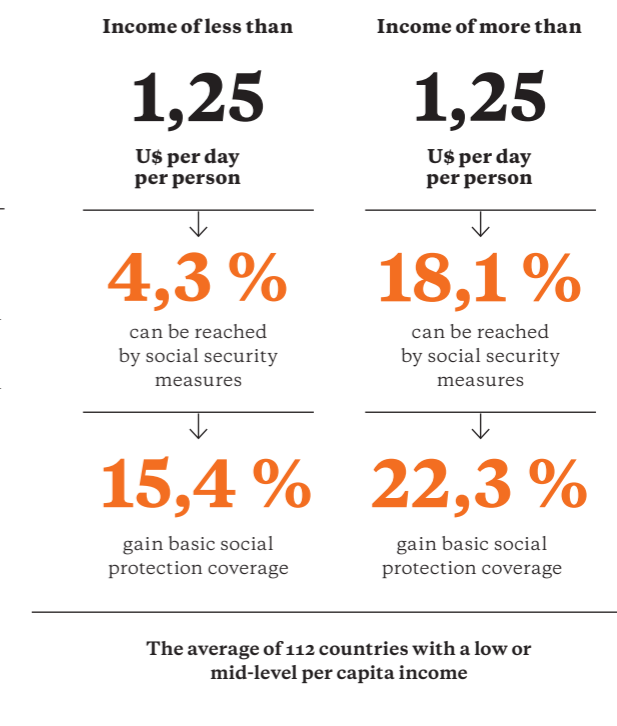
There are a number of positive examples in this context that demonstrate that other approaches can be implemented with great success. The Brazilian government's Zero Hunger programme provided a contractually secured public demand for agricultural products that reduced the risks faced by smallholder farmers and encouraged them to invest in the quality of their products. This also enabled smallholder farmers to increase their income and thus improve their living conditions (Swensson 2015). CAPA – a Bread for the World partner organization – provides an impressive illustration of how this can be done. (→ *Bread for the World's partners leading the way*) Brazil's Zero Hunger programme underwent numerous learning cycles and changes and this enabled it to continuously increase the volume it directly ordered from smallholder farmers. In 2012, the programme reached around 190,000 producers. In addition, Brazil also applies a 30 percent quota for produce from smallholder farms to its school meals programme. These experiences have inspired other countries and even international organizations such as the World Food Programme, which is implementing a new approach to public procurement in 20 countries under the Purchase for Progress pilot initiative (WFP 2015).

A positive impact in towns and the countryside

There are numerous ways in which government policy can focus more on poverty reduction and become more coherent. When combined with low access barriers and

the active distribution of information, universal social security and basic social protection provision are fundamental principles of inclusive urban development. They help people to help themselves and use the opportunities offered by the economic and social dynamism inherent to cities. Moreover, they enable people to reap the benefits of urban life, such as the diversity of lifestyles, the dissolution of rigid social structures, and access to education. Furthermore, this can also help to change paralyzing norms, rigid gender roles and patterns of oppression. Nevertheless, state actors still need to consider the impact of policy on producers and view urban and rural developments as complementary. (→ *Town – country – food*) For example, it is essential that low-cost food procurement for social policy programmes does not lead to further impoverishment in rural areas. Instead, the scope available for policy change needs to be used to create beneficial links between food security in the city and food-securing incomes in the rural areas.

Who has access to social protection?

Income of less than	Income of more than
1,25 U$ per day per person	**1,25** U$ per day per person
↓	↓
4,3 % can be reached by social security measures	**18,1 %** can be reached by social security measures
↓	↓
15,4 % gain basic social protection coverage	**22,3 %** gain basic social protection coverage

The average of 112 countries with a low or mid-level per capita income

Source: Gentilini 2015

A Dual Burden: why women are particularly affected by malnutrition and urban poverty

Carsta Neuenroth

A street vendor carrying her child on her back while selling fruit to people stuck in rush hour traffic.

Life in the city often enables women and girls in the Global South to have more autonomy over their lives than is currently possible in rural regions. Discriminatory traditions tend to be more rigid and have deeper roots in rural areas. Furthermore, as women are usually responsible for feeding the children and other family members, their situation, which is marked by poverty and gender discrimination, means that the whole family can suffer from malnutrition. In the hope of a better life, many women move to the cities, either voluntarily or in times of crisis, disaster and conflict. However, as it is not usually possible to grow food in cities, women in urban environments face the double burden of having to earn enough money to feed themselves and support the rest of their family.

Population growth and migration are the driving force behind the rapid growth of urban areas: by 2050, 80 percent of the world's population will be living in cities. Moreover, increasing numbers of women in the Global South are moving to cities. Many women and girls seize the opportunities available in cities to gain education and training, benefit from formal employment and access networks that can enable them to cope with their everyday lives and experience a sense of solidarity. Nevertheless, poverty, food insecurity and malnutrition still often accompany the move to the city and processes of urbanization (Tacoli 2012). These difficult conditions mean that the hopes of many women and girls of a better life in the city are often dashed.

Broken dreams in the city

Women and girls are disproportionately affected by hunger and malnutrition. Of the more than two billion people suffering from malnutrition throughout the world, 1.4 billion are women and girls. This situation is caused by structural disadvantages that lead women and girls to have a lower social, educational and economic status than men and boys. These factors have an impact on the opportunities available to women and girls and prevent them from shaping their own lives and securing the right to a suitable, balanced diet; this is particularly the case with women who are poor.

Throughout the world, women already make up half of all migrants and internally displaced people (IOM 2015). An increasing number of women hold the primary responsibility for feeding their families and are therefore moving to cities without a partner or other adult family member in the hope of finding better conditions for feeding themselves and their children. In other cases, women may follow their husbands and families once these have decided to move to a city.

Both women and men assume that life in the city will provide them with better living and working conditions as well as open up access to infrastructure and services such as housing, transportation, electricity, water and sanitation. However, women also leave their homes and move to the city due to the gender-based discrimination and widespread sexualized violence that they are exposed to in rural areas. Young women and those who resist forced marriage or who rebel against other

traditions often treat migration as a way of circumventing the expectations placed upon them by their families. As women still have no right to land or inheritance in many parts of the world, widows and women from polygamous societies see no other choice than to earn a living in the city when their husbands do not meet their family responsibilities. Doing so, however, is not easy for them as they face numerous obstacles when it comes to feeding themselves properly, gaining a balanced diet and overcoming poverty.

The reality behind life in the city: poor working conditions and low pay

Urban households are far more dependent on food that must be bought than families living in rural areas (→ *Overlooked poverty, Town – country – food)*. This problem increases city dwellers' dependence on an income. Thus, they are dependent on the scarce opportunities of finding regular work or getting a stable job. Women living in poverty are more affected by unemployment than men. Figures from the World Bank for Dhaka (Bangladesh) show a 25 percent rate of unemployment among poor women and a 10 percent rate among poor men (World Bank 2007). Disadvantaged women also rarely find employment in the formal sector, not least because they are often unable to exercise their right to education. As such, they are more dependent on the precarious informal sector than men and are usually only able to gain employment as small traders, street vendors, domestic workers and nannies. Although the income that this provides is marginal, it remains indispensable if they are to feed their families, even in households where both partners are in employment. As such, more and more households in Latin America, Sub-Saharan Africa and many Asian countries are dependent not only on the unpaid care provided by women, but also on the money that they earn. Finally, in many cases, children also have to work and are therefore unable to attend school. This means that they are also destined for work in poorly paid unskilled jobs in adulthood, just as their parents were.

The double burden: 'job' and family

Women not only face unfavourable working conditions, but they usually also have to care for their children, and the entire household. This is often harder to do in cities than in rural areas, where mothers can take their children with them to the fields where they work. Women in cities are not usually permitted to have their children with them during working hours. This difficulty is made worse by long journeys to and from work, which also increase women's dependence on the (often inadequate)

childcare available (Mohiddin/Phelps/Walter 2012). Moreover, women's domestic situation prevents them from improving their labour market position, such as through training, as they already work most of the day and are constantly faced with a lack of time. This vicious circle will be hard to break as long as care work is not redistributed and valued, and instead continues to predominantly rest on women's shoulders.

A lack of education means that women particularly often work in the informal sector, like this woman in Vietnam who feeds her family by working as a market vendor.

The high costs of living

Life in cities is expensive; this is particularly applicable to slums. Housing, energy and water costs are often higher in slums than in rural areas, despite the lower quality and inadequate levels of service provision. Price increases, especially for food, have catastrophic consequences on the diet and living conditions of people in informal settlements. The high population densities in slums, accompanied by inadequate water supplies and a lack of hygiene, lead to health problems, particularly among children who have been weakened by malnutrition. Furthermore, there are usually no healthcare centres in slums, meaning that people incur extra costs when they need to travel to a doctor – costs that cannot be met by the normal household budget. Research by UN Habitat has shown that households run by women – and these households are increasing in number – are particularly affected by poor housing and living conditions in precarious districts (see Women Watch, n.d.). Insecure housing, and toilets located in isolated areas, increase the risk of women and girls facing sexualized violence. Also, women are often particularly affected by the power and violence exercised by the state during slum clearances.

The impact on diet

Despite the situation set out above, hunger and malnutrition are no less prevalent in cities than in rural areas. Urban households tend to eat greater levels of energy-dense foods that contain fewer micronutrients, resulting in malnutrition, which can manifest as both obesity and undernourishment (Mohiddin/Phelps/Walter 2012). Both forms of malnutrition have a negative effect on health and performance.
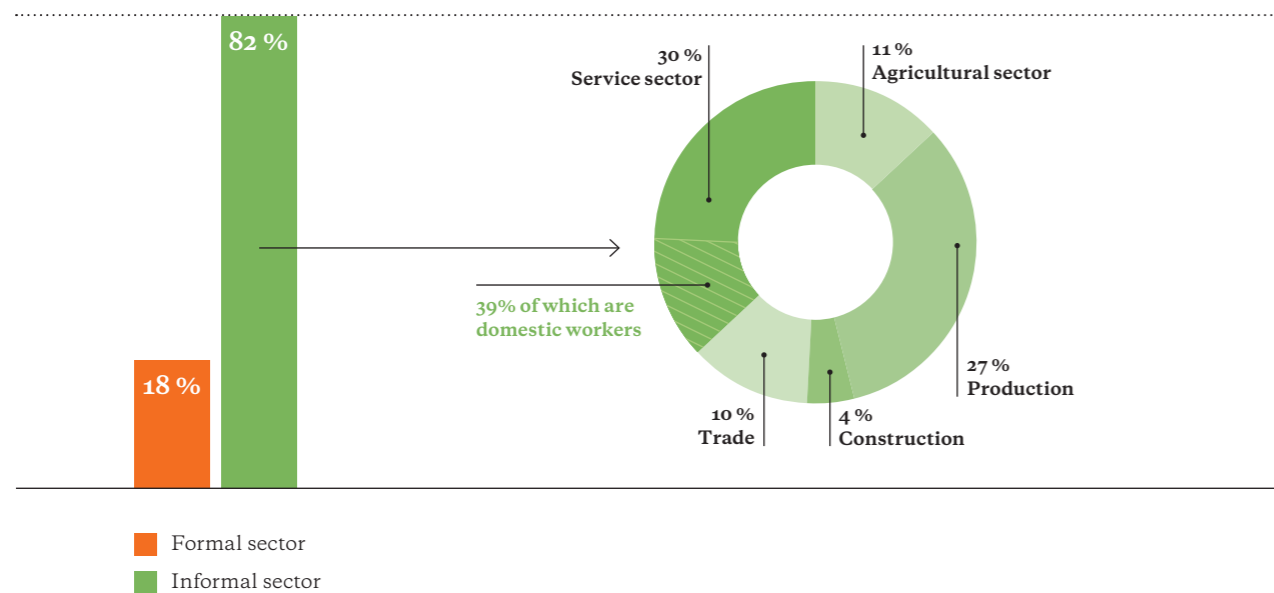
Small housing and badly constructed kitchens – typical of poor districts – coupled with high prices for gas, kerosene and firewood, often prevent urban households from cooking. This leads them to buy meals on the street, or in places where food safety and hygiene are not taken particularly seriously. This situation is exacerbated by the poor sanitary and hygienic conditions in the slums, already damaging to people's health, which lead to an insufficient intake of nutrients from the food that people are able to buy. Moreover, in cases where people can cook, the tight household budget only enables them to buy small quantities of food, despite the fact that buying larger quantities would be more economical

in the long run. At the same time, they rarely buy fruit and vegetables because these are relatively expensive. Many people living in poor conditions work in city centres where cheap meals are simply unavailable. As a result, they have to go to expensive shops or supermarkets to buy the cheapest products that they can find, which are generally of poor nutritional quality. Finally, the poorer the household – and women-led households are among the poorest – the more likely the household is to feed itself in this manner so as to keep the cost of food to a minimum.

Policies for women's rights

The solutions are clear: decent housing, better social infrastructure and services, a safe and violence-free environment, and adequate employment opportunities that pay proper wages. These policies would enable women and girls to capitalize on the potential of cities. Governments and municipalities must take the rights of people living on the outskirts of cities seriously – and the rights of women and girls in particular – and implement policies that contribute towards gender equality.

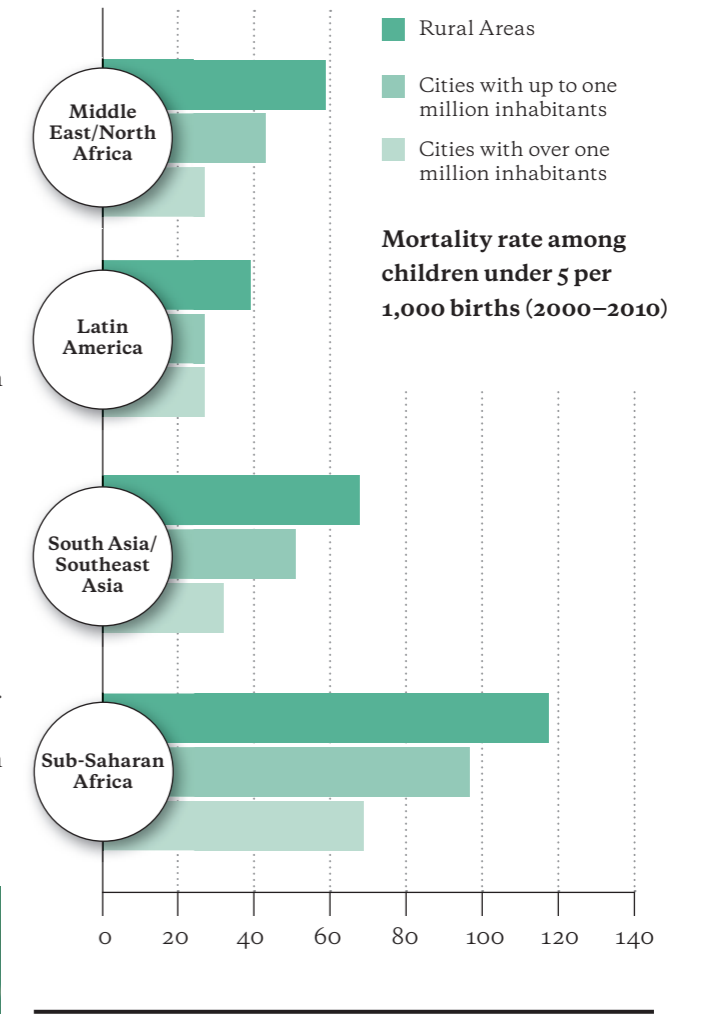**The employment of women in Indian cities in 2011 and 2012 (%)**

- 82 %
- 18 %
- 30 % Service sector
- 11 % Agricultural sector
- 39% of which are domestic workers
- 27 % Production
- 10 % Trade
- 4 % Construction

■ Formal sector
■ Informal sector

Source: WIEGO 2011

Poor Districts – Rich Districts: why city-based health services need to cover all inhabitants

Astrid Berner-Rodoreda

Health is a human right. It applies to all and is independent of people's place of residence. The degree to which people are able to live healthy lives depends, however, on various factors, not least on where they live, whether they are rich or poor, their level of education, the infrastructure available to them and their level of nutrition.

One would assume that fresh air, more exercise, better nutrition and lower levels of environmental pollution in the rural areas lead to better health outcomes; yet, global statistics show that city dwellers are often healthier than people living in rural areas. There are many reasons for this: cities have more resources and a better infrastructure than rural areas. Healthcare facilities and medical staff, as well as pharmacies and counselling services, are also often in close proximity to where people live. This makes it easier for cities to promote health services and to facilitate the treatment of diseases (WHO/UN HABITAT 2016). People living in rural areas, by contrast, mostly do not receive the same level of health care. A 2013 study that collected data from 37 low- and middle-income countries found that in cities with more than one million inhabitants, child mortality was decreasing much faster than in rural areas or smaller towns.

■ Rural Areas
■ Cities with up to one million inhabitants
■ Cities with over one million inhabitants

Mortality rate among children under 5 per 1,000 births (2000–2010)

Source: Fink/Hill 2013

People in cities are often able to reach hospitals, such as this one in Myanmar, more easily than people living in villages.

Health in the City

Increasing urbanization has led to a greater responsibility for cities to develop an appropriate medical infrastructure that can prevent and treat both infectious diseases and non-communicable diseases such as diabetes, cancer, cardiovascular and respiratory illnesses. Although non-communicable diseases also occur outside of cities, the four main risk factors associated with them – an unhealthy diet, alcohol use, tobacco consumption and a lack of exercise (due to a sedentary lifestyle and the use of motorized transport) – are more common in cities than in rural areas. In India, for example, cardiovascular diseases and cancer are the leading causes of death in cities (see WHO/UN HABITAT 2016).

Life in Manila (Philippines): people live right next to a sewer.

Infectious diseases are also widespread in cities as diseases such as tuberculosis can spread more easily in areas where people live in closer proximity to each other. HIV and sexually transmitted diseases are also far more prevalent in cities than in rural areas. According to UNAIDS data, one quarter of HIV-positive people worldwide live in the 200 cities that account for 10 percent of the world's population (see UNAIDS 2014). HIV prevalence rates among sex workers, intravenous drug users and men who have sex with men are also higher in cities.

Nevertheless, cities have more resources to deal with this situation and to provide relevant information, health services, medication and diagnostics than rural areas. In Sub-Saharan Africa, more than 90 percent of HIV services are provided in cities. UNAIDS also heavily relies on cities and city administrations in its strategy to end AIDS by 2030. Through the expansion of health services in terms of both prevention and treatment, the provision of education, and better access to nutrition and HIV treatment, the wider metropolitan area of Durban (South Africa) was able to reduce mother-to-child HIV transmission to below 1 percent (UNAIDS 2014).

Still, cities are not homogeneous entities and the health of people living in urban environments depends heavily on where and under which conditions they live. Between 2008 and 2009, 12 percent of people living in the slums of Nairobi were HIV-positive; in other parts of the city the rate was 5 percent (see UNAIDS/UN HABITAT 2015). Alcoholism and violence against women – including sexual violence – are often a big problem in informal settlements. This places women at a higher risk of an HIV infection. Furthermore, poor nutrition and a

weakened immune system contribute towards greater levels of susceptibility to infectious diseases. When disease prevents people from securing an income for themselves or their families, a fateful cycle ensues.

Social Inequality in Confined Spaces

In the past, infrastructure development has often been unable to keep up with rapid levels of urbanization. In addition, city administrations have not always accepted their responsibility for building adequate infrastructure in slums because informal settlers are – theoretically at least – outside their purview. This situation is exacerbated by the fact that municipalities often have limited planning and management resources which restrict their ability to provide the required services or to respond adequately to changing needs. In 2007, the United Nations Population Fund (UNFPA) described the situation of people living in informal settlements as follows:

'The urban poor, and especially although not only the residents of informal settlements, face formidable challenges in the form of environmental hazards, inadequate shelter, insufficient provision of water and sanitation and limited access to services, resulting in huge amounts of time spent in ensuring that their basic needs and those of their dependants are satisfied.' (UNFPA 2007)

Ten years have passed since this document was published and very little has changed. Many large cities in the Global South continue to present a paradoxical image: on the one hand, there are 'rich districts', whose inhabitants have everything they could possibly need, and on the other hand, there are 'poor districts', where people lack

everything they need to secure a future for themselves and their families. Providing people with access to adequate levels of basic infrastructure and a healthy diet is an enormous challenge. Unequal access to health services is perpetuating inequalities in living conditions, as health services and hospitals are more likely to be found in urban areas where people have a more or less steady income. As such, the long journeys people would have to undertake to reach these health facilities places these facilities largely out of the reach of people living in the outer districts of a city. Moreover, many people simply cannot afford to pay for their treatment. Health insurance coverage is often dependent on having contributed to an insurance fund , which many people cannot afford to do. Out of pocket payment is out of the question for many people due to insufficient financial resources. As a result, people living in poverty do not visit healthcare centres until their condition has deteriorated so much that they literally have no other choice. By this time, good health outcomes are harder to achieve and the cost of treatment has usually increased many times over, and it may be impossible for them to cover the costs. In addition, the costs incurred drain their resources for a healthy diet, which in turn increases morbidity.

Greater Health Risks in Informal Settlements

Informal settlements such as slums are frequently located near rubbish dumps, and this imposes an additional burden on the health of the people living in these areas, especially as they often live in makeshift homes. Dwellers of informal settlements are exposed to wind and weather and are more affected by natural disasters such as flooding. *(→ A good climate in the city)* Moreover, these settlements are usually densely populated, which makes it difficult for people to find sufficient space for small gardens where they could grow their own crops and become more self-sufficient. At best, it may be possible to cultivate a few crops using car tires or similar objects. People therefore have little choice but to spend their small income on expensive food items, which further restricts their access to healthy food and places an additional burden on their health. People living in poverty are frequently undernourished or severely malnourished.

Access to clean water and sanitation is also a major problem in informal settlements. As city water supplies are often unavailable in these structurally neglected urban areas, drinking and cooking water often has to be bought privately. *(→ Competing interests)* If toilets exist, they are usually located far away from people's homes and are used by dozens of households. Consequently, they pose a particular hazard to women due to

the risk of being sexually assaulted on the way to/from the toilets at night. In some settlements, people may even be charged to use toilets.

Informal settlements also usually lack any form of organized waste collection and a sewage system. This leads to waste and sewage being dumped on the streets. Clean water for washing or cooking is rarely available and faecal contamination is one of the causes of the high rates of diarrhoea, worm infestations, typhoid and cholera found in these areas. Children, in particular, often suffer from sicknesses accompanied by diarrhoea, and during these periods their bodies are unable to properly absorb the nutrients they need, which in turn leads to greater levels of malnourishment.

People's living conditions deteriorate when health risks and poverty occur at the same time. Persistent social inequality in cities can lead to diseases and epidemics spreading more quickly, and when this happens it often disproportionately affects vulnerable people in informal settlements. It is often impossible for people in these areas to earn an income that would enable them to maintain a healthy and balanced diet because state social security programmes hardly reach the poor urban population. *(→ Overlooked poverty)* This situation is made all the more tragic by the fact that the conditions needed to reach these people clearly exist in cities, at least in principle: the spread of highly contagious diseases can be prevented in cities and people suffering from diseases can be treated. The Global Report on Urban Health, which was published by WHO and UN Habitat, also emphasizes this point and stresses that people who are economically, politically and socially excluded from the achievements of a well-functioning urban society are exposed to a higher risk of falling sick.

What needs to be done?

It is essential that access to information, health education, prevention and treatment as well as nutrition, sanitation and living conditions are improved in informal settlements. Doing so would significantly improve the health and the lives of people living in these settlements. For people already affected by diseases, early treatment should be provided. However, this will only happen, if affected cities and countries are prepared to implement the respective measures, build up their health and social services, provide access to appropriate and healthy food and invest in a better infrastructure in informal settle-ments. Basically, it is essential to ensure that health services and other social services are brought closer to the people who really need them, and this includes providing access to people who live outside of city centres.

Competing Interests: how can urban water management be made more equitable?

Andrea Müller-Frank

Water transport in Goma, a city in eastern Democratic Republic of Congo.

Around half of the world's cities with more than 100,000 inhabitants are located in areas affected by water scarcity. By 2050, more than one third of the world's population will live in regions that suffer from severe water stress. These are regions where water abstraction exceeds recharge by 50 percent (HLPE 2015). City expansion is posing a major challenge to governments and municipalities as water and sanitation supply need to be planned in advance, designed with future needs in mind, while contributing towards sustainable resource management and the fight against poverty.

In addition to population growth, changes in patterns of consumption, the lifestyles of the urban population and methods of industrial and energy production are already leading water consumption to rise to such an extent that many places are already exceeding the limits of sustainable water use. Serious competition and conflicts over water are likely to occur in the future and are already beginning. Rich households and industries,

and this includes not only drinks companies, but also industries involved in water-intensive sectors focused on exports, have begun to politically and financially secure their access to water. Socially disadvantaged population groups, therefore, are already facing a precarious situation with regard to drinking water and sanitation. Many people only have access to water for a few hours a day, and they rely on the use of contaminated irrigation sources to produce staple foods. This directly exposes them to health hazards. If nothing is done to change this situation, the world will face an increased risk of epidemics and the destruction of entire ecosystems at a rate that reflects the extent of urban expansion. However, it is not only competition for water between rich and poor districts within cities, but also competition between urban and rural areas – between the various water-intensive sectors of agriculture, industry and households – that is expected to increase. Therefore, urgent attention and political action is required along the entire water usage chain.

A cause for concern: the growing urban water footprint

Although the demand for water in cities still accounts for less than 20 percent of total groundwater abstraction in most countries, urban water supplies are facing major challenges. Many cities, such as Mexico City, Bangkok, Manila, Beijing, New Delhi and Shanghai, have already depleted both their local supplies of surface water and subterranean sources. This high level of groundwater extraction is even leading to subsidence. In coastal regions, this is causing salt-water intrusion and brackish underground aquifers that are almost unfit for human consumption or the preparation of food. Similarly, a lot of water is lost through leaks caused by damaged water pipes – estimates put this at up to 50 percent of the water supply.

Current growth forecasts predict that global water demand – if it follows current trends – will have increased by 55 percent by 2050. The lion's share of this increase can be attributed to rises in virtual water extraction by the growing cities in the Global South. This is due to the fact that demand for water extraction linked to industrial production (+ 400 percent) and energy generation (+ 140 percent) will exceed the direct demand for water from private households (+ 130 percent) (see HLPE 2015). However, these figures, which stem from the OECD, do not include trends in demand for virtual water for food production. Importantly, the Food and Agriculture Organization (FAO) and the United Nations Intergovernmental Panel on Climate Change predict that increasingly volatile weather patterns will result in an expansion of irrigated agriculture (see HLPE 2015). Progressive urbanization is also linked to changes in diet that increase demand for particularly water-intensive agricultural products such as meat, sugar and rice, but also vegetables

and fruit. Specifically, much more water per calorie is required to rear chickens, pigs and cattle than to grow plants. As such, agriculture consumes the largest amount of water of any sector and already accounts for 70 percent of total water extraction. At the same time, meat production is already responsible for one third of global water extraction, and this trend is growing (HLPE 2015).

Politicians face the difficulty of reconciling diverse consumer rights with the various environmental and economic factors associated with water-resource management. In the future, this will be the only way of creating a framework that can prevent city expansion occurring at the expense of rural populations and causing extreme levels of inequality. Although agriculture can play a key role in this regard, resolving this situation will require more than just improved water consumption management. Rather, environmentally sound methods of cultivation are needed that are adapted to the specific social situation on the ground and ensure that the ecosystem services which are developed preserve and restore local water cycles. From a human rights perspective, the fundamental rights to water and to healthy and culturally appropriate food have to be reflected in the usage hierarchy and planning of urban-rural relations. Moreover, the international interdependencies that are driving water exploitation need to be unravelled and held to account for what is happening on the ground. The current situation in Brazil provides an example, as households are losing out in the face of the powerful interests of industry and export-based agriculture.

At the same time, Germany is also part of Brazil's water problem: Brazil and Argentina use two and a half trillion litres of water every year to cultivate the soya beans required to produce the feed needed by the meat industry. Almost 38 million freight containers would be

The water crisis in Brazil

What do the water reservoirs in Cantareira, Paraíbuna and Serra Azul have in common with the metropolises of São Paulo, Rio de Janeiro and Belo Horizonte? Most of the natural forests that were found around these cities have been cleared to make way for agro-industrial production – and this has had a significant impact on the entire regional water balance in southeastern Brazil. As the soil in this area is now losing its capacity to store water, rivers are swelling faster in heavy rains leading rain water to flow directly to the sea. As such, less water is supplying the underground aquifers. The reservoirs that provide these cities with water are already at their lowest ever levels and this is fuelling a crisis that is already affecting around 77 million people.

Although well-off households have yet to see any impact – their water comes from secure groundwater sources – protests against cuts to the water supply, and fines for private households are increasing in the poorer areas of these cities. Special conditions have been granted to major customers in industry and agriculture for far too long: between 2005 and 2014, the number of companies receiving such concessions increased from 8 to 526, and these enterprises consumed a total of 25 billion litres of water in 2014 – 92 times more than they consumed in 2005.

required to transport this amount of water. If these containers were loaded onto a freight train, it would stretch for more than half a million kilometres and span the circumference of the earth 13 times. This is one of the reasons why the UN has proposed a global system of certification aimed at preventing water from being exported from regions under water stress (UN 2015).

Precarious drinking water and sanitation provision on the margins of society

According to the 2015 UN World Water Development Report, drinking water supply and access to sanitation deteriorated between 1990 and 2012 in numerous African countries. Moreover, the provision of drinking water has fallen from 42 percent to 34 percent. The figures for sanitation are even worse: 40 percent fewer people had access to toilets and sanitation in 2002 than in 1990. The main problem in this regard is providing access to water and sanitation to the people living on the margins of cities and in informal settlements. At best, the rates and quality of public water provision in these areas are inadequate, and this gap is often filled by independent vendors. This means that people in these areas are forced to pay significantly higher prices for an unsatisfactory water supply that does not even comply with regulatory mechanisms covering water quality and availability. This crisis is made worse by the rising costs and difficulties of providing sanitation, with women particularly affected by this situation.

Although the Millennium Development Goals (MDGs) provided two billion people throughout the world with access to 'improved drinking water', the World Health Organization and UNICEF's 2014 report on water stress and food security points out that too little attention has been paid to the quality of water and whether particularly vulnerable groups in poor urban areas have adequate access to water. The sustainable development goals set out in Agenda 2030 should change this situation. Although they still do not directly mention human rights, Goal 6.1 focuses on a universal and equitable drinking water supply, with Goal 6.2 calling for special attention to be paid to the needs of women and girls and those in vulnerable stations in providing hygiene and sanitation to all. Goal 6.b has also led the international community to integrate the promotion of participatory mechanisms for the involvement of female recipient groups as an interdisciplinary issue into public decisions that affect the water sector. These are important steps in the right direction as it is essential that the people affected are able to effectively participate in the process if the human right to water and sanitation is to be realized, and if control mechanisms within political and administrative decisions are to be established. Currently, a trend is devel-
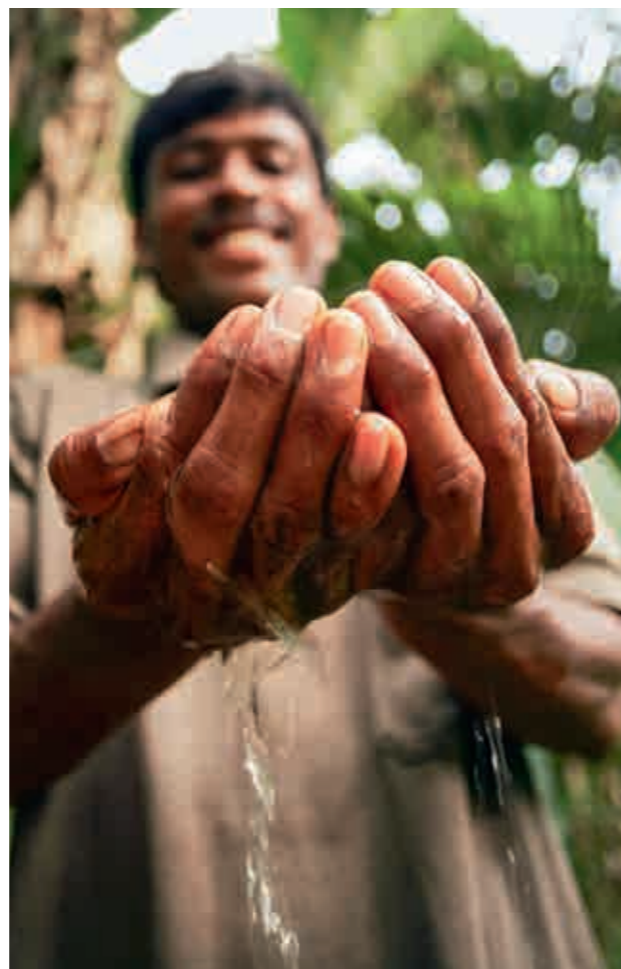
Farmer Chandana Kumare built his own irrigation system for his papaya and banana trees near the town of Ambalantota in Sri Lanka.

oping away from privatization and towards the re-municipalization of water supplies. Between 2010 and 2015, 235 cases were reported in 37 countries where municipalities had terminated their contracts with private water companies due to their failure to improve efficiency, worsening funding gaps in the supply network and increased consumer prices (Kishimoto/Lobina/Petitjean 2015).

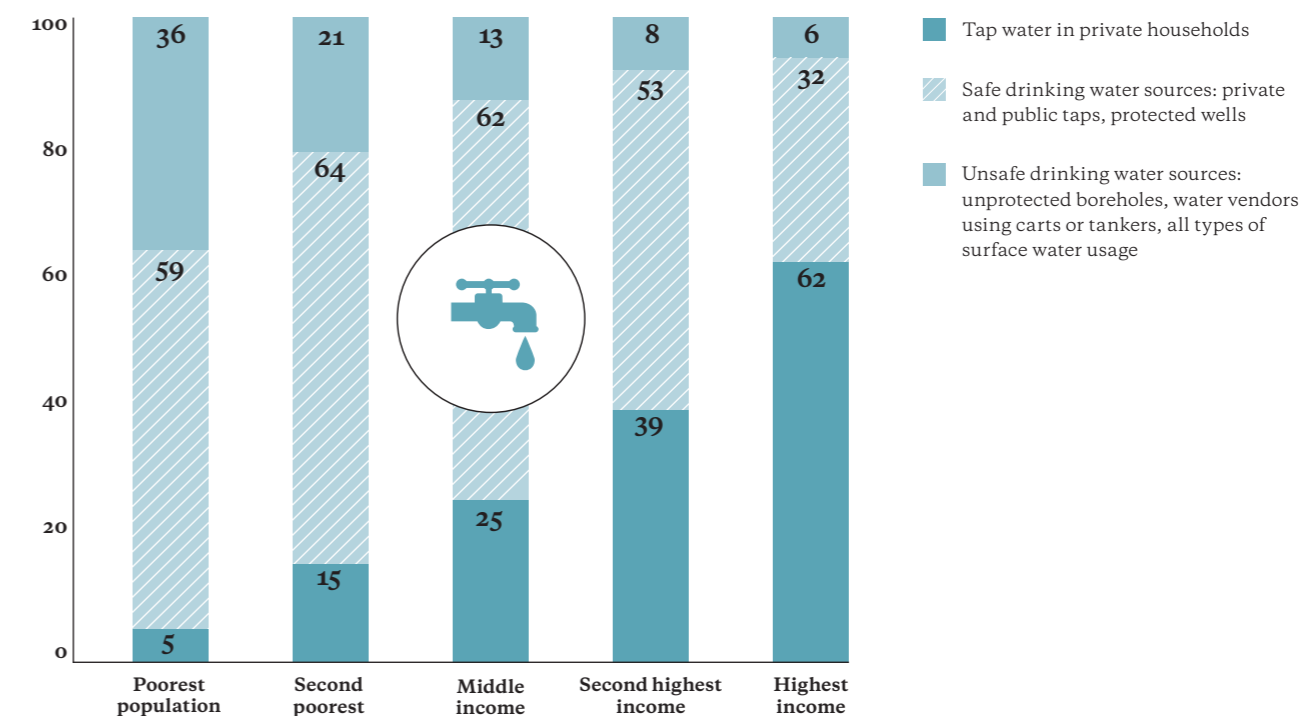## Integrating land and wastewater management

Due to the expansion of cities (→ *Insatiable megacities*), agricultural production is occurring closer and closer to the metropolises. According to UN Habitat, about 60 percent of irrigated agriculture and around 35 percent of rain-watered agriculture takes place within 20 km of urban centres (CFS 2016). Therefore, urban development plans need to focus more on peri-urban agriculture. Importantly, this could provide an opportunity to integrate land and wastewater management (Hettiarachchi/Ardakanian 2016). Up to 70 percent of wastewater from

city households can be recycled. This 'grey water' can be used for agriculture and energy production. However, most African, Asian and Latin American cities lack comprehensive wastewater systems and treatment plants, and instead tend to channel their grey water more or less unchecked into the nearest streams, rivers and lagoons. This water may contain pathogens, worms, bacteria, viruses, salts, heavy metals and toxins. As such, wastewater in these cities is a lost resource that pollutes the environment and poses a hazard to human health. Due to a lack of alternatives, smallholder farmers use this semi-treated or untreated water to irrigate agricultural land (HLPE 2015). This poses a high risk to eco-systems, agriculture, fishing and forestry. Wastewater treatment, especially in arid areas, therefore, is an important resource that can help promote nutrient cycling, reduce environmental pollutants and improve food security.

Some of the problems outlined here have been addressed by the indicators developed to measure the implementation of the SDGs, such as the maintenance and quality of sources of supply. Other objectives include the reprocessing of wastewater and halving the proportion of untreated wastewater worldwide (6.3.), addressing water scarcity by significantly increasing efficiency of water-use

in all sectors (6.4.), integrating the management of transboundary water catchment areas (6.5.) and protecting and restoring natural water systems (6.6). In the shadow of urban expansion, the success of the new sustainable development goals in redressing these issues will be judged by whether they are able to make up for the shortcomings of their predecessors – the MDGs. If this is to happen, international efforts need to increasingly focus on access to drinking water, sanitation, the irrigation methods employed by particularly vulnerable populations in the urban peripheries, and the sensitive urban-rural relationship. Moreover, water management across all sectors must be brought into line with the rights of the various populations in urban and rural contexts. This will require the promotion of appropriate structural policies, infrastructure and control mechanisms alongside the participation of the populations concerned as well as wider civil society. The international interdependencies and responsibilities that drive local water exploitation also need to be uncovered and ended – this is especially the case with export-oriented agriculture. This is the only way of ensuring that the worldwide expansion of cities and their growing water consumption does not take place at the expense of the environment, health and human rights.

Access to drinking water by income in cities in Sub-Saharan Africa (%)

Legend:
- Tap water in private households
- Safe drinking water sources: private and public taps, protected wells
- Unsafe drinking water sources: unprotected boreholes, water vendors using carts or tankers, all types of surface water usage

	Poorest population	Second poorest	Middle income	Second highest income	Highest income
Unsafe drinking water	36	21	13	8	6
Safe drinking water sources	59	64	62	53	32
Tap water in private households	5	15	25	39	62

Source: UN 2012

A Good Climate in the City: why climate change threatens to reinforce social inequality

Eike Zaumseil

The issues related to climate protection and adaptation often arise in the context of the elementary problems that are connected to poverty, supply and infrastructural deficits, and poor governance. This is especially the case in the rapidly growing megacities and urban centres of Africa and Asia. The demand for a green, climate-friendly city that really is worth living in can easily be reconciled with the lives of modern city elites. This situation can be contrasted with the uncomfortable truth that the unpredictability of the natural environment is far less responsible for the impacts of climate change than a form of urban development that only rarely benefits the poorer population.

Many municipalities are unable or unwilling to provide secure housing and legal protection for tenants. At the same time, many city dwellers are also denied access to health, sanitary and educational facilities. The need for climate justice, therefore, is particularly evident in cities. On the one hand, the consumption patterns of the urban middle and upper classes in well-protected neighbourhoods are causing the higher temperatures behind climate change; on the other, more and more people are moving to informal settlements and poor districts where they are particularly exposed to an increase in extreme weather events. These people are in greater danger because they live in high-risk areas such as along the courses of rivers or close to landslide-prone mountain slopes, or because they are not the focus of urban infrastructure or the resources provided for disaster prevention and response. Finally, as their lives are marked by poverty, people in informal settlements have very little capacity to adapt to climate impacts – despite the fact that their contribution to climate change is usually only marginal.

Informality as a climate risk

UN Secretary-General Ban Ki-moon pointed out that the 'struggle for global sustainability will be won or lost in cities'. More specifically, this struggle will have to be won (or lost) in the sprawling slums – the crowded informal shanty towns – located in dangerous places where every year millions of migrants seek refuge from the lack of prospects and poverty they face in rural areas. The unrestricted expansion of cities is largely occurring in the context of informal settlements. These areas are not listed in municipal registers, but in many cases they provide shelter for more than half of a

city's population. The people in these areas not only suffer from poor living conditions, they also have no voice as citizens and are thus virtually excluded from political processes. Importantly, by 2030 approximately two billion people will be in this same situation.

As long as people are unable to access urban basic services and cannot participate in decision-making structures, the fight against the consequences of climate change cannot be won. In fact, climate adaptation measures may even pose a threat to people in informal settlements, such as when, for lack of alternatives, they move into buffer zones on river banks or coastal areas needed for technical protection measures by better-off neighbourhoods. Moreover, entire settlements sometimes have to give way to new dams and discharge channels. When this occurs, people in informal settlements are often neither informed nor consulted, and they usually receive no compensation when they are forced to leave. Relocations often place people in areas far from the city centre, which limits their mobility, and this is not simply due to the costs of travel. Furthermore, when economic considerations are at play, climate adaptation measures are often used as a pretext to get rid of informal settlements and enable new residential and commercial districts to be built on precious urban land for the middle and upper classes (Schauber 2014).

Currently, there are only a few development organizations, such as the Catholic development organization Misereor, that ensure that these new lines of conflict between climate adaptation, land use and residency rights are being placed on the international agenda. In the run-up to the Habitat conference, these organizations worked together with the grassroots and political networks established by people living in informal settlements to ensure that in cases where relocations really are unavoidable, human rights provisions and, in particular, the ban on forced evictions, were to become core elements of the New Urban Agenda (→ *Habitat III*) (Misereor 2016). Both the main text of the New Urban Agenda and the sections on implementation contain references to human rights. However, it remains to be seen whether these commitments will be followed through with the necessary measures.

Against invisibility

How can the necessary climate change adaptation measures be reconciled with the interests of people living in informal settlements? The fact that many municipalities have no information on the exact location, population size and vulnerability of informal urban settlements is certainly an obstacle to doing so. Such information is essential if municipal services are to be planned in a manner that reflects the needs of the poor and if protective measures are to be initiated. In many cases, this situation can be resolved by establishing better contacts between municipalities and the people living in informal settlements. Examples from these areas demonstrate that residents can at least partially compensate for the failure of public actors through creativity and organization. Grassroots groups usually possess detailed maps of their districts, as well as up-to-date information about the number of inhabitants, the size and exact location of houses, schools and sanitary facilities. In some cases they may have even carried out climate risk analyses. 'Know Your City' is the motto of an initiative run by Shack/Slum Dwellers International (SDI) – the international slum residents' association – that documents and raises awareness about informal settlements in many cities in Asia, Africa and Latin America. SDI's aim is to ensure that knowledge based on local experience forms the foundation for participatory approaches to improving informal settlements and finding alternatives to relocation.

There are examples in numerous cities that illustrate the opportunities that open up when city administrations and informal settlers cooperate successfully. In Kampala, the capital of Uganda, maps and information provided by local self-help groups have changed the focus of and significantly expanded a development

project aimed at improving basic sanitation in the district. A comparison with official data gained from a census undertaken 13 years earlier, which was being used to plan the project, identified significant differences in the actual extent of poor districts. This enabled the project to be adapted and to better reflect the reality on the ground (Dobson/Nyamnweru/Dodman 2015). Residents in informal settlements can also take on the responsibility for improving their neighbourhoods or climate adaptation measures through the provision of community-based development funds. These funds are based on deposits made by local savings groups, and can be supplemented by private and state development or climate funds. Although their budgets are often modest, even small changes can have a great impact. For example, the construction of small roads or bridges connecting an informal settlement to an urban transport network can serve as an escape route in the event of a disaster. Moreover, when self-managed projects are successful, they always raise awareness about the capacities that people have in informal settlements. This often provides the impetus behind better cooperation with the authorities.

However, it is essential that participatory approaches are not restricted to crisis management, relieving local governments of the responsibility to make cities more equitable; therefore, poor urban populations and people living in informal settlements need to be integrated equitably into all economic processes. The measures that this will require (e.g, to regulate aggressive real estate markets) are becoming increasingly difficult to access due to the worldwide privatization of public goods and services. As such, it is essential that the New Urban Agenda also initiates a fundamental change of course in this area as well.

Habitat III and the New Urban Agenda: the key role of food and nutrition

Tim Schneider

Increasingly rapid urbanization, growing environmental problems and worsening living conditions, especially among the urban population, led the United Nations General Assembly to convene a global summit in 1976 in Vancouver, Canada. For the first time, this led to an agreement at the global level on common written guidelines for standards for human settlements. The Vancouver Declaration calls on UN member states to address the challenges posed by violations of people's land rights, population growth, urbanization, infrastructure, basic services and access to adequate housing and employment, and to do so in a manner that takes marginalized population groups into account. 50,000 people attended the third UN World Summit on Housing and Sustainable Urban Development, known as Habitat III, which took place in October 2016 in Quito, Ecuador.

Quito led to the adoption of the New Urban Agenda, a set of guidelines for sustainable urban development that apply to all UN member states.

UN Habitat – What is it based on?

The first ever UN conference on urbanization took place in Vancouver in 1976; it resulted in the establishment of 'Habitat' – the UN Commission on Human Settlement and the United Nations Centre for Human Settlements (UNCHS). The UN Habitat and Human Settlements Foundation (UNHHSF) was placed under Habitat's supervision. These three institutions led to the foundation of today's UN-Habitat – the United Nations Human Settlements Programme. UN-Habitat currently operates in 70 countries and the 58 members of its Governing Council are appointed directly by the UN Economic and Social Council.

At the second World Settlement Summit, which took place in Istanbul two decades later in 1996, the world community adopted the Istanbul Declaration on Human Settlements. This document has since been designated the Habitat Agenda and ratified by all of the 171 members of the United Nations. The Habitat Agenda is a reflection of the sustainability paradigm adopted at the 1992 Rio de Janeiro Earth Summit. It includes two main objectives: creating adequate housing for all, and contributing to sustainable settlement development in an increasingly urbanized world. Habitat II also led to a recognition of the importance of participatory and comprehensive policies that improve urban living conditions, and of the need for city administrations to commit themselves to the principles of transparency, accountability and civic participation.

Habitat II also led to a shift away from the belief, popular at the time, that it would be impossible to solve the problems caused by city expansion. Rather, the summit sought to demonstrate the positive experiences and good practices that had been developed in attempts to meet the challenges posed by urbanization. In addition, it sought to promote global partnerships that enabled a better exchange of experiences at the national, subnational and local level. For the first time, urbanization was treated not as an obstacle, but as an opportunity for sustainable development and to reduce poverty. Although the human rights-based approach enshrined within the Habitat Agenda continues to be commended, critics often stress the lack of implementation and the insufficient – and this also applies to Germany – civil societal participation in the implementation of the Habitat Agenda (UN Habitat 2012; Forum Umwelt und Entwicklung 2015; Lexikon der Nachhaltigkeit 2015).

Poverty reduction strategies have since been added to the Habitat Agenda. Its mandate and the financial resources it receives have been expanded, and a separate secretariat has also been established (UN-Habitat 2012). Since 2002, its signatories have met every two years at the World Urban Forum, as well as on other occasions. Habitat III took place in October 2016 in Quito, Ecuador, 20 years after the first conference in Istanbul.

Maghbazar slum in Dhaka, the capital of Bangladesh, is located on a railway line between an old airport and a train station. Nearly half of Dhaka's inhabitants live in slums, sometimes under very difficult conditions.

The New Urban Agenda addresses many aspects of the food security of the growing urban population. This is certainly welcome, as efforts to provide urban populations with an adequate and healthy diet are facing challenges and major changes and this will continue to be the case in the future. Although the issue of how urban and rural areas are linked is rarely discussed within this context, urban spaces are inconceivable without agriculture in rural areas. In fact, these interdependencies are expressed within a multitude of social, ecological, economic and cultural contexts. *(→ Town – country – food)* Processes of supermarketization in the Global South *(→ Supermarkets versus informal markets)* and shifting patterns of global consumption are leading to enormous changes in food systems. In turn, this is resulting in nutritional deficiencies and malnutrition which then places a burden on health systems. Although the New Urban Agenda does at least assert the need for food security and access to adequate and healthy nutrition, it does not set out how this is to be achieved. It only includes a rather vaguely formulated intent to integrate food and agricultural policy. Neglecting food systems, the fight against hunger and rural areas will have far-reaching consequences for urban centres, as family agriculture currently produces up to 80 percent of global food (FAO 2014b). Family farms, therefore, supply a large proportion of the food consumed by people in cities.

If the New Urban Agenda really is to create 'liveable cities', it will need to redefine the urban-rural relationship: it is not enough to merely raise this issue when describing possible transport and delivery routes. In the future, liveable cities will need integrated and multi-centred spaces in which rural infrastructure and the promotion of rural production play an important role.

The links between Habitat III's New Urban Agenda and Agenda 2030 (the new development agenda) should certainly be welcomed:
The New Urban Agenda pledges to 'leave nobody behind' by:
- ending poverty in all its forms and dimensions, including the eradication of extreme poverty
- guaranteeing equal rights and opportunities, socio-economic and cultural diversity, the integration of urban spaces, making cities more liveable, and improving levels of education, food security, health and well-being
- ending the epidemics of AIDS, tuberculosis and malaria
- increasing security and ending discrimination and all forms of violence
- ensuring public participation, providing safe and equal access for all
- providing equal access for all to physical and social infrastructures, basic social services and adequate and affordable housing (UN Habitat III 2016a).

Although the vision behind the New Urban Agenda needs to be achieved now, its implementation is confounded by a lack of specific goals and criteria that could be used to measure the Agenda's success.

In 1950,

30%
of the global population lived in urban areas

→

In 2016, over

50%
of the global population lived in urban areas

(of 7.2 billion people in the world)

→

By 2050,

66%
of the global population is expected to live in urban areas

Source: WBGU 2016

Bread for the World's Partners Leading the Way

Nilo Schiavon harvests peaches. He and his family sell their crops via CAPA. They also regularly sell their produce at the organic market in Pelotas/Southern Brazil.

—— Brazil: healthy food for all

Agribusinesses are very powerful in Brazil – and the use of pesticides is widespread. However, there is resistance to this situation in southern Brazil where Centro de Apoio ao Pequeno Agricultor (CAPA), one of Bread for the World's partner organizations, has built up a network of organic farms. In 2009, the Brazilian government brought in a law stipulating that at least 30 percent of the food supplied to state schools must come from local smallholder farmers. As a result, organic farmers now provide healthy food to urban schools and nurseries. This has catapulted organic farming from a niche market into the midst of society. This policy also promotes local agriculture as it enables smallholder farmers to count on the public sector as a reliable buyer; this enables farmers to gain independence from the large agribusinesses and the expensive seeds and fertilizers they provide. The new law has also enabled cooperatives such as CAPA to supply the urban population with healthy foods that are free of toxins.

—— India: from the rural areas to the city

Almost 70 percent of farmers living in the Anantapur region in India depend on agriculture for their livelihoods and cultivate less than two hectares of land. Since the 1970s, the Indian government has encouraged farmers to cultivate cash crops rather than to grow their own food (which would improve their food security). Now, most of them grow peanuts. This policy has increased the dependence of smallholder farmers on expensive seeds, and the associated fertilizers and pesticides. Although these farmers grow food, their diet mainly consists of state-subsidized rice. The Bread for the World partner organization Timbaktu Collective (TC) supports nearly

20,000 marginalized families in the district of Anantapur. It encourages farmers to return to organic farming and helps them to establish cooperatives, stand up for their rights and secure a livelihood that is independent of the agribusinesses. These cooperatives already sell their organic produce in 40 Indian cities and operate an online shop; in April 2015, they opened a health food shop in the southern Indian city of Bangalore. Their products are widely known and the demand for organic products is steadily rising – a reflection of trends in India's emerging economy. Importantly, these sales not only benefit rural producers, but also urban consumers.

In order to produce independently of large agribusinesses, NGOs like Timbaktu Collective in India promote smallholder farmers, teach them organic farming techniques and help them set up their own shops to sell organic produce.

—— Togo: Local not global

In Togo's capital Lomé, more and more people are eating cheap imported foods. People in the city view imports as modern, but they are also often cheaper than locally produced foods. The Bread for the World partner organization Organization pour l'Alimentation et le Développement Local (OADEL) informs people about the health-related and social consequences of imported products and helps smallholder farmers in the surrounding area to market their produce. Subsidies in the US or in the EU mean that imported products such as cooking oil or rice can be sold in Togo at half the price of local produce. In Lomé, OADEL has opened an organic food shop that only sells local produce. It also uses radio broadcasts, films and brochures, as well as at events at schools and fairs, to explain why the price difference between imported and regional organic produce is justifiable: in Togo almost everything is made by hand, the goods are not subsidized by the state and they are often of higher quality.

Cheap imported food in Togo, as in many other countries, threatens the livelihoods of local farmers. OADEL sells the produce of local smallholders in its own shop and explains in schools and on the street about the advantages of local food: it is fresh, unprocessed and rich in nutrients.

Conclusion

Providing the populations of megacities with a suitable and healthy diet will be a key issue for this century. Can people still freely choose how they feed themselves in cities and rural areas when they are faced with the increasing pressure posed by globalization? Healthy urban diets rely on agriculture in rural areas. Are rural producers in control of what they grow and sell, or are they dependent on seeds and fertilizers from multinational corporations and the criteria dictated by supermarket chains? Finally, what choice do consumers have?

As this brochure shows, in attempting to resolve the issue of feeding the growing urban population, it is important to recognize the role that can be played by family-run smallholder farms. These farms currently produce up to 80 percent of the world's food and therefore already largely feed the urban population. Moreover, it should be clear that food grown in urban areas cannot satisfy the hunger of the people in cities. In order for smallholder family farms to find buyers for their fresh, regionally-grown produce, the influence of large corporations over the entire food chain needs to be ended and replaced by policies that support the commitment of smallholder farmers. Moreover, reliable supply and value chains that are based on fairness are needed so that the demand for food in the cities can be met by the supply of food available in rural areas.

If city dwellers are to enjoy a healthy diet, they need a range of opportunities to buy food. Informal markets are the main source of fresh produce for the poor urban population. As such, governments need to act to secure these people's right to a balanced diet and establish a social security system. This issue particularly affects women, as they are not only responsible for feeding their families but also face the dual burden of having to earn a living in the city.

Bread for the World campaigns for the following improvements:

—— Reduce poverty, social and economic inequalities between urban and rural areas and establish stable regionally-anchored urban-rural relations. For this to happen, rural areas need to provide attractive living and working conditions.

—— Intensify the dialogue between urban and rural populations. Provide civil society with a stronger voice in the political arena with regard to sustainable food systems.

—— Ensure urban development planning recognizes the importance of the agriculture undertaken close to urban areas. This could involve integrating land

and wastewater management. Ensure that water management reflects the rights of various sections of the population.

—— Promote urban supply systems such as public storage systems and hygiene standards as well as local markets, and production and trade, through aspects such as microcredit and other financial instruments.

—— Improve rural infrastructure, including access to clean water, refrigeration and appropriate packaging, as well as safe transport and transportation routes to prevent crop losses while guaranteeing cities a supply of fresh produce.

—— Halt 'supermarketization'. The preservation of neighbourhood markets is an important element in the fight against poverty, hunger and malnutrition and contributes to a diverse range of services and the income security of family-run farms.

—— Ensure social security includes food security. Political scope should be employed to establish a positive relation between the urban food supply and food security in the rural areas.

—— Place efforts to promote gender equality, to recognize the active role of women in caring for their families, and to guarantee women with protective spaces more strongly on the political agenda.

—— Ensure that climate adaptation in the city is sustainable and in line with the interests of the people living in informal settlements. City administrations have the task of integrating their citizens equally into economic and social security systems and guaranteeing them access to adequate healthcare. This is the only way that the growing gaps between rich and poor and urban and rural areas will be overcome.

Diverse baked goods on offer in the town of Pelotas, Brazil.

Literature

Agrar-Europe Bonn (2016): Nr. 21, 23 May 2016

Barclay, Eliza (2013): Rooftop Farming is getting off the Ground. Available at: https://www.npr.org/sections/thesalt/2013/09/24/225745012/why-aren-t-there-more-rooftop-farms, last accessed: 3 September 2016

Buntzel, Rudolf/Francisco Marí (2015): Gutes Essen – arme Erzeuger: Wie die Agrarwirtschaft mit Standards die Nahrungsmärkte beherrscht, München: oekom

CFS (2016): Urbanization and Rural Transformation. Implications for Food Security and Nutrition – draft Background Paper to CFS 43 Forum Discussion. Available at: http://www.csm4cfs.org/wp-content/uploads/2016/02/UrbRurZeroDraft.pdf, 3 September 2016

Cohen, Marc J, Garrett, James L (2009): The food price crisis and urban food (in)security, Human Settlements Group, International Institute for Environment and Development (IIED). Available at: http://pubs.iied.org/pdfs/10574IIED.pdf, last accessed: 3 September 2016

De Schutter, Olivier (2014): The Power of Procurement: Public Purchasing in the Service of Realizing the Right to Food. Briefing Note 8, April 2014. Available at: http://www.srfood.org/es/the-power-of-procurement-public-purchasing-in-the-service-of-realizing-the-right-to-food, last accessed: 3 September 2016

Dobbs, R. et al. (2014): Overcoming Obesity: an Initial Economic Analysis. McKinsey Global Institute Discussion Paper

Dobson, Skye/Hellen Nyamweru/David Dodman (2015): Local and participatory approaches to building resilience in informal settlements in Uganda, in: Environment & Urbanization 2015, Vol 27, pp. 1–15, last accessed: 3 September 2016. Available at: http://eau.sagepub.com/content/early/2015/08/19/0956247815598520.full.pdf, last accessed: 3 September 2016

FAO (2009): Food for the Cities. Available at: ftp://ftp.fao.org/docrep/fao/012/ak824e/ak824e00.pdf, last accessed: 3 September 2016

FAO (2011): Looking Ahead in World Food and Agriculture – Perspectives to 2050

FAO (2014a): City region food systems – Sustainable Food Systems and Urbanization – An overview; Rom. Available at: http://www.fao.org/fileadmin/templates/FCIT/documents/City_Region_Food_Systems_and_Sustainable_Urbanization_an_overview.pdf, last accessed: 3 September 2016

FAO (2014b): The State of Food and Agriculture: Innovation in family farming. Rom. Available at: http://www.fao.org/3/a-i4040e.pdf, last accessed: 3 September 2016

FAO (2014c): Food and Nutrition in Numbers. Available at: http://www.fao.org/3/a-i4175e.pdf, last accessed: 2 September 2016

FAO/International Sustainability Unit (ISU) (2015a): Food in an urbanized World: The Role of City Region Food Systems in Resilience and Sustainable Development. Available at: http://www.fao.org/fileadmin/templates/agphome/documents/horticulture/crfs/foodurbanized.pdf, last accessed: 3 September 2016

FAO (2015b): Cities of despair – or opportunity? Available at: http://www.fao.org/ag/agp/greencities/en/whyuph/, last accessed: 3 September 2016

FAO (2016a): Urban agriculture: Key facts. Available at: http://www.fao.org/urban-agriculture/en/, last accessed: 3 September 2016

Fink, Günter/Kenneth Hill (2013): Urbanization and Child Mortality – Evidence from the Demographic and Health Surveys, Harvard School of Health. Available at: http://globalhealth2035.org/sites/default/files/working-papers/urbanization-and-child-mortality.pdf, last accessed: 3 September 2016

Forum Umwelt und Entwicklung (2015): Gute Stadt – Böse Stadt: Landromantik vs. Stadt für alle. Rundbrief 04/2015. Available at: http://www.forumue.de/wp-content/uploads/2016/01/Rundbrief_Forum-Umwelt-und-Entwicklung_IV-2015-2.pdf, 3 September 2016

Gentilini, Ugo (2015): Entering the City. Emerging Evidence and Practice with Safety Nets in Urban Areas, World Bank, Washington 2015

Hettiarachchi, Hiroshan/Reza Ardakanian (eds) (2016): Safe Use of Wastewater in Agriculture: Good Practice Examples, UNO-FIORES. Available at: http://unu.edu/media-relations/releases/unu-flores-publishes-good-practice-examples-for-the-safe-use-of-wastewater-in-agriculture.html#info, 3 September 2016

HLPE (The High Level Panel of Experts) (2015): Water for food security and nutrition. Available at: http:// http://www.fao.org/3/a-av045e.pdf, 3 September 2016

Hopkins, Emma/Francesca Bastagli/Jessica Hagen-Zanker (2016): Internal migrants and social protection: a review of eligibility and take-up, ODI Working Paper 436, London 4/2016

IINAS (2015): Urban Food Systems and Global Sustainable Land Use. GLOBALANDS Issue Paper. DRAFT VERSION. Available at: urban_foods_systems_and_global_sustainable_land_use_2015, 3 September 2016

ILO (2014): World Social Protection Report 2014/2015. Building economic recovery, inclusive development and social justice, Geneva

IOM (2015): Women on the Move: A Look at Migration, Women and Cities. Available at: https://weblog.iom.int/women-move-look-migration-women-and-cities, 3 September 2016

Kishimoto, Satoko/Emanuele Lobina/Olivier Petitjean (eds) (2015): Our public water future: The global experience with remunicipalisation. Amsterdam. Available at: http://municipalservicesproject.org/sites/municipalservicesproject.org/files/publications/Kishimoto-Lobina-Petitjean_Our-Public-Water-Future-Global-Experience-Remunicipalisation_April2015_FINAL.pdf, 3 September 2016

Kruchem, Thomas (2015): Gesund durch Fertigessen, in: Weltsichten 12/2015-01/2016, pp. 38ff

Lexikon der Nachhaltigkeit (2015): HABITAT, Vancouver 1976 / HABITAT II, Istanbul 1996. Available at: https://www.nachhaltigkeit.info/artikel/habitat_konferenz_vancouver_1976_770.htm, last accessed: 3 September 2016

MISEREOR (2016): Positionspapier zum 3. UN-Weltgipfel zu Wohnungswesen und nachhaltiger Stadtentwicklung (Habitat III): Klimapolitik in Städten ohne Vertreibungen – Für eine Verankerung menschenrechtlicher Grundsätze in der städtischen Agenda

Mohiddin, Lili/Laura Phelps/Tamsin Walter (2012): Urban malnutrition: a review of food security and nutrition among the urban poor, International Public Nutrition Resource Group (Nutrition Works), UK

Monteiro, Carlos A/ Cannon, Geoffrey (2012): The Impact of Transnational 'Big Food' Companies on the South: A View from Brazil, in: PLoS Med 9(7), p.4, e1001252. Available at: doi:10.1371/journal.pmed.1001252 (pdf), last accessed: 3 September 2016

Pollan, Michael (2009): Lebens-Mittel: Eine Verteidigung gegen die industrielle Nahrung und den Diätenwahn, München: Goldmann

RUAF (2013): WP3 Synthesis report: Innovative experiences with (peri-)urban agriculture and urban food provisioning – Lessons to be learned from the global South; Supurbfood

Sankaran, Kamala/Roopa Madhav (2011): Gender Equality and Social Dialogue in India, Industrial and Employment Relations Department and Bureau for Gender Equality, International Labour Office, ILO Working Paper, Geneva. Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_150428.pdf, last accessed: 3 September 2016

Schauber, Almuth (2014): Hell und Dunkel – Bürger und unsichtbare Städter, in: Bündnis Entwicklung hilft (eds): Weltrisikobericht 2014, pp. 18–24

Schauber, Almuth (2015): Städte müssen arme Bevölkerung in die Stadtentwicklung einbeziehen, in: Forum Umwelt und Entwicklung, 4/2015, pp. 22–23

Stuckler, David/Marion Nestle M. (2012) Big Food, Food Systems, and Global Health, in: PLoS Med 9(6)e1001242. Available at: doi:10.1371/journal.pmed.1001242, last accessed: 3 September 2016

Swensson, Luana F. J. (2015): Institutional Procurement of Food from Smallholder Farmers. The Case of Brazil, FAO, Rome 2015

Tacoli, Cecilia (2012): Urbanization, gender and urban poverty: paid work and unpaid carework in the city, UNFPA, working paper 7, International Institute for Environment and Development (IIED)

Tawodzera, Godfrey (2013): Rural-Urban Transfers and Household Food Security in Harare's Crisis Context; in: Journal of Food and Nutritional Disorders, 2:5. Available at: http://dx.doi.org/10.4172/2324-9323.1000128, last accessed: 3 September 2016

UN (2012): Millenium Development Report. Available at: http://www.un.org/millenniumgoals/pdf/MDG Report 2012.pdf, last accessed: 3 September 2016

UN (2015): World Water Development Report 2015, Water in a Sustainable World

UN Population Division 2014: World Urbanization Prospects: The 2014 Revision. Available at: http://esa.un.org/unpd/wup/CD-ROM/, last accessed: 3 September 2016

UNAIDS (2014): The Cities Report. Available at: http://www.unaids.org/sites/default/files/media_asset/JC2687_TheCitiesReport_en.pdf, last accessed: 3 September 2016

UNAIDS/UN HABITAT (2015): Ending the AIDS Epidemic: The Advantage of Cities. Available at: http://www.aidsdatahub.org/ending-aids-epidemic-advantage-cities-unaids-and-un-habitat-2015, last accessed: 3 September 2016

UNFPA (2007): State of the World Population: Unleashing the Potential of Urban Growth, United Nations Population Fund, New York

UN Habitat (2012): History, mandate & role in the UN system. Available at: http://unhabitat.org/about-us, last accessed: 3 September 2016

UN Habitat III (2016a): Habitat III: The New Urban Agenda. Available at: https://habitat3.org/the-new-urban-agenda, last accessed: 9 December 2016

UN Habitat III (2016b): The Process. Available at: https://www.habitat3.org/, last accessed: 3 September 2016

UNICEF/WHO/World Bank (2013): Joint Child Malnutrition Estimates, Levels & Trends in Child Malnutrition. Available at: http://www.who.int/nutgrowthdb/summary_jme_2013.pdf?ua=1, last accessed: 3 September 2016

Waskow, Frank/Regine Rehaag (2011): Globaler Ernährungswandel zwischen Hunger und Übergewicht. Available at: https://www.researchgate.net/publication/251414603_Globaler_Ernahrungswandel_zwischen_Hunger_und_Ubergewicht, last accessed: 3 September 2016

WBGU (2016): Der Umzug der Menschheit: Die transformative Kraft der Städte, Hauptgutachten, Ein Beitrag zu Habitat III, Berlin

WFP (2015): Summary Report of the Strategic Evaluation of WFP's Pilot Purchase for Progress Initiative, Rom

WIEGO (Women in informal employment globalizing and organizing) (2011): Urban Employment in India

WHO (2014): Global Status Report on noncommunicable diseases. Available at: http://apps.who.int/iris/bitstream/10665/148114/1/9789241564854_eng.pdf, last accessed: 3 September 2016

WHO (2015): Factsheet Noncommunicable diseases. Available at: http://www.who.int/mediacentre/factsheets/fs355/en/, last accessed: 3 September 2016

WHO/UN Habitat (2016): Global Report on Urban Health; Equitable, Healthier Cities for Sustainable Development. Available at: http://unhabitat.org/books/global-report-on-urban-health-equitable-healthier-cities-for-sustainable-development/, last accessed: 3 September 2016

Women Watch (o. J.): Gender Equality and Sustainable Urbanisation, Fact Sheet. Available at: http://www.un.org/womenwatch/feature/urban/factsheet.html, last accessed: 3 September 2016

World Bank (2007): Dhaka: Improving Living Conditions for the Urban Poor, Bangladesh Development Series Paper No. 17, The World Bank Office, Dhaka