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Institutional responses to decentralisation, urban poverty, food shortages and urban agriculture

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Abstract

Urban agriculture (UA) has not always received adequate recognition in respect of institutional acceptance. In addition, institutional acceptance has often not been followed by proactive policy approaches. At the same time, decentralisation in both South Africa and Zambia has resulted in a larger degree of local decision-making powers. This report evaluates said responses from eight case studies (four from Zambia and South Africa each) against the existing literature and policy frameworks. The case studies reveal that the institutional response of decentralised government systems is mixed and that, while there has largely been institutional acceptance, proactive responses do however remain limited. In cases where institutional responses have been available, basic evidence from M&E nevertheless remains weak. Amongst the most important lessons are the role of supportive policy frameworks, the importance of access to land, the legal status of urban agriculture in Zambia, the role of extension services, partnerships, NGOs and support to women. Market access to markets, technical support and the financial constraints of local authorities to support UA also receive mention.

1. Introduction

The challenge of addressing poverty probably remains the most vexing issue facing humankind today. While some successes have been noted in respect of the attainment of the Millennium Development Goals (MDGs), the most recent United Nations report on the MDGs however argues that 'greater effort is required' (UN, 2008, 4), especially with regards to issues such as addressing poverty in Africa and acting counter malnutrition. Institutional responses to these challenges, especially from local authorities, who are now better positioned to implement facilitative action in an era of decentralisation, are all the more urgent and a real challenge exists for municipalities to put in place appropriate poverty-relief and food-security initiatives and enabling systems that we in the line with the MDG in the areas under their jurisdiction. (Mbiba, 1994; UN, 2008).

Within the context of multiple livelihood strategies, which the poor employ in the Global South, urban agriculture (UA) has received increasing recognition as an approach that can contribute to human survival, income and efforts to improve the overall quality of life (Sanyal, 1987; Thaman, 1975, 1995; UNDP, 1996; Mougeot, 1997; 2006). Gogwana (2001: 58) notes that UA is an "important socio-economic activity, particularly for the poor." While acknowledging that UA can only be regarded as one aspect of a multifacetted approach, UA, it is argued, deserves greater institutional recognition and support because of the role that it can potentially play in helping to address concerns of urban poverty and food insecurity.

There are several useful definitions of urban agriculture (UA) or urban and peri-urban agriculture (UPA) in the relevant literature (Mbiba, 1995, 2000; Binns & Lynch, 1998; Mougeot, 2000; Hovorka, 2005). At a basic level, urban agriculture is an activity that typically includes the raising of livestock and the production of crops within city boundaries (Page, 2002). In the broadest of terms, UPA can be understood to include any agriculture-related activities-production, processing and marketing, occurring in built-up 'intra-urban' areas and the 'peri-urban' fringes (often 'green-belts') of cities and towns (Mougeot, 2000; Thornton, 2008). However, UA is not restricted to food crops and can also include animal husbandry, aquaculture, agro-forestry and horticulture. In terms of its spatial coverage, urban agriculture occurs in the peri-urban areas also (Yeung, 1987). Peri-urban agriculture is often described as the location of urban farming activities on the periphery of populated urban zones (Obosu-Mensah, 1999: 11). Urban and peri-urban agriculture (UA) takes place in vacant spaces such as *inter alia*, roadsides, along banks of rivers and streams, on and around buildings, wetlands and, in some countries, on rooftops (UNDP, 1996).

It would be fair to argue that many local authorities in the Global South have traditionally been reluctant to support UA activities that have variously been viewed as marginal or even illegal (Hovorka, 2002; Mougeot, 2006; Hampwaye, 2008). There is however now growing evidence that greater support for UA is emerging, and in this context, the issue of what the appropriate institutional responses to UA are can and should be debated (UNDP, 1996). This paper seeks to determine the features of UA, the current poverty- response policies that are in place in the Southern African countries of South Africa and Zambia – with a particular focus on food security, and- based on a series of eight case-studies in said countries- to determine the nature of current local government institutional responses to UA, and to gauge to what extent, in terms both of policy and practice, greater support may be rendered to support UA[1].

[1] These reports exist as separate documents.

2. Focus and Methods

This paper is based on research conducted into the incidence of and support for the practice of UA in Zambia and South Africa undertaken in 2008 – 2009 as part of a study sponsored by the Global Development Network. The study specifically sought to establish the degree to which UA can be regarded as a poverty-alleviation strategy and also the degree to which appropriate institutional support is already in place. In addition, a further focus included the degree to which South African policy may provide lessons for Zambia.

The research was based on several core methodological approaches. These included: a review of relevant literature and policy documents pertaining to UA both globally and also specifically in the two case-study countries. The second major approach was to conduct a series of institutional interviews, primarily with the urban authorities in the eight case-study cities (in Zambia – Lusaka, Kabwe, Ndola and Kitwe and in South Africa – Gauteng, eThekweni, Cape Town and Mangaung), which are or can be engaged in support of UA. The final focus was a series of questionnaire surveys undertaken with UA participants (400 in Zambia). Following quantitative and qualitative analyses of the collected results, the findings were synthesised and this laid the basis for this paper.

3. Literature Review - The Role of Urban Agriculture (UA) and Institutional Responses to UA

It is generally acknowledged that urban agriculture is a widespread phenomenon in most cities in the developing world (Harcsa, 1993). Approximately 800 million people in the world are involved in urban and peri-urban agriculture (UPA) (UNDP, 1996). In Latin America, about 50 percent of people living in the cities practise UPA , while in Africa the proportion is 40 percent (International Food Policy Institute (IFPRI), 2002). Urban agriculture has become significantly important in several African cities such as those in Kenya, Tanzania and Uganda (Eberlee, 1997). A significant proportion of urbanites are involved in urban farming in other African cities such as Libreville, Yaoundé, Lagos, Harare, Durban, Lusaka, Ouagadougou, Maseru, and Windhoek (Sanyal, 1985; Streiffeler, 1987; Rogerson, 1996; Dima and Ogunmokun, 2004; Brickhill, 2005)

The dramatic increase in UA noted in recent years is attributable to several factors that include rapid urbanisation, poor food production and distribution, withdrawal of subsidies by many governments in the developing world, high unemployment rates, and unsustainable incomes (Mougeot, 1997; 2006). The benefits of UA are widely recognised in literature and urban agriculture has been practised for the purposes of food production in many urban centres throughout the developing world both recently (Sanyal, 1987; Thaman, 1975, 1995; Mougeot, 1997; 2006; Thornton, 2009b) and also out though history.

3.1 The benefits of urban agriculture

Urban agriculture plays a critical role as a source of survival for many poor households in terms of the provision of cheap food, employment creation, and income generation, especially for women (Lado, 1990; Rogerson, 1993; 1996, UNDP, 1996; Mougeot, 2006). In Africa, urban agriculture has both economically and socially benefited, many marginalised groups in urban areas (Lado, 1990; Rogerson, 1993 1996, UNDP, 1996; Mougeot, 2006; Thornton, 2006, 2007, 2008, 2009a, 2009b). Urban gardens can reduce the negative effects of HIV/Aids through improved nutrition (Mubvami and Manyati, 2007).Urban agriculture is also beneficial in that it contributes towards improving the urban environment and also social interactions (Deelstra, 1987; Van den Berg, 2000; Slater, 2001). Observers often point out the potential of UPA to improve food security and nutrition for urban poor households

(Drakakis-Smith, 1992; Frankenberger et al, 2000; Garrett, 2000; Webb, 2000; Gogwana, 2001; United Nations Human Settlements, 2001). As Sahn (1989: 310) claims, "home gardening may be an effective intervention for food insecurity and low-income households beyond that of normal field agriculture, in particular during seasonal food shortages." Many observers argue that UA provides an income and improves nutrition for low-income households, in particular for female-headed households (Webb, 1996, 1998a, 1998b; Stephens, 2000; Rogerson, 2003). In reviewing UA in the African context, it has emerged as a response to economic crises, which, in many cases, resulted from the implementation of the International Monetary Fund's austerity measures (or structural adjustment programmes) (Drakakis-Smith, 1994; Maxwell, 1994; Mlozi, 1996; Bowyer-Bower, 1997; Gertel & Samir, 2000). For the most part, UA is practiced by all income groups and is of crucial importance to the poorest households for subsistence, while middle-income groups are also noted as deriving benefits – particularly in terms of the provision of a cheap source of meat and animal fodder (Egziabher, 1994; Maxwell, 1994; Sawio, 1994; Mlozi, 1996; Mtani, 1997; Mbaye & Moustier, 2000; Foeken & Mwangi, 2000, Foeken et al.,2002; Jacobi et al, 2000; Gogwana, 2001; Sorenson, 2003). This role is recognised, for example, in Dar es Salaam, where UPA has been integrated into urban planning (Mwalukasa, 2000), and given the region's harsh urban economic conditions, UA is seen as an 'economic necessity' for the poorest households and the average middle-income earner views UA as the 'logical thing to do' (Sawio, 1994).

From the standpoint of the social benefits of UA, some observers (Smit et al, 1996; de Zeeuw, 2002) claim that UA enhances the living environment, can improve efficiency of urban management, contribute to better public health, and further social participation in the community. Some observers claim that the impacts of UA on social networks of women can outweigh its economic impacts (Slater, 2001: 635; Rogerson, 2003). UA also stimulates the development of other related small businesses that may focus on the production of inputs, such as the collection and composting or urban wastes and the production of organic pesticides (Rogerson, 2003).

3.2 The challenges facing urban agriculture

The limited impact of UA on households is mentioned in the published literature. For example, food production for household food security in Kampala, Uganda, is the most common type of UPA (Maxwell, 1994: websource). However, "the food produced does not constitute the majority of what a household consumes…the market is their major source of food" (ibid.). A similar finding was revealed in a study of small urban centres in South Africa, where most of urban agriculturalists were found to depend on incomes earned from social welfare grants for household food security (Thornton, 2006, 2007, 2008). For urban residents in Cairo, Egypt (Gertel & Samir, 2000: 214), rural areas provide urban markets with comparatively low prices throughout the year.

In spite of the importance of urban agriculture to urban households, the activity is challenged by many factors, especially physical, social, political, institutional, and if moreover lacks legal frameworks (Hampwaye, 2008). Other constraints include those relating to post-production, the lack of technical assistance and the absence of associations in compared ISON with rural counterparts (UNDP, 1996; Vanderschueren *et al.*, 1996). Overall, lack of access to land, water, poor soils, poor transportation to the markets, and lack of information regarding marketing, pests, high costs of labour and other inputs, lack of policy on urban agriculture, crop thefts and lack of credit and investment support services have all negatively affected urban agriculture and particularly in Africa (Yeung, 1987; Mougeot, 1997; Thorgren, 1998; Mireri, 2002; Rogerson, 2003, Thornton, 2009a). In terms of land access, tenure is

often insecure and occupancy may even be illegal (Thornton, 2009, 2009b). In addition, in many cases, such as in Accra, most of the local production comes from the peri-urban areas surrounding the city (Armar-Klemesu & Maxwell, 2000: 200). In spite of this, available land for peri-urban production is under threat from urban sprawl, quarries and sand mines that have developed on the urban fringes of Accra (Armar-Klemesu & Maxwell, 2000; International Food Policy Research Institute, 2003). Apparently, governmental authorities acknowledge the threats to peri-urban farmers and are planning intervention to protect and promote UPA (Armar-Klemesu & Maxwell, 2000: 200-201).

There are however health and environmental risks associated with urban farming such as the view that the over-use of pesticides can contaminate the environment. The cultivation of crops polluted environment can contaminate crops as was the case in Jos in Nigeria, where lettuce in surrounding farms contained high concentrates of lead and zinc (Pasquini, 2006). In Dar-es-Salaam, roaming cows in the city have caused environmental degradation and traffic congestion (Mosha, 1991; Mlozi, 1996). Livestock- rearing in urban areas can also predispose humans to such diseases as avian flu (Mougeot, 2006). Worse still, in the Zambia case studies discussed in this paper, maize cultivation in urban areas has been linked with the spread of malaria (Ndola City Council, 2008). However, these negative effects can be minimised if urb an agriculture is given all the institutional support required (UNDP, 1996).

3.3 Policy Issues

Overall, in terms of institutional support, urban agriculture is not yet supported to the extent of the level of support given to rural agriculture. Yet, with support, urban agriculture can become a key intervention strategy in alleviating urban poverty in developing cities of the global South (UNDP, 1996; Hampwaye *et al*, 2007). In many cases local government interventions are impeded by negative perceptions of the activity, perceived health-risks, the marginal and micro-scale nature, of UA activity all of which make support difficult. Many governments in developing countries consider urban agriculture to be, an 'illegal' activity. Institutional responses have varied from being either repressive or accommodative to supportive (Hampwaye, 2008). It is argued that urban agriculture, particularly in Asia and Africa, is not supported by many local governments to be they view the activity as anti-modern, 'backward', and 'archaic' (Mbiba, 1994; Hovorka, 2002; Mougeot, 2006; Rogerson, 2003; Thornton, 2008). Consequently, urban agriculture is not part of urban land -use plans in some cities, even in times of recession, especially in Asia and Africa, with Zimbabwe being a case in point (Yeung, 1987; UNDP, 1996). There are, however, several local governments in the developing world that have realised the significance of urban agriculture and have started recognising and supporting it. This positive trend is common in Japan, Papua New Guinea, the Philippines, Latin America and some cities in Africa (Lado, 1990; Mougeot, 1997),

however, the majority of local governments in Africa have responded negatively towards urban agriculture Compared with other continents (Hampwaye, 2008). No legal status has been accorded to urban agriculture in some cities (Rakodi, 1985; 1988; Mougeot, 1997; Rogerson, 2003). It is common for some local authorities in Africa to destroy crops in their areas of jurisdiction 'Allegedly' for contravening certain by-laws (Mascarenhas, 1986; Mougeot, 2006). It is, however, important to stress that although local governments in Africa are perceived to be more negative towards urban agriculture, there are some variations across the continent. Some local authorities in Cameroon, Mali and Ethiopia even go the extent of destroying crops in urban areas in order to discourage urban farming (Mougeot, 2006)

By contrast, cities in South Africa and in Lesotho do accommodate urban agriculture to the extent that the activity is supported through the provision of extension services (Mbiba, 1994;

Tevera, 1996). The activity is tolerated in Zambian, Malawian and Tanzanian cities rather than in Kenyan and Zimbabwean cities (Tevera, 1996). Recently, local governments in Africa have begun reconsidering their position in respect of UA in response to urbanisation and its associated challenges, such as urban poverty, food insecurity, growth in informal (squatter) settlements and increasing unemployment. The projected increases in the global urban population are challenging the capacities of cities worldwide, with the "largest and fastest growing cities primarily [situated] in developing countries" (Rakodi, 1997: 17). Therefore, where urban poor households spend 50-90% of their income on food, many observers argue in favour of the need for these households to become more pro-active in meeting their food needs, as well as to contribute to the overall urban food supply and chains of production (Tinker, 1994; Mougeot, 1997; Lynch, 1995; Rogerson, 1996, 2003; Foeken & Mwangi, 2000; Foeken & et al., 2002).

Despite the seemingly self-evident need for support, resulting from, as a result of "poor planning institutions", UA in Harare, Zimbabwe has "taken over" from Lusaka, Zambia as "the capital city of urban agriculture in Africa" (earlier assigned to Lusaka in a study by Sanyal, 1987). This clearly suggests that, even in the absence of institutional support, urban farmers will still try to suceed in countries most severely impacted on by an economic downturn. However, in cases where there has been over-regulation and the absence of support, such as has indeed the case in Lusaka, a dampening impact can be expereinced.

4. Poverty Reduction Strategies

A distinctive feature of the African subcontinent is the persistent nature of poverty, with the region, sadly, being noted as having the highest level of poverty in the world (some 51% of the total population)(UN, MDG Report, 2008). In the case of Zambia, in 2006, 64% of the population were classified as poor (Ndulo *et al.*, 2009). As a result of this reality, various national governments, often with external support, have attempted to respond to poverty through various policy and strategic interventions. In this section, the nature of poverty and current government responses to its incidence in South Africa and Zambia are discussed with a particular emphasis on institutional support for food security and, by implication, for UA.

4.1 South Africa

In South Africa a significant 60% of the population are considered to be 'poor' and living below the poverty line (South African Regional Poverty Network, 2004). Through, South Africa, unlike Zambia, was not required to develop a Poverty Reduction Strategy Plan (PRSP), trying to deal with persistent poverty has been a major focus of government policy, starting from the critical Reconstruction and Development Programme (RDP) in 1994, then extending through a range of policy documents from the various ministries concerned with Public Works, Social Development, Welfare, Local Government and Trade and Industry (ANC, 1994). In addition, there have been noteworthy extensions to the social welfare system in the country, with a focus on support for the aged, the disabled and young mothers. Within this context it is not possible to review the diverse policy experience which exists and the focus will rather on policy- related to food security.

The Reconstruction and Development Programme (ANC, 1994), which was the main thrust of as the African National Congress election manifesto for the 1994 election, identified 'nutrition' as one of the basic needs to be met in a democratic South Africa. This was to be achieved through land reform, job creation, and the reorganisation of the economy. More specifically, ensuring low-cost food, the regulation of prices, the exemption of basic foodstuffs from value-added tax (VAT), the development of information systems, etc. were

seen as strategies. ‘Access to food’ was also identified under the basic need of ‘social security and social welfare’. Here the efficient production of food and the encouragement of food security through rural development, land reform, and a review of the agriculture sector were to be the courses of action. Food security was given further impetus and legal basis in the 1996 Constitution, (Republic of South Africa, 1996) where the Bill of Rights identified ‘sufficient food and water’ as a basic right. It was also stated that ‘the state must by legislation and other measures, within its available resources, avail to progressive realisation of the right to sufficient food.’

The first attempt to develop food security in policy was the White Paper on Agriculture (Department of Agriculture, 1995) released in 1995. The mission statement for agricultural policy, as set out in the White paper on Agriculture, was to ‘ensure equitable access to agriculture and promote the contribution of agriculture to the development of all communities, society at large and the national economy, in order to enhance income, food security, employment and quality of life in a sustainable manner.’ The White Paper on Agriculture recognised that food security consists of both national and household food security. National food security was defined as ‘the availability of a constant supply of sufficient, safe, and nutritious food for the population within the country, whether from production, imports, or stocks, Household food security was defined as ‘the availability and accessibility to households of affordable, nutritious food, whether from their own production, purchases, social welfare, or community support.’ According to the White Paper on Agriculture, national food security needed to be addressed through increasing the efficiency of food production and exploiting competitive advantages. Household food security needed to be addressed through job-creation, social subsidies, food distribution, land reform, urban food-production, and the reduction of the price of foodstuffs. The ideas of the White Paper on Agriculture were further developed in the Discussion Document on Agricultural Policy released by the Department of Agriculture in 1998 (Department of Agriculture, 1998).

The 1998 Discussion Document on Agricultural Policy (Department of Agriculture, 1998) further affirmed the distinction between national and household food security. It also continued the ideas of addressing food insecurity through job creation (specifically in the agricultural sector), own food production, more efficient production, and a more equitable distribution of resources (especially access to productive resources). Furthermore, while the White Paper on Agriculture identified the need for further research into smallholder farming, the Discussion Document on Agricultural Policy encouraged home gardens and smallholder production as a means of addressing food security. Since the White paper on Agriculture, the Act on the Marketing of Agricultural Products, Act No 47 of 1996, which limits intervention in agricultural markets, was also discussed in the Discussion Document on Agricultural Policy. According to the Act, any intervention must be proven not adversely to affect food security or employment.

The White Paper for Social Welfare (Department of Welfare, 1997), was released in 1997, ‘nourishment’ was included as part of the agenda for action that was entitled the ‘War on poverty’. The White Paper for Social Development envisaged incorporating nutrition in all of the programmes of the Department of Social Welfare cooperating with other departments to improve (specifically) household food security and prozeling of food aid during national disasters. Household food security was defined as ‘access by a household to enough food for active and healthy lives, The White Paper for Social Development further distinguished between acute (transitory and sudden) and chronic (long-term) food insecurity.

The South African government committed itself to the Rome Declaration on World Food Security (United Nations Food and Agricultural Organisation, 1996). In broad terms, the Declaration sought to promote the optimal allocation of natural resources and the efficient use of public -and private-sector resources to achieve global food security. The government further committed itself to creating an enabling political, social, and economic environment and to implementing policies to eradicate poverty. It pledged to ensure that technology development, farm management, trade and growth policies, and distribution systems would foster food security. As a response to the Rome Declaration, the government appointed the Food Security Working Group to investigate options to achieving food security in South Africa. The output, the Discussion Document on Food Security Policy (Food Security Working Group, 1997), identified the following interventions:

- agriculture and land reform (promote the opportunities of disadvantaged groups for commercial and subsistence agriculture);
- food trade (exporting, preventing unfair trade, investigating the possible effects of liberalisation, etc,);
- income enhancement and diversification (income- generation, access to finance, public works, etc.);
- social security and welfare services (welfare -and social- security spending, targeted food subsidies, reinvestigating zero VAT on certain products, etc.);
- disaster mitigation (sustainable agriculture, public works during problematic times, and encouraging drought-resistant crops); and
- food consumption and nutrition (access to information and education, etc.).

The document also suggested the coordination of food security programmes and cooperation amongst various sectors.

This coordination of programmes and cooperation between the various sectors was finally captured in policy in 2002 in The Integrated Food Security Strategy (Department of Agriculture, 2002). The Strategy integrated previous policies and programmes by various government departments into a single, integrated, cross-departmental strategy. The Strategy defined food security as '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.' The differentiation between national and household food security, first seen in the White Paper on Agriculture, was also continued. The South African challenges concerning food security were identified as: inadequate safety nets, weak support networks and disaster management systems, inadequate and unstable household food production, lack of purchasing power, and, poor nutritional status. In order to meet said challenges, the strategic objectives of the Integrated Food Security Strategy were: to improve household food production, trade, and distribution; to improve income-generating and job-creating opportunities; to improve nutrition and food safety; and to increase safety nets and food- emergency management systems.

Overall, various government departments have thus tried to support UA programmes. Most prominent among these are the Department of Agriculture and the Department of Social Development. Yet, very little evidence exists in respect of the outcomes and benefits of such programmes for the poor.

4.2 Zambia

From the outset, it must be emphasised that poverty in Zambia has remained high for the past several decades- principally as a result of the poor performance of the copper- dependent national economy. Furthermore, even with the recent modest positive performance of the economy, the impact on poverty reduction has been marginal, largely because of the significant regional income inequalities existing in the country (Kaela, 2008; Kapungwe, 2008; Ndulo *et al.*, 2009). Table 1 shows the incidence of poverty in Zambia to have been relatively high at 64 percent in 2006 (Ndulo *et al.*, 2009).

Table 4.1: Incidence of Poverty (%) trends in Zambia, 1991-2006

Year	**1991**	**1996**	**2004**	**2006**
Rural Poverty	88	82	78	80
Urban Poverty	49	45	53	34
Total Poverty	70	69	68	64

Source: Ndulo *et al.*, 2009

Regionally, the rural areas suffered a higher incidence of poverty than aid the urban areas (see Table 1). Whereas urban poverty reduced by 19 percent between 2004 and 2006, rural poverty increased by 2 percent during the same period. In spite of this disparity between urban and rural areas, the proportion of poor urban households in Zambia was also significant as unemployment was higher in urban areas than in rural areas. It is argued that "in 2006, this was estimated at 35% and 5% for urban and rural areas respectively. Furthermore the female unemployment rate, at 41%, was higher than male unemployment rate, estimated at 25%" (Ndulo *et al.*, 2009: 32). The overall formal sector employment ratio averaged at 15.27 and 15.74 for 2004 and 2006 respectively (Ndulo *et al.*, 2009). Such high levels of poverty justify interventions by the government.

There has until recently been no comprehensive social protection policy in Zambia. An exception is the Public Social Welfare Scheme established before independence, which was designed mainly to provide support for the elderly and the destitute. More recently, an emphasis on social protection for the disadvantaged has emerged, which is linked to the Poverty- reduction Strategy Paper (PRSP) formulated in the early 2000s (Ndulo *et al.*, 2009). Consequently, this led, in 2005, to the formulation of a policy for social protection with the primary aim of poverty reduction (Ndulo *et al*, 2009). Ndulo *et al.* (2009) argue that the overall aim of social protection in Zambia is to give protection to and to promote the livelihoods and welfare of the vulnerable. The social protection programmes in Zambia include measures such as those being supported by NGOs, donors, and the respective communities (Mulungushi, 2008; Ndulo *et al.*, 2009). The PRSP is premised on the promotion of both national and household food security in order to reduce poverty (Kapungwe, 2008). Assessments that have been done, however, show that the majority of agricultural interventions under the PRSP did not yield positive results in terms of poverty reduction (Kaela, 2008; Kapungwe, 2008; Mulungushi, 2008).

The current major social protection programmes include: the Public Welfare Assistance Scheme (PWAS), the Social Cash Transfer Scheme (SCTS), the Food Security Pack (FSP), the School Feeding Programme and the Urban Self-help Programme (Mulungushi, 2008; Ndulo *et al.*, 2009). The respective numbers of beneficiaries of each are indicated in Table 2.

Table 4.2: Beneficiaries of the main social protection programmes, 2005-2006

Scheme	Beneficiaries	
	2005	**2006**
PWAS	107, 415	166, 559
SCTS	39, 500	64, 700
FSP	40, 000	34, 942
School Feeding Programme	19, 520	173, 980
Total	**206, 435**	**440, 181**

Source: Ndulo *et al.*, 2009

Although the total number of beneficiaries more than doubled between 2005 and 2006, the overall impact on poverty reduction on the poor in Zambia was minimal given that 64 percent of more than ten million people are classified as poor. Table 2 suggests that less than 8% of the poor are receiving support. Besides, certain programmes are only found in few regions such as the SCTS (Ndulo *et al.*, 2009). It has also been observed that government expenditure on these programmes is relatively insignificant and that sometimes the late release of funds is common (Hampwaye, 2008; Kaela, 2008; Mulungushi, 2008; Ndulo *et al*, 2009). The situation is aggravated by the lack of capacity on the part of bureaucrats to spend the budgeted allocations including that assigned for the social sectors and the social protection (Mulungushi, 2008; Ndulo *et al.*, 2009). The current global economic crisis will further exacerbate the funding situation. Reduced government funding to the social sectors and social protection programmes will have adverse effects on the attainment by 2015, the Millennium Development Goal(MDGs).

It is noteworthy that the FSP is aimed at providing inputs and training to small-scale farmers in rural areas in order to improve agricultural productivity as a means of enhancing household food security (Mulungushi, 2008). This government intervention programme is being implemented by an NGO called Prevention Against Malnutrition (Mulungushi, 2008). However, the small-scale farmers in urban and peri-urban areas are not being targeted despite the fact that they too are also poor and vulnerable. Yet farming, along with street vending, illicit beer brewing and piecework are among the key livelihood sources in both the urban and the peri-urban areas in some cities in Zambia (Lusaka City Council, 2005). Although there are no specific laws, by-laws or regulations that entirely support UA, there are, likewise, none that directly prohibit its practice. Although the term was not directly mentioned, 'peri-urban agriculture' received government support from the former president of Zambia, Dr Kenneth Kaunda, who specified the need for self-sustaining cities through increased urban food production in the Third National Development Plan: 1978-1983 (Rakodi, 1988). This largely took the form of peri-urban production units through extension services and is its impact is visible in the number of cooperatives throughout the case study areas.

This section has clearly demonstrated the high prevailing levels of poverty in the Zambia and the limited nature and impact of government poverty response programmes. In this scenario the poor are often left to control their own destiny, with the search for alternative and multiple livelihood strategies- such as UA- being critical. Overall, both the central and also local governments in Zambia do not provide assistance to urban farmers. However, local authorities tolerate urban farmers given the high poverty levels in the country.

5. Urban Agriculture's Contribution to Poverty Relief and Food Security in Zambia

As noted above, a survey of 400 UA farming families was undertaken in the cities of Zambia included in the study. The results gathered from farmers in Lusaka, Kitwe, Ndola and Kabwe clearly reveal that UA has a not insignificant role to play as a source of food and income.

The study revealed that in 80% of cases farming families consumed 80-100% of what they produced and that they were able to produce approximately three- and-a- half months of their annual family food requirements. These results clearly indicate the key role UA plays in helping to ensure food security, extend the household budget and, indirectly, to reduce the risk and incidence of poverty. In cases where farmers sell part or all of their produce, it was established that in Kabwe, Kitwe and Ndola sales from UA can provide as high as approximately 50% of the annual household income. In Lusaka, the figure stood at a modest 18% and an average of 42% for all of the four case studies. The fact that the two major reasons for engaging in urban agriculture by the majority of the respondents for food and to earn income- clearly indicates the significance of urban agriculture. In terms of animal husbandry, the major motive for the involvement of the farmers is to earn extra income. This clearly indicates that for participating households that produce surplus for sale, UA can serve as an important instrument to help address poverty.

6. Case Studies

Having overviewed the nature of poverty relief in the two case-studies and the currently limited impact that poverty interventions and food security interventions currently have. We next turn to examining the reality of UA on the ground in South Africa and Zambia from both an applied and an institutional perspective.

6.1 South Africa

A striking feature of the South African scenario is the reality that UA policy is being actively developed and that government – at various tiers – is keen to improve conditions for the poor. On the ground, evidence of support and success is however less ideal. In this section, findings from research undertaken in major urban centres in South Africa are reviewed. This overview includes results from applied research undertaken in Gauteng (Johannesburg and neighbouring cities), Cape Town, eThekweni (Durban) and Mangaung (Bloemfontein).

6.1.1 Policy Development

Cape Town was the first city in South Africa to engage actively with the concept of UA, and Cape Town is recognised as a city in which UA is well established, and one with a long-established municipal awareness of the role and importance of UA. Significant in this regard are both the evolution of well established policy frameworks and active engagement in applied projects. In the 1980s the municipality began researching the significance of UA in the city. From the 1990s onwards policy managers recognised the value of UA, especially in areas of denser settlement within the city. Various agriculture summits and the establishment of policy followed in the 2000s. Draft policy documents identify the role UA can play in poverty alleviation and the achievement of food security. Key themes in these documents relate to land access, human resource development, the promotion of survival through UA, and creating sustainable economic opportunities. Principals of extension support, land-and water-access and partnerships underlie policy thinking.

One of the most well-established supporting policy frameworks for UA in South Africa is provided by the Gauteng Provincial government. Provincial policy in the form on an Agriculture Strategy provides a policy basis for supporting UA in the cities in the Gauteng Province. Applied provincial support focuses on enhancing food security, income, employment and the overall quality of life. Provincial support is provided for food gardens in terms of providing communities with skills and equipment. In addition, community gardens, homestead gardens and schools projects are also the focus of support. Long-term plans include the proposed mainstreaming of UA activities and securing retail links for small-scale producers.

The city of eThekweni provides not insignificant policy and practical support to UA. Key support agents include the Parks and Recreation Department of the municipality and direct support is also provided through the Area-based Management System. Links with progressive informal-sector policy support in the city are also apparent. The Parks Department incorporates UA into its poverty-alleviation focus and makes available 'open areas' in low-income areas for UA activities, in addition to providing support such as ploughing. City policy has a focus on issues of land access, agricultural development, support services and providing institutional structures. Significantly, policy is noted as looking at both rural and urban areas in the municipality. However, there is only limited emphasis placed on the marketing of produce.

6.1.2 Practice

Within individual cities in the Gauteng Province, growing acceptance of UA and its significance is noted, as is the proliferation of a range of UA activities. Not insignificant local government support is provided to a range of UA activities – this includes establishing food garden projects, providing land for UA, and incorporating UA considerations into municipal planning,

In terms of supporting household level food security in Cape Town, applied programmes have been established. Key project support has been initiated in the low-income Philippi area, but limited inputs, skills and support are noted as key constraints. Accessing land and water are also noted as noteworthy barriers.

In Mangaung, some high-level UA projects have been developed, and funding is provided for UA projects; however, as is noted, and in contrast to other cities, policy support is underdeveloped. Applied support includes the building of greenhouses for various community-based agricultural projects, and the establishment of a significant partnership between the municipality and the local university the latter having undertaken relevant research and helped settle stock farmers on a university experimental farm. The initiative also makes provision for the concept of progressing farmers on to larger holdings. The holding of auctions by the university and the astablishment of support group for farmers by said institution provides a good market link and applied support for UA producers. The university has also provided training in crop production, especially for the various greenhouse projects that the municipality has supported. In addition, community-based workers are providing local support to UA participants in food security programmes in the city.

6.1.3 Assessment

In the case of Mangaung, the Municipal – University Community Partnership Programme (MUCPP) is a useful model of support and research for other centres to consider. Providing support through the partnership for UA, in a market context, is seen locally as significant, as

is the progressing of stock farmers to larger units. The greenhouse projects seem to have been less successful – with low productivity and the poor circulation of participants through projects being noted as concerns. The absence of an enabling policy framework is clearly a local-level challenge, but one that does however not preclude local action. High levels of cost incurred in food-security projects are an additional negative issue, as is the limited focus on backyard gardens.

In Gauteng, the limited impacts of interventions are a negative finding, as are the effects of the limited nature of funding, the shortfall in institutional capacity to provide adequate support, concerns over land-and water-access, poor skills levels in communities and the high over- turn rates of participants in projects. Course for additional concern is the fact that it is the most marginal communities who lack access to land and who tend to be excluded from accessing support. Key findings from the Gauteng case study include: the value of providing appropriate policy support, of allowing land access to marginalised communities, of providing appropriate support to farmers, of promoting gender equality and social inclusion, and of reducing the applied risks associated with UA.

In Cape Town, research undertaken in the city indicates the value of UA, the role it plays in supporting women, and the part NGOs can play in supporting the activity. In the case of eThekweni, while community gardens are supported, backyard gardens are not. Dependence on council support, limited access to water and electricity and theft are also noted as constraints. Limited focus on the marketing of produce is noted to be a additional key constraint.

While UA is clearly well established in South Africa and is moreover starting to enjoy increasing policy and applied support, it is also apparent that, on the ground, support is constrained by issues ranging from cost, to limited capacity. That said, projects such as partnership-based development clearly can provide useful applied guidelines.

6.2 Zambia

6.2.1 Policy

Significant variations exist between the Zambia Kitwe that was investigated. The four centres studied were: Lusaka, Ndola, cities and Kabwe. Of general significance is the degree to which national law and policy are variously viewed as either assisting or constraining UA within urban areas. Despite certain indications of endorsement, general uncertainty over the legality of UA has clearly inhibited local councils from developing policy-support mechanisms, which indicates the degree to which the local state looks to the national government for guidelines, despite the clear endorsement of decentralisation in the country. Clear differences exist between the cities: Lusaka is the most conservative and Ndola is the most progressive, with the latter city now actively engaging in UA policy development. And, while authorities in Lusaka seem reluctant to engage in active support for UA, the municipalities in Kabwe and Kitwe, by contrast, clearly recognise the value of UA and the role it plays as a survival strategy, particularly in times of economic crisis, Kabwe and Kitwe however still have to formulate policy in this regard.

Legal constraints on UA relate to issues of land access and public health (most especially the perception that mosquitoes breed in UA areas). Despite this concern, UA has grown in significance as a result of the general economic downturn, but more specifically as a result of the decline of the country's key copper-mining industry, especially in the area of the

Copperbelt (where Ndola and Kitwe are situated). This has led many officials, particularly in Kabwe, Ndola and Kitwe to recognise the significant role that UA plays. However, the absence of policy in all centres, except to some degree in Ndola, is a constraint of some significance.

6.2.2 Practice

In terms of applied practice, it can be said that while UA is widely practised, land access constraints within and on the fringe of cities (particularly on Forestry land) are key challenges. As a result, open land, land along streams and wetlands and backyards are the primary sites of UA. An exception to the rule is where clear farming 'blocks' exist on which UA is practised-especially in peri-urban areas-where co-operatives have been operating for some decades and have been receiving government support in the form of seeds, inputs and resources. Marketing links with retail chains, which have been established, are a key success for some co-operatives

Greater openness to UA exists outside of Lusaka – especially as a result of high levels of unemployment and mine closure and it is significant that, in many instances, direct support for UA falls more within the realm of non-municipal agents i.e. NGOs, churches and gras-roots organisations. One noteworthy form of support from local authorities is based on the reality that most have market areas in which produce can be sold.

Ndola is clearly the most active city in terms of supporting UA. Land-use surveys are planned by the city to identify and zone land for UA. The Municipal Development Programme, funded by the Dutch government, has started a pilot UA project, and set up stakeholder forums. In addition, various NGOs are supporting training, dairy farming and cash cropping. Of particular note is that Ndola has developed a draft UA policy that seeks to support participation in UA, food security and poverty alleviation. Legal and land constraints are identified in the draft document as barriers that require attention.

The questionnaire survey of 400 UA participants in the four cities in Zambia yielded interesting results regarding the very limited nature of available levels of institutional support and what participants hoped government could deliver. It is interesting to note that only 16 of the 400 farmers who were surveyed stated that they had received previous support from government officials. Of the 16 who had indeed received support, four had received veterinary support and 12 received general farming advice. Very low levels of support (4% overall) suggest that UA is not receiving any significant attention from government and its agricultural extension staff. Despite the currently low levels of actual government engagement, almost all farmers would like to receive some measure of support from the government. Desired support takes the form of support for farming, marketing, training, disease control, and extension support. Clear themes emerge in terms of what forms of help farmers require. Key in this are the basic inputs required to farm, e.g. fertiliser (26% of all respondents), seed, and loans (10%) and securing land access (12%). A cluster of basic farming support also emerges, e.g. help with animals (8%), pests and weeds (4%), water issues (8%), equipment and labour. Market access, surprisingly does not feature that prominently (2%). It is significant to note that UA is clearly occurring in the absence of defined support, which is a testimony to the resilience of urban farmers and the severity of the economic crisis that prompts their actions.

6.2.3 Assessment

While UA is well established in Zambia, outside of Ndola there is only limited institutional support in place for UA. Key constraints noted in Zambia include: clear absence of policy or legal support in urban areas-as compared with peri-urban / rural areas where support is received. Limited funds and extension support are all barriers of some note, as are constraints on land access. On the positive side, policy on land support is starting to evolve in Ndola, and Kitwe and Kabwe are broadly supportive of such action. In addition, NGOs and other holders –stake are starting to play a role, and, as the questionnaire survey suggests, UA activity is widespread, even in the absence of institutional support. In most centres, marketing outlets provided by councils have the potential to assist UA farmers to establish retail bases.

7. Assessment and Analysis of the Case Studies

The eight case studies clearly reflect the reality that UA is widely practised in the two countries investigated. Not surprisingly, UA appears to be practised on a more widespread scale in areas where the copper industry has declined.

Institutional policy and practice in respect of UA appears to be variable in the case studies mentioned. In the South African examples such as Cape Town, there is recognition of the importance of UA in policies and applied projects. Likewise, policy existed in eThekweni where numerous UA projects was also supported , though there was a failure to utilise residential yards back, and it was further noted that a perception of dependency on council support was a concern. In fact, a pattern appeared of a lack of urban or peri-urban or backyard projects in two of the South African examples and although peri-urban and indeed backyard UA occurred in Zambia, in those cities there was a lack of formal access and support for these smaller urban agricultural projects. This Indicates a need for policy legally to allow and support backyard opportunities, which would also counteract the bias towards rural over urban agriculture as indicated in the literature.

In the South African city of Mangaung, policy was indicated as being underdeveloped, and the greenhouse projects had high costs, low turnover of participants and low outcomes; yet despite this problem of lack of policy, partnerships with the University were successful. In Zambia except for Ndola, policy hardly exists. While there is general endorsement of the benefits of UA , this did not necessarily translate into legal clarity. Policy varied from being very conservative and constraining towards UA in Lusaka, while Kabwe and Kitwe had UA activities but no policy, to Ndola which was the most proactive in that it at least had a draft policy. Again this indicates a need for policy to give clear legal land-access rights and practical support to the smaller sites, while simultaneously ensuring that low-cost projects with high outcomes are given priority. There is a need to ensure the inappropriate policy does not actually restrict UA activity as has occurred in Lusaka and as is also indicated as a risk in the literature.

With regard to the accessing of land, half of the South African case studies indicated a problem in respect of access; however, the other half noted the problem to be more predominant in respect of accessing land in backyards. In Zambia, while UA occurred in backyards, legal access to other land was found to be an issue especially in urban and peri-urban areas and there was particular mention of a need for access to forestry land. Water was an issue in most of the case studies, an issue which also needs to be addressed via policy, while electricity supply and theft problems were also specifically mentioned in eThekweni.

Access to markets was only mentioned in eThekweni, and the Zambian case studies appeared to have created some marketing links with retail outlets organised by local authorities. The

case studies indicate that benefit is to be derived from supporting market opportunities, which also further supports the expansion of the micro-industries that surround UA. Policy needs to recognise the importance of supporting these related industries and also the higher-end consumer product demand, as the benefits of UA are not necessarily limited to subsistence products.

Three of the case studies endorsed the role of women in UA, a benefit once again noted in the literature. One policy mentioned the importance of 'greening' the environment. The other issues of waste and recycling mentioned in the literature review did not appear in the case studies, this possibly indicating a need for policy to specify that land use is permissible only if the project ensures the benign utilisation of wastes.

The issue of limited finances was raised in all of the case studies except two in South Africa: eThekweni, which however mentioned the perception of dependence on council funding, and Mangaung- which found the greenhouse project too costly and having limited outcomes and low participant turnover. Interestingly, the Zambia Poverty Reduction Paper also indicated that bureaucracies lacked the ability to spend budgeted allocations or that finances were slow to be released. This indicates the need to have policy or systems to allow the speedy release of resources for small backyard initiatives, with a focus on projects with low costs and high outcome ratios.

Partnerships supporting communities appeared to be strong in Zambia, with support from grassroots organisations, NGOs, Churches and co-operatives being evident. In South Africa, Cape Town mentioned the 'need to develop' NGO partnerships. Mangaung had a strong partnership with the university in research, training and extension support. The case studies indicate the benefit of utilising outside organisations (which appears to occur freely without the need for a specific policy), especially if such partnerships enhance access to backyard opportunities and offer high-outcomes-to -cost ratios.

8. Institutional Lessons

The South African and Zambian cases reveal that UA is clearly not without challenges that relate to issues such as limited policy support, lack of funding, limited land access and poor market access. The limited nature of success achieved and the high turnover of project participants are also further noted as concerns. That having been said there are some significant lessons that can be noted:

- It is apparent that there is value in developing supportive policy frameworks (e.g. in Gauteng Province and eThekeweni City) to focus local government resources, to ensure buy-in by the municipalities and to endorse and support UA. In this regard, ensuring synergy between provincial and local government policy is clearly of value, and particularly in recognising the value of backyard, urban, and peri-urban agriculture and the links between them. It is also important to ensure that existing policy does not restrict UA.

- There is a role to be played by local government departments (e.g. Parks in eThekeweni) in supporting UA and providing access to land.

- There is a need to clarify the legal status of UA and to ensure land access, especially in Zambia. Equally, safe and secure access to other resources / inputs such as water, electricity and extension support is critical.

- Government has a role to play in terms of support and extension services, but this also needs to be made more readily available to backyard farmers-in addition to current support for community gardens / peri-urban farming.

- The training, research, support and marketing value that forming a partnership with a local university can have. Other partnerships with church groups, NGOs, community groups etc should be encouraged and facilitated.

- NGOs have a potential role in terms of providing support, training and even market access, such as in Zambia.

- There is a need in terms both of policy and practice to support not only community gardens / small farmers, but also backyard farming.

- Marketing of produce is a key challenge, and targeted support in this regard is desirable. The provision of urban market outlets in Zambia and the establishing of links with retail chains are clearly ideal avenues to pursue.

- Women farmers are in particular need of support.

- Clear financial constraints exist – both on the part of farmers and the authorities-to support local action actively. There is a need for the authorities to target low-cost but high-output projects and not expensive 'flagship' projects. In addition, financial support needs to be made available with the minimum of delays.

- There is scope to look into the range of products produced, related technical considerations and requirements, e.g. supporting fodder production for middle-income households with stock.

- Policy and support must be environmentally appropriate and sustainable.

9. Conclusion

Although UA is widely practised in South Africa and Zambia and has some not insignificant potential to address poverty concerns, it would appear that appropriate institutional support mechanisms are not as yet fully in place. While policy is evolving in South Africa and in Ndola in Zambia, applied interventions in support of UA appear less spread wide, although there are some South African exceptions. In the case of South Africa, greater levels of support and funding are clearly needed. In the case of Zambia, it would appear that the role UA can play needs greater recognition, while policy still largely needs to be developed.

Based on the research undertaken, it is difficult to escape the conclusion that UA is a survival strategy in the two countries and that policy and applied support are currently in a relatively undeveloped state. While policy has been established or is an advanced state of preparation in South Africa, considerations such as ensuring land access, whether support should also target backyard producers, and how to support marketing are key challenges that exist.

Low levels of success attained, high over-turn rates of project participants, limited funding and support and also land and water access constraints are unfortunate realities that prevail in almost all cases. Quite clearly, over and above policy support, significantly greater levels of concrete action will be required in both countries on the part of local institutions if UA is to move beyond its current status as a marginal survival strategy. On the positive side, themes such as recognition of the need to work through partnerships, the role of NGOs and

universities all emerge as positive aspects that should be encouraged. In all the cities examined, key shortcomings emerge in the economic realm. Foremost in this regard are the limited or non-existent nature of financial support of UA and, perhaps more seriously, the near absence of support for the marketing of produce – with limited exceptions in Zambia.

A clear institutional challenge exists. UA has the potential to help in the attainment of the 1st MDG through being one of a range of support strategies designed to respond to urban poverty and food insecurity. It is an approach in which the beneficiaries can play an active and critical role, but it is also one that is unlikely to flourish in the absence of access to land and resources and of extension and marketing support from local institutions.

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