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# Challenges to Urban Food Supply in South Africa

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The food security problem in South Africa is a highly complex social challenge. This is a social challenge that cannot be understood in isolation; it should be understood in relation to other developmental challenges such as rural and urban development, social protection, health, access to services, land inputs and water and educational and nutritional knowledge and practices. Three challenges to urban food supply are identified and explored in this brief: rapid urbanisation and urban food supply; the idea that the current global food system is a skewed system that is currently failing the estimated 925 million people who experience food insecurity globally; and thirdly the fact that South Africa lacks comprehensive policy frameworks on food security.

#### Introduction

Food security and food issues are a major social challenge in South Africa. McLachlan and Thorne cite an analysis by Adam Kahane of the food security problem in South Africa.<sup>2</sup> In this analysis Kahane is of the opinion that the food security problem in South Africa has many of the elements of what he calls a 'complex social challenge'.3 His discussion of the challenge of food security in South Africa identifies three types of complexity. The first refers to the relationship between causes and effects when they are far apart from each other in space and time, which inhibits the ability of people to see and understand the relationship. The second exists when different stakeholders each have specific interests and their own perspectives on the same issue.4 The last refers to situations

where the context of a specific social challenge or problem is changing rapidly; this makes future prospects very different from those of the present, thereby rendering existing solutions neither valid nor applicable to the challenges faced. Kahane believes that all three of these complexities can be found in the South African case.

### **Urbanisation and Urban Food Supply**

South Africa, like most other developing nations, is becoming urbanised at rates never experienced before. According to the United Nations Human Settlements Programme (UN-HABITAT), 61, 7 per cent of the South African population currently live in urban areas.<sup>5</sup> Its predictions are that this figure will rise to 66, 6 per cent of the population by

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2020 and 71, 3 per cent of the total South African population by 2030.6 With regard to urbanisation in South Africa, the report of the Centre for Development and Enterprise (CDE) states that it is the 'most important but also most neglected social dynamic' in South Africa.7 Cities in South Africa are indeed among the fastest-growing cities on the African continent. South African cities are growing at an average rate of almost 2 per cent annually.8

Urbanisation in South Africa is underpinned by large-scale rural-urban migration, both from rural areas to urban areas within South Africa and migration from across the African continent to South African cities.9 Such migration is fuelled by South Africa's status and image as the largest, most developed and most stable economy in Africa. There is, furthermore, general consensus that the South African population has now an urban face, and that urbanisation will in the coming years be one of the most defining issues the country will have to learn to understand and deal with, especially on a policy-making level. It remains to be seen exactly how it will shape South African society. Sufficient and ongoing research is needed on the impact of urbanisation on South African society.

Food is supplied to any urban or metropolitan area through various food supply and distribution systems (FSDSs). FSDSs are complex systems whereby a range of activities such as production, handling, storage, transport, processing, packaging, wholesaling and retailing are combined with one another to enable cities to meet their food needs. These activities are performed by different agents in any particular food system that include food producers, assemblers, importers, transporters, wholesalers, retailers, processors, shopkeepers, street vendors, service providers, packaging suppliers and public institutions. In addition there are private associations of traders, shopkeepers and consumers. The suppliers are complex suppliers and consumers.

For clarity of terminology, this section will use the definitions given in the glossary of the 2001 United Nations Human Settlements Programme (UN-Habitat) report, *The state of the world's cities*. This report defines a metropolitan area as 'the politically defined urban area for planning or administrative purposes that combines all local jurisdictions normally regarded as part of the greater urban area', and a peri-urban area as the 'developing area just beyond the established built up parts of a city'. The definition of what constitutes an urban area would be determined by the statistical definitions, practices and standards

of a country and may vary around the world from a minimum of 500 to one of 50 000 persons.<sup>12</sup>

According to Argenti and Marocchino, three levels exist within any system of urban food supply: the regional level, the metropolitan level and the urban level. 13 Understanding these three levels and how they fit into the overall supply of food to a city is of utmost importance for governments and city planners. Food supply at the regional level includes rural food production; facilities for assembling, handling and packaging of food; processing of food; storage and transportation of food.14 At this level it is important to create conditions where adequate amounts of food can be produced and where this food can be transported to cities at the lowest possible cost and in the most hygienic conditions possible. This means that there need to be assembly markets where food from all producers in a particular region can be concentrated, warehouses where food can be stored to reduce the amount of food that gets spoiled, adequate transport services and infrastructure for transport, an efficient communications system between rural and urban areas, and adequate sanitation and hygiene in all of these facilities.15

At the metropolitan level, food supply mainly concerns food production in peri-urban areas; facilities for assembling, packaging and handling food; food processing and what Argenti and Maracchino call slaughterhouses; and transportation of food.16 Here peri-urban farming not only plays an important role in the supply of food, but also provides employment and supplementary income to low-income families. It can also lower the costs of transporting food to urban areas with high levels of consumption. Lastly peri-urban farming can play a role in the disposal of organic waste through the re-use of such materials as fertilisers.17 Slaughterhouses are facilities where livestock are slaughtered and processed. Although slaughterhouses are part of the food supply system by providing facilities where livestock on the hoof can be processed to produce meat, they can also be unhygienic and can therefore pose health risks. They are furthermore one of the principal causes of air, water and soil pollution.18

In order to maximise food supply at the *met-ropolitan level*, the following measures could be taken: protect the land resources; create conditions under which food in sufficient quantities can be produced and transported to cities at the lowest possible cost; ensure that all activities in slaughterhouses take place under hygienic conditions; encourage public and private investment to help meet the growing urban demand for food; and try

to minimise the harm done to the environment by food supply activities.<sup>19</sup>

At the *urban* level, the supply of food mainly concerns urban food production and food processing, which at this level also includes slaughterhouses and the transportation of food.<sup>20</sup> Agricultural activities in urban areas are much more difficult and much more under threat than in metropolitan areas, as the population density is much higher in urban areas than in metropolitan or peri-urban areas. A high risk of pollution is also possible in densely populated areas, for reasons such as the improper use of chemical products and liquid and solid waste.<sup>21</sup>

In order to increase food supply at the *urban level*, authorities need to support and promote urban agriculture; protect the land resources, promote kitchen gardens on suitable land, create conditions for the production of sufficient quantities of food, and create conditions under which all food processing activities can be carried out in hygienic conditions.<sup>22</sup>

The South African Minister of Rural Development and Land Reform, Gugile Nkwinti, in March 2010 revealed that 90 per cent of the farms that were bought up by the South African Government for restitution or redistribution to black farmers after 1994 are now unproductive and not functional.23 This revelation has a direct link to urban food supply, particularly at the regional level. In South Africa large-scale commercial farming contributes a much larger proportion of agricultural output than small-scale and more traditional farming on smallholdings or communal farming areas. Farmers in general, however, are under enormous pressure in South Africa. In 1996 there were 60 000 commercial farming units. By 2007 this number had declined to 40 000.24 Of this number of commercial farming units, 20 per cent produce 80 per cent of total food production.25 Small-scale farming has been in decline for the past 10 years and the divide that exists between the level of output of commercial farming and that of small-scale subsistence farming appears to be growing.26 There is thus an increasing consolidation of land into larger units of ownership and production.

The share of the Gross Domestic Product (GDP) that the agriculture sector accounts for has also decreased from 4 per cent in 1994 to 2, 9 per cent today.<sup>27</sup> According to Vink and Van Rooyen, this does not, however, mean that the sector as a whole is declining, but rather that the services sector in South Africa is growing at a faster rate.<sup>28</sup> What is very important to take note of, however, is that both types of farming contribute to national

and household food security in South Africa, and that therefore support is needed from the public and private sectors for both these types of farming in the South African agriculture system.

In this regard it is important to know that different understandings sometimes exist about what constitutes small-scale farming. The definitions and characteristics of it can vary from country to country. According to the Evangelischer Entwicklungsdienst (EED), the development service of the Protestant churches in Germany, research estimates that there are 500 million such smallscale farms globally and that in some cases these small farms can account for up to 80 per cent of the land that is used for agriculture.29 Small farms provide food for both household subsistence and supply to markets. Small farms are, however, still marginalised in many developing countries due to the large investment in commercial farming, large irrigation schemes and also by the rapidly growing megacities that are found in many countries in the developing world. Lack of access to water, markets and services also hamper small-scale farmers struggling to create sustainable livelihoods.

The potential of small farms should not, however, be underrated. The EED states that small farmers in many countries contribute to the economic development and well-being of their countries by providing hard currency, especially through crops like coffee and cocoa, by providing employment and services and by providing raw materials for agro and other industries through crops such as cotton and sugar.30 The size of the farms is also not the decisive factor but rather the output of the farm and the productivity of the land. Small farmers in most cases have very little land for agricultural production available to them, and therefore they have to use it optimally and exploit the land as much as possible. Production generally is also lower on small farms than on commercial farms, which means that small farmers can produce and supply food at lower prices, which in turn helps to improve the lives of urban dwellers, as food affordability is one of the key factors that fuels food insecurity in cities.31 Most small farms are also much more natural and organic than commercial farms in nature, as small farmers cannot always afford modern fertilisers, agrochemicals and genetically modified crops or seeds. On the one hand this prevents small farmers from taking out loans to invest in these modernised farming resources, but it also means that the food produced on small farms is healthier and contains no chemicals. A study undertaken in the late 1990s of more than 200 sustainable ecological agriculture projects in 52 countries

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925 million people experience food insecurity around the globe.

found that farmers who moved away from using agrochemicals, hybrid or genetically modified seeds and inorganic fertilisers were able to increase their food production per family by 1, 71 tonnes, or more than 70 per cent per year.<sup>32</sup> This is concrete evidence of the importance of small scale farming in securing food and sustainable livelihoods and also improving the nutrition of both rural and urban dwellers.

Well balanced and well managed synergy between these two sectors of the agricultural system of South Africa will help to improve the sustainability of the food system in South Africa in the long term in both urban and rural areas. The next section of this brief will discuss this challenge to urban food supply. The current global food system of which South Africa and Sub-Saharan Africa are part is, however, experiencing great pressure from forces such as climate change, ecological degradation and population growth. This challenge can be linked to the third complexity Kahane mentions in his discussion. South African municipalities and city councils were not prepared for the pace at which urbanisation has taken place in South Africa in recent years. The subsequent impact on urban food supply of such a high population influx into cities means that new and evolving solutions must be designed that can be adapted as the context changes.

#### A Failing Global Food System

There is growing consensus that the global food system is experiencing an era of crisis and that the system is currently failing the estimated 925 million people<sup>33</sup> who experience food insecurity around the globe. Oxfam International in June 2011 published a report entitled *Growing a better future: Food justice in a resource-constrained world*, in which it states that the current global food system is a failing food system.<sup>34</sup> It is struggling to deal with the pressures of climate change, ecological degradation, population growth, rising energy prices, a rising demand for meat and dairy products and competition for land from large-scale bio-fuel production, industry and rapid urbanisation.<sup>35</sup>

The report then identifies three major challenges that must be met in order to improve the global food system and make it more sustainable. These challenges are firstly the sustainable production challenge: that enough nutritious food must be produced to feed the global population – which is now close to 8 billion.

Secondly, the challenge for equity, in the sense that women and men must be empowered to be able to grow or purchase enough food to eat; and thirdly the challenge to make the food system more resilient to changes in global food prices and to reduce the vulnerability of the food system to climate change.<sup>36</sup> Governments are crucial role players in this challenge of a failing food system and must make a renewed commitment to their role as custodians of public goods and make policies that will serve the interests of the many rather than the few and protect the vulnerable.<sup>37</sup>

This awareness of changing trends in food systems and food supply is also becoming evident in the popular media and news magazines such as Time. In a recent issue of the magazine, Michael Schuman writes on the cost of food against the background of an increasing global population growth and decreasing farm productivity.38 Schuman makes reference to the famous essay published in 1798 by Thomas Malthus in which Malthus' future vision of the world was that exponential growth of the global population and an arithmetical increase in food production would lead to a situation where there would be a shortage of food.<sup>39</sup> Schuman adds that the world lacks a comprehensive source of information on global production and reserves of major food grain, which means that traders and governments are not informed and therefore food prices can sometimes be calculated on incomplete information.40

These examples point clearly to an evolving awareness of the issue of the sustainability of the food system and food supply, not only in South Africa and the African continent but globally. The governments of South African and other African nations should be aware of these debates and the questions that they pose for the policy frameworks for food security in South Africa and other Sub-Saharan African nations. In the South African case, a strategy for food security was established but no clear and comprehensive policies exist in South Africa in this regard.

This challenge of a failing food system links to two of the complexities that Kahane mentions: the first and third. In the case of the first complexity, it is true that people can find it hard to see and understand the relationship between the cause of the current failures of the food system and the effects thereof: because the food system as a whole contains so many different facets, and it is difficult to see the system and its shortcomings as a whole. In the case of the third complexity, once again it can be noted that due to the rise of major global forces such as climate change and

environmental degradation, new and evolving solutions must be designed in order to analyse the sustainability of the food system in its current state and make changes where necessary to ensure sustainability in the long run.

# A Lack of a Comprehensive Policy Framework in South Africa

As a result of policy debates in South Africa on agriculture and food security, the Integrated Food Security Strategy (IFSS) was established in South Africa in 2002. The vision of the IFSS is in accordance with the definition of food security offered by the Food and Agricultural Organisation of the United Nations (FAO). The vision is 'to attain universal physical, social and economic access to sufficient, safe and nutritious food by all South Africans at all times to meet their dietary and food preferences for an active and healthy life'.41 The IFSS has adopted a broadly developmental approach to food security rather than a strictly agricultural approach and has five broad pillars: production and trading, income opportunities, nutrition and food safety, safety nets and food emergency, and information and communication.42

Despite strong commitment from the South African government, tremendous disparities in food security exist, which are in many cases linked to geographic location, gender and race.43 One of the biggest challenges at the moment is that the IFSS approach is a strategy and not yet an official national government policy. The IFSS in its current state does provide South Africa with an innovative policy tool that can coordinate and bring together various stakeholders, but there is a general feeling that the strategy lacks political will and support to make a significant difference to the food security situation in the country.44 In 2010 a Food Security Round Table was organised as part of the methodology for the Country Report on food security policy in South Africa by the International Policy Centre for Inclusive Growth. Participants recommended that a new official government policy on food security be hosted within the National Planning Commission, directly linked to the Office of the President. A step like this and the adoption of an official policy on food security in the country would enable decisions and functions around food security to be stipulated at a high level, with authority over the various government departments and line ministries that deal with food security issues on some level.45

The country study makes further policy recommendations which include more standardised ways of measuring food insecurity in the country, a more robust food security monitoring and evaluation that should be developed with an identified and agreed-upon target for food security, and further investment in research and policy support by the South African Government.<sup>46</sup>

Furthermore, it is important that food security in South Africa should be understood in connection with other developmental challenges such as rural and urban development, social protection, health, access to services, land inputs and water and educational and nutritional knowledge and practices. Lastly, a new food security policy for South Africa would have to include a definition of food security that is context-specific and therefore tailor made to the complexities of the food security challenges in South Africa.<sup>47</sup>

This lack of a comprehensive policy framework for food security in South African can be linked to the second complexity discussed by Kahane. The fact that food security is being dealt with by many government departments in South Africa and various other stakeholders, without a single overarching and comprehensive policy framework being in place, means that there are many different perspectives on the issue but that there is no synergy between these roleplayers and stakeholders, which enlarges the current gap in policy on the issue of food security in the country.

The vision is 'to attain universal physical, social and economic access to sufficient, safe and nutritious food by all South Africans at all times to meet their dietary and food preferences for an active and healthy life'.

#### **Conclusion and Recommendations**

This brief has focused on highlighting the fact that the social problem of food security in South Africa is a complex problem that cannot be understood in isolation. Three challenges were identified and introduced in this brief: urbanisation and urban food supply, the idea that the current global food system is a skewed system that is currently failing the estimated 925 million people experiencing food insecurity around the world, and thirdly the fact that South Africa lacks a comprehensive policy framework on food security.

In the light of the highly complex nature of the food security problem and the challenges to urban food supply in South Africa as highlighted in this brief, it is recommended that more attention be given to the following:

 There is a need for increased research on food systems of cities in South Africa and Sub-Saharan Africa. A city like Johannesburg has a very dysfunctional food system in terms of the

- sources of food, the areas of food production and the distribution of food. It would be imperative to conduct comprehensive studies and analysis on the structure of food systems of cities in order to gain a clear understanding of how food moves to and from and within a city. It is also important to pay attention to the roles of various actors in the food system within a city and how those roles can be governed and regulated more effectively. No comprehensive studies have been done on the food systems of South Africa's major cities. The national and local government should have a clear and informed understanding of food in their cities.
- The South African government and the governments of Sub-Saharan African countries at large need to come together to work in unity towards improving food supply and distribution systems on a larger regional level.
- More synergy is needed between all the various government bodies dealing with different aspects of food security. The lack of synergy between government departments on the issue of food security also increases the complexity of the challenge of food security and making the food systems of cities in South Africa more resilient and equitable and ultimately more sustainable.
- There is a need for an official national government policy on food security and not just a strategy, as there is now.
- Food security, particularly urban food security, must become part of the development strategy of every urban and metropolitan area in South Africa, as urbanisation is a demographic trend that will be part of the South African society at large for the next decades to come.
- Increased research is needed on new forms of income generation for urban residents. Together with effective food supply and distribution systems, sufficient levels of food production and increased agricultural activities in urban and metropolitan areas, income generation is one of the key determinants for ensuring food security at individual and household level in cities in South Africa.

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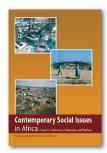


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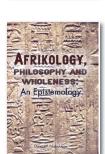
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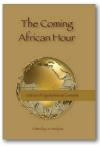
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