

**DEVELOPING NETWORK POLICY INSTITUTIONS FOR
URBAN AND PERI-URBAN AGRICULTURE DEVELOPMENT
IN SOUTH AFRICA'S METROS**

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DECLARATION

I, SANDILE NGCAMPHALALA, hereby declare that the work submitted here is the result of my own investigation and that all citations, references and borrowed ideas have been duly acknowledged. I further declare that this work is submitted for the first time at the Graduate School of Public and Development Management, University of the Witwatersrand towards a Master of Management degree in Public Policy and that it has never been submitted to any other university/faculty for the purpose of obtaining a degree.

Signature

Date

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DEDICATION

I would like to dedicate this thesis to my mother, Nomalungisa Mbiko, who sacrificed everything to give me my first chance for education. Special thanks also go to my wife Carol, whose support and love in the past two years is most appreciated. Thank you!

ACRONYMS

ANC	African National Congress
AFSUN	African Food Security Urban Network
DPLG	Department of Provincial and Local Government
MDP-ESA	Municipal Development Partnership for Ease and Southern Africa
MMPP	Master of Management in Public Policy
ODI	Overseas Development Institute
OCHA/IRIN	Office for the Coordination of Humanitarian Affairs/ Integrated Regional Information Networks
JICA	Japan International Cooperation Agency
OECD	Organisation for Economic Co-operation and Development
SACN	South African Cities Network
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlements Programme
UPA	Urban and Peri-urban Agriculture
UFS	Urban Food-security Systems
UFSUN	African Food Security Urban Network
PUFS	Programme for Urban Food Security
ACC	African Centre for Cities

ABSTRACT

This research set out to explore the feasibility of developing Urban and Peri-urban Agriculture (UPA) collaborative policy networks in South African metros. The study explored related challenges and barriers, and investigated the role of the state (national, provincial and local/metro) and other sectoral development stakeholders (private sector, research institutions, non-governmental-organisations, development partners, donors, and farmers) in the substantive UPA policy management process in South Africa. The research was conducted against the backdrop of institutional/procedural policy and collaborative policy networks' theory was used as framework. The research goal was to contribute to and generate new information and knowledge to enhance UPA collaborative governance and procedural policy. This was done through the application of collaborative policy networks as a contemporary procedural policy arrangement framework. Collaborative policy networks in this research are patterned relationships between state and society. These networks link a variety of actors (in the public and private sector) in a set of relatively stable relationships, that are non-hierarchical and interdependent, that share similar policy interests and exchange resources. The purpose is to collaboratively pursue specific policy goals as outlined by Börzel (1997:1). This research applies institutional/procedural theory as formal and legal aspects of government structure and particularly focuses on the way governments are arranged, their legal powers, and their rules and procedures in policy management (Kraft and Furlong, 2004).

South Africa's metros have continuously demonstrated an appreciation of the developmental role of UPA through small and concrete initiatives, including the development and implementation of urban and peri-urban agriculture (UPA) development policies. In line with Mougeot (1994:1), this research however notes that the focus on UPA development in South Africa overemphasises agricultural production as the major component of the UPA definition. According to Dr Jane Battersby-Lennard, Head of the Urban Food Security programme of the African Centre for Cities at the University of Cape Town, the overemphasis on agricultural production can mainly be attributed to the peri-urban agriculture

(UPA) terminology, which accentuates agriculture – even in metros where agricultural production is not feasible. As a result, this research recommends that the UPA terminology in South Africa be rephrased as ‘Urban Food-security Systems’ (UFS). In this context UFS is defined as a systems approach to develop sustainable and equitable urban food value chains while incorporating a strong focus on elements of urban land-use planning, access to production resources (land and water), food production, safe supply of production inputs, value adding and processing, market development and access. Such an approach also develops responsive institutional/procedural and substantive policy management instruments.

The emerging trend noted through this research is that South African metros have not made much progress on the ground in terms of UPA substantive policy management. This also applies to UPA institutional policy in South Africa, which in its current form offers limited opportunities to UFS development in South African metros. This type of development still faces a number of barriers and challenges that relate to institutional and substantive policy issues. Even with the metros’ demonstrated interest in advancing the sector, UPA policy management capacity and resources (human, social, physical, economic and environmental capital) remain limited. UPA suffers overall limited state attention and commitment and consequently restrictive legislation, bureaucratic red tape and limited institutional, technical and financial support. The research argues that UPA development initiatives could benefit from government’s commitment and prioritisation at all spheres (metro, provincial and national).

The research gathers that UPA governance could be enhanced through institutional policy improvements that emphasise wider stakeholder participation through collaborative policy networks. The researcher argues that there is a strong need for state sanctioned interventions that initially focus on developing strategic institutional policy networks as a development foundation for comprehensive, accelerated, equitable and sustainable UFS interventions rather than just agricultural production. This calls for the engagement of multiple stakeholders from social, economic and environmental

development sectors (including agriculture, food security, natural resources management, social development, political management, climate change, environment and health, etc.) as active UFS development partners in South Africa. This research emphasises collaborative policy networks as an appropriate form of UPA institutional/procedural policy arrangements to help ensure trust, transparency, participation, reciprocity and a good balance of vertical and horizontal power/governance structure (as also defined by Deleon and Varda, 2009:67-71). Here the researcher argues that institutional policy networks articulate very well with the desired objectives of achieving collaborative UPA governance, and that these objectives are key to efficient UPA substantive policy management for South Africa.

As a justification for policy networks, the study found that UFS development as a multi-stakeholder and multi-sectoral public policy issue could benefit not only from the distributed intelligence presented as a benefit of policy networks, but also from the distributed human, social, physical, financial, and political capital/resources that can be accessed and utilised collaboratively to pursue overarching and specific substantive UFS policy goals at national, provincial and local levels. The study recommends the establishment of a national level UFS policy network that could be led by the Department of Agriculture, Forestry and Fisheries (DAFF) in partnership with the metros and other strategic state and non-state actors. The research recommends that a national UFS Secretariat be established at part of DAFF, to deal with national UFS policy issues (substantive and institutional) and to provide strategic programming and technical support to metros. The research also notes that developing efficient UFSs would require engaging numerous specialised skills and capacity sources that thus calls for the establishment of smaller specific substantive policy networks within the national UFS policy network. This could be led and constituted by specialist institutions with the required capacity and skills. Potential smaller specific substantive policy networks could include: agricultural production, trade, food/nutrition security and research; trade and marketing and research; environmental management and research; and spatial development and land-use planning and research. The research recommends that such policy networks be institutionalised at national, provincial and local/metro levels and that

these policy networks are referred to as the Urban Food-security Systems – Community of Practice (UFS-COP).

The research also notes that although there is a strong appreciation of the characteristic benefits of policy networks for managing multi-dimensional policy issues such as UFS, it must be noted however, that policy networks are not a panacea and that they do exhibit a hind-side of major challenges (for collaborative governance) that must be continuously addressed in search of efficient collaborative policy governance structures that emphasis the active engagement of multi-sectorial and multi-level policy management stakeholders for collective action.

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CHAPTER 1: INTRODUCTION

1.1 BACKGROUND OF THE RESEARCH

As far back as the 1980s researchers pointed to Urban and Peri-Urban Agriculture (UPA) for feeding the urban poor. In a study conducted for the International Labour Organization, Singh (1989: 37 cited by Rogerson, 1993) referred to food production in the cities as an ‘unconventional proposal’ to address urban poverty, unemployment and to ultimately contribute to dealing with the challenges of runaway growth of cities in developing countries (Mougeot, 2006). Smit et al. (1996) note that the potential for urban agriculture across the developing world is largely untapped and is in fact undervalued.

While UPA is identified as a strategic development area that should be strongly considered for urban food security and sustainable development of cities, very little effort has been made to ensure the integrated development of the sector. At a practical implementation level, it is also worth noting that the majority of UPA activities in South Africa are generally unplanned and very inefficient (Rogerson, 1993; Austin and Visser, 2002). Nonetheless, although disintegrated, considerable efforts have been made to study this sector, with researchers seeking to understand UPA’s importance as a pro-poverty development strategy in South African’s metros. Specific questions, however, have been raised with regards to the lack of national UPA policy direction in South Africa as a function of the poor institutional policy and governance structures in place. Indeed, substantive UPA policy development is essential, but the development and design of the necessary institutional policy and governance structures form the bases for substantive UPA policy management activities (setting the policy agenda, policy development, implementation, monitoring and evaluation).

This research therefore investigates the opportunities of developing a functional set of UPA policy institutions for South Africa’s metros. The research focus has evolved from looking at policy institutions in own right, to exploring network policy institutions as the most appropriate arrangement for UPA policy management in South Africa.

1.2 PROBLEM STATEMENT

According to the South African census survey for 2011 (Statistics South Africa, 2012), the population of the eight South African metros is currently estimated at about 40 percent (20.4 million) of the national population of 51.7 million people. This represents 31.5 percent growth since 1996 (Statistics South Africa, 1998) and 21 percent growth since 2001 (Statistics South Africa, 2003). The high urban population in South African metros presents a new set of challenges to city managers, including, most importantly, the availability and sustainable supply of affordable and suitable energy, land, water and food (United Nations, 2007; OCHA/ IRIN and UN-HABITAT, 2007). Due to rapid urban population growth and its consequent consumption demands, South Africa's metros, like a number of other metropolitan cities throughout the world, face a series of challenges that threaten their social, environmental and economic viability.

Among others, UPA in South Africa has been identified as one of the key urban sustainable development and management strategies (Rogerson, 1996; 2003; Smit et al., 1996; Austin and Visser, 2002; Smith, 2006). UPA provides a great deal of social, economic and environmental benefits, and therefore significantly contributes to the development of sustainable cities (Henn, 2000). The sector offers different opportunities for urban people at different levels of income. Smit et al. (1996: 4) note that "... for the poorest of the poor, it (UPA) provides good access to food. For the stable poor, it provides a source of income and good-quality food at low cost. For middle-income families, it offers the possibility of savings and a return on their investment in urban property. For small and large entrepreneurs, it is a profitable business". UPA plays a major role in recycling and re-using urban organic waste and waste water, increasing biodiversity and reducing energy use by providing fresh food close to the city, ultimately reducing the ecological footprint of a city (Smit et al., 1996). For example, in China intensive livestock and vegetable farming has been successfully integrated into an ecological complex involving recycling nightsoil and organic urban waste. As a result, about fourteen of China's largest cities, including Shanghai, are virtually self-sufficient in terms of food (Haughton and Hunter, 2003; Rogerson 1993 citing Yeung, 1992).

Regrettably, in South Africa, the majority of UPA initiatives are unplanned and very inefficient (Rogerson, 1993; Austin and Visser, 2002). The sector provides limited social benefits and is overwhelmingly driven by food security needs and economic survival (Rogerson, 1996; Slater, 2001; Smith, 2006). In fact, the current state of UPA in South Africa suggests that the sector claims too much but offers too little to urban poverty alleviation, food security and environmental sustainability.

As this thesis will argue, however, it is limited attention and poor state support that continue to undermine local UPA development initiatives in South Africa (the latter as specified by Rogerson, 2003). The country does not have a national UPA development policy. Instead, UPA features as an extension of other policies and urban development plans that tend to have a wider economic development focus and thus lack the kind of emphasis and impact that specific UPA policy would otherwise have. Furthermore, UPA development in South Africa is local or city government's responsibility with minimal support from provincial and national government, particularly in terms of setting a national UPA development policy framework to guide local efforts. Consequently, UPA development initiatives at local level often lack the necessary resource inputs (natural, financial, human, physical and social capital) that are prerequisites to the sector's success.

In a study that investigated opportunities for UPA development in South Africa ("Advancing urban and peri-urban agriculture: an enabling framework for South African cities"), Ngcamphalala (2009; author of this thesis) identifies institutional policy gaps as the undermining factor for the evident inefficient UPA sector performance in South Africa. Ngcamphalala (2009) argues that limited attention and poor state support continue to undermine local UPA development initiatives in South Africa. Without appropriately designed policy institutions with the relevant capacity and resources, transformational substantive UPA development policy may never be realised in South Africa's metros. The apparent failure of UPA development efforts in South African cities is in all probability a consequence of the missing link effect of an efficient institutional policy function in the sector's

development equation. Ngcamphalala (2009) further notes that the UPA sector in South African cities is characterised by poor institutional design and capacity, limited stakeholder participation, poor and isolated sector development planning, and poor programme implementation, monitoring and evaluation.

Urban sustainability and food security constitute challenge that can no longer be ignored. This challenge threatens millions of vulnerable South Africans living in cities. As a prerequisite, while innovative substantive UPA development policy is desired for effective UPA development in South Africa, equally innovative, progressive and informed institutional/procedural policy with the relevant human, social and financial capital will be a fundamental prerequisite to face the challenge. This research therefore seeks to investigate the feasibility and indeed the appropriateness of network institutional policy to lead effective and collaborative substantive UPA policy management in South Africa's metros.

1.3 RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

The main research question for this research is: 'How can UPA policy institutions be appropriately developed and designed to effectively manage substantive UPA policy in South Africa's metros?' Table 1 shows how the main research question will be used as a guide to answer the research objectives. At the same time, Table 1 identifies the matching sub-research questions to help facilitate the necessary data collection through interviews.

Table 1: Research objectives and corresponding research questions

Research objectives	Matching sub-research question
- To establish the state of UPA development in terms of institutional and substantive policy management in South Africa.	- What is the current state of UPA development in South African metros? - What are the UPA institutional and substantive policy management barriers and challenges?
- To identify the role of the state (national, provincial and local/metro) in the UPA policy management process in South Africa's metros.	- What is the state's role in the UPA policy management process in South Africa's metros?
- To identify the role of other sector development stakeholders (private sector, research institutions, non-governmental-organisations, development partners, donors, farmers, etc.) in delivering substantive UPA policy.	- What is the role of other stakeholders (private sector, social partners, etc.) in the UPA policy management process in South Africa's metros?
- To make recommendations on the development and appropriate design of institutional policy network for substantive UPA policy delivery in South Africa.	- How can network institutional policy theory be used to guide procedural policy recommendations for UPA development in South Africa's metros?

1.4 CONCEPTUAL FRAMEWORK

A number of concepts provide the framework for the proposed project. These concepts attempt to establish a common context and understanding for the research. Substantive UPA development policy initiatives cannot operate in isolation to its institutional governance base including individuals and organisations. As such, the proposed research project brings together UPA substantive policy, institutional policy/procedural policy and the need to consider policy networks in UPA institutional/procedural policy arrangements, as a comprehensive package for UPA policy management enhancement in South Africa. The concepts that follow in the rest of this section dominate the research and analysis and there is thus a need to establish a common understanding of these concepts upfront. These concepts are defined in further detail in Chapter 2.

1.4.1 Urban and peri-urban agriculture (UPA)

For many, urban and peri-urban agriculture (UPA) is considered a marginal, part-time, leisure activity, or a means to cope with household poverty. However, UPA is also much more than just this notion. Mougeot (1994: 1) defines UPA as “the growing of food and non-food plant and tree crops and animal husbandry (livestock, fowl, fish and so forth), both within (intra-) and fringing (peri-) built-up urban areas”. Smit et al. (1996: 1) put a business sense in the practice defining urban agriculture when they describe it as “an industry that produces processes and markets food and fuel, on land and water dispersed throughout the urban and peri-urban area”. For the purposes of this research, the researcher defines UPA as any agricultural production activity (livestock, agronomy, horticulture, etc.) that occurs within the boundaries of the metropolitan municipalities.

1.4.2 Institutions and substantive policy

In the light of the need for institutional policy to drive UPA substantive policy (practical policy issue, such as agriculture development), Jepperson (1991) defines institutions as any social pattern that is characterised by standard sequences of interactions. Taking the definition further, Ostrom (1990: 51) refers to institutions as the “set of working rules that are used to determine who is eligible to make decisions in some arena, what actions are allowed or constrained, what aggregation rules will be used, what procedure must be followed, what information must or must not be provided and what pay-offs will be assigned to individuals dependent on their actions”. Klijn and Koppenjan (2006) strongly suggest that “without institutions virtually every form of collective behaviour and collective action would be impossible”. Institutional theory on the other hand often emphasises the formal and legal aspects of government structure, with a particular focus on the way governments are arranged, their legal powers as well as their rules and procedures (Kraft and Furlong, 2004). This understanding links well with Gormley’s (1987: 154) institutional policy analysis definition, which he sums up as the “study of government reform and its consequences”. Knowing and understanding institutions will

therefore help to appreciate their role in public policy. Such an awareness underlines the importance of institutional or procedural policy to improve substantive/practical public policy delivery.

1.4.3 Policy networks

According to Börzel's (1997:1) definition, networks are a patterned relationship between state and society linking the public and private sector in policy in a set of relatively stable relationships. These relationships are non-hierarchical and interdependent, and link a variety of actors who shape similar policy interests and exchange resources. The objective is to pursue policy through cooperation and collaboration. In this research project, policy networks have been identified as an appropriate framework for institutional/procedural policy design for enhanced UPA development in South Africa.

The concepts of institutional policy and policy networks are part a wider body of knowledge and theory that guides the application and consequences of these concepts in public policy management (development, implementation, monitoring and evaluation). Section 1.6 sums up the theoretical framework applied for this research (see Chapter 2 for the detailed review).

1.5 THEORETICAL FRAMEWORK

This research brings together substantive urban and peri-urban agriculture development policy issues, institutional policy theory and policy networks theory as a framework to guide this investigation. The proposed research is essentially an institutional or procedural policy analysis study that takes a special interest in policy network theory as the most appropriate institutional policy design for the efficient advancement of urban and peri-urban agriculture in South Africa. As noted in Gormley (1987: 154), institutional policy analysis forms the basis to understand institutional governance constraints and to identify opportunities to improve the policy-management process – from agenda setting and policy development through to implementation, monitoring and evaluation, and policy review. As such institutional policy analysis and reform focuses explicitly on enhancing the policy management

process and consequently improving on substantive policy delivery and transformation as a result of the effective and efficient performance of the institutions in place (Gormley, 1987). Gormley (1987: 154), as briefly noted earlier, defines institutional policy analysis as the “study of government reform and its consequences”, while institutions in particular refer to any social pattern characterised by standard sequences of interactions (Jepperson, 1991). Specifically with reference to public policy and politics, institutions are seen as governance structures that are based on rules, norms, values and systems of cultural meaning (Booyesen, 2011). In line with this emphasis, Tolbert (2003) stresses that institutional policy deals with the rules, structures, organisation and process of government while putting a strong emphasis on understanding and enhancing institutional arrangements and their capacity to deliver substantive policy objectives. Understanding institutions helps to appreciate their role in public policy and the importance of institutional or procedural policy recommendations aimed at improving substantive public policy delivery. As such, institutional or procedural policy forms the foundation that grounds specific substantive policy governance issues.

The network policy theory (also see Chapter 2) is identified in this research as an appropriate institutional design framework for UPA institutional policy in South Africa. Policy networks are said to be an emerging type of institution that is fluid, evolving, networked, involving dialogue and showing distributed intelligence characteristics (Hajer and Wagenaar, 2003; Stoker, 1998). Furthermore, as noted earlier (Börzel, 1997:1), policy networks can be seen as patterned relationships between the state and society, which link public and private actors in public policy management in a set of relatively stable relationships that are non-hierarchical and interdependent. Policy networks allow for the exchange of resources between policy actors as well as cooperation and collaboration in policy management (Börzel, 1997). The network policy can offer a good opportunity for advancing UPA policy management in that it links different key actors in the UPA policy management process.

1.6 RESEARCH DESIGN AND METHODOLOGY

This research project builds on initial research conducted by Ngcamphalala (2009) (“Advancing urban and peri-urban agriculture: An enabling framework for South African cities”). Ngcamphalala’s (2009) work contributes technical knowledge to the current research project, constituting a stepping-stone in investigating the feasibility of developing network policy institutions for UPA development in South Africa.

The research project utilises secondary and primary data that is collected through the literature review, face-to-face and telephonic interviews, and documentary analysis (also see Chapter 4 on the details of the research methodology). The research methods adopted for this research are partially informed by the research methods that were used in the preceding studies conducted by the researcher on urban agriculture development in South Africa (Ngcamphalala, 2009). In the preceding research paper data was gathered through literature review and face-to-face interviews with key informants from the four biggest metropolitan cities in South Africa (Pretoria, Cape Town, Durban and Johannesburg), as well as from provincial and national government and other private sector experts on sustainable urban development planning and management in South Africa. The research objectives and questions dictate the appropriateness of similar research methods.

Building on prior research (Ngcamphalala, 2009), the researcher re-interviewed some of the initially interviewed key informants, as well as other key informants (experts on institutional/procedural policy, network policy, and substantive UPA development), within and outside the state. Neuman (2011:410) defines an informant or a key actor in field research as an individual “with whom a field researcher develops a relationship and who tells about, or informs on, the field”. Neuman further asserts that the best informant is an expert individual who is actively involved in the field. Given the follow-up nature of the current research, the interviews simultaneously resembled a feedback orientation on the outcomes of the initial research. This allowed for a sense of ownership of the research and emerging recommendations. Interviewing key informants individually helped eliminate

the risk of group-think (limited alternate views), which is common in some types of focus group discussions or group interviews (as outlined by Newman, 2011:410). Individual interviews also allow for higher quality contributions, given that the number of interviewees is relatively limited, albeit appropriate to the research objectives (Neuman, 2011). The research design and research methods applied are elaborated in Chapter 4.

1.7 RESEARCH REPORT OUTLINE

This thesis comprises the following chapters, which are sequenced as follows:

- Chapter 1: Introduction (just dealt with)
- Chapter 2: Theoretical and conceptual framework
- Chapter 3: Multi-stakeholder nature of UPA in South Africa: Opportunities for policy networks (a literature review)
- Chapter 4: Research design, methodology and implementation of the research
- Chapter 5: Data presentation
- Chapter 6: Data analysis
- Chapter 7: Conclusion and recommendations

CHAPTER 2: CONCEPTUAL AND THEORETICAL FRAMEWORK

2.1 INTRODUCTION

Institutional policy (also known as a form of procedural policy) forms the basis of substantive policy management, which deals with development policies and programmes on ground level (Booyesen, 2011). Booyesen points out the significance of the opportunities and procedural management benefits that institutional policy offers to the substantive policy management process. Procedural policy is fundamentally the base of policy governance. According to Booyesen (2011), institutional policy reform has a very strong bearing for substantive policy analysis outcomes, as with the choice of theoretical framework and the favoured form of institutionalism. Booyesen further explains that institutional policy analysis and reform neither happens in a substantive vacuum nor is it pursued as an objective in its own right. As such, this research seeks to contribute to institutional reform and development activities that are specific to substantive urban and peri-urban agriculture (UPA) policy management challenges in South Africa's metros. This understanding also helps justify the need to establish a very good understanding of the substantive policy issue in question so as to be able to design relevant responsive institutional policy structures (see Chapter 3).

Institutional policy in its traditional form emphasises hierarchy in the decision making process, which may sometimes prove antagonistic to the interest of collaborative governance (Kenis and Schneider, 1991:36; Hajer and Wagenaar, 2003). Instead, this research focuses on collaborative policy networks as an appropriate form of institutional design that emphasise trust, transparency, participation, reciprocity and a good balance of vertical and horizontal power/governance structure (Deleon and Varda, 2009:67-71). Here the researcher argues that institutional policy networks not only articulate very well with the desired objectives of achieving collaborative governance, but also constitute a relevant and appropriate institutional/procedural policy design framework for efficient UPA substantive policy delivery in South Africa's metros. Chapter 2 explores a number of concepts utilised in this research as well as the underlying institutional and policy networks theory as a guiding

framework for the research. The definitions are offered as an attempt to establish a common understanding of the application of the different concepts within the context of procedural policy reform for effective substantive UPA policy delivery.

2.2 CONCEPTUAL FRAMEWORK

The rest of this section defines a number of key concepts utilised in this research. These definitions are utilised to ensure that the concepts presented in the research have a common meaning (at least for the purposes of this research) and are informed by relevant literature.

2.2.1 Urban and peri-urban agriculture (UPA)

First, it is important to establish a common understanding of Urban and Peri-urban Agriculture (UPA) as the substantive issue base for this research. Mougeot (1994:1) defines UPA as “the growing of food and non-food plant and tree crops and animal husbandry (livestock, fowl, fish and so forth), both within (intra-) and fringing (peri-) built-up urban areas”. Smit et al. (1996:1) put a business sense in the practice, defining urban agriculture as “an industry that produces, processes and markets food and fuel, on land and water dispersed throughout the urban and peri-urban area”. In this research administrative boundaries for metros are used to define UPA particularly in terms of the areas where it is practiced. Urban land is defined as located in the intra-city and peri-urban referring to land found on the fringes of the city. Table 2 sets out the different UPA farming systems, the expected products/outputs, examples of different locations where these are practiced around the city, and some of the techniques employed.

Table 2: Urban and peri-urban agriculture farming systems (Source: adapted from Smit et al., 1996)

System	Product/Output	Location / technique
Aquaculture	Fish and seafood, vegetables, seaweed, fodder	Ponds, streams, cages, estuaries, sewage, lagoons, wetlands
Horticulture	Vegetables, fruit, compost	Home-sites, parks, rights-of-way, roof-tops, containers, hydroponics, wetlands, greenhouses
Livestock	Milk, eggs, meat, manure, hides, fur	Zero-grazing, rights-of-way, hillsides, coops, open spaces
Agro-forestry	Fuel, fruit, nuts, compost, building materials	Street trees, home-sites, steep slopes, vineyards, greenbelts, wetlands, orchards, forest parks, hedgerows
Other	Houseplants, medicines, beverages, herbs, flowers, insecticides	Ornamental horticulture, roof-tops, containers, sheds, beehives, greenhouses, rights-of-way, urban forests

Although the source for the UPA definition is agriculture and food based production systems (crops and livestock), UPA can also be defined to include non-food plant and tree crops, as well as the processing, marketing and trading of these goods for sustainable urban food security (Mougeot, 1994:1). As noted by Mougeot, UPA development is defined to include the entire food production and supply system for metros. Although Nasr's (1996:1) definition clarifies UPA as all the practices and different components across the value chain, the terminology (urban and peri-urban agriculture) does not do justice to the desired understanding of the tasks required to develop the UPA value chain. Nonetheless, the UPA concept is further explored throughout the research as an effort to establish an adapted definition that responds to the needs of UPA development within the South African context.

2.2.2 Public policy management

The public policy management process is characterised by a number of different but interconnected stages. These stages include agenda setting, policy formulation, policy adoption, policy implementation and policy assessment (Dunn, 1994:17). Although these are common policy management stages, in practice however, the public policy management process turns to be complex and often non-systemic rather than logical or rational (Gumede, 2011:170; Cohen et al., 1972:1-25). In

many cases, as also observed in South Africa, policy managers employ a balance of different approaches as dictated by circumstances (Gumede, 2011:170). Gumede (2011:170) notes that “in most instances agenda setting is often informed by the political imperatives of the time”, which may imply that certain stages or phases such as “consultations or the involvement of stakeholders hardly occur in the policy-making processes”. There are different policy management approaches that are applied in practice, such as the garbage-can model, incremental model, and the rational model to policy management (Cohen et al., 1972:1-25; Howlett and Ramesh, 2003:166). However, this research takes specific interest in the different policy management stages rather than the approaches. As an underlying statement, the logical stages of the public policy management model help to recognise the different policy actors that may be involved in the different stages of public policy management. This resonates well with the institutional policy analysis and network policy arrangements focus of this research, which requires a fair appreciation of the different policy management stages, and the policy actors and their current and expected roles in the process. In this research public policy management is understood as a comprehensive process of agenda setting; policy formulation, policy adoption, policy implementation and policy assessment as means to efficiently manage government’s task to deliver public services and goods while ensuring sustainable and equitable development.

2.2.3 Policy management in a developmental state – South African context

Over the years the role of the state has changed tremendously in South Africa. According to the then Department of Provincial and Local Government (DPLG) (2006:16), the role of the state is to play a facilitation role to assist the creation of the necessary conditions to support local leaders, communities, businesses, NGOs, organised labour and other stakeholders to realise their goals. Here the state plays a role of a facilitator, networker and monitor. Over the years the South African government has made a commitment to become a ‘developmental state’ (ANC, 2007). According to the DPLG (2006:11), the move towards a developmental state signals frustration within the state with the presumption that markets are always perfect, that government must be minimalist and that privately led growth benefits will trickle down and ensure the delivery development outcomes. This decision does, however, signal

a decisive decision by the state to become an active necessary, ‘capacity’ that is well organised to work with social partners and others to pursue developmental goals.

As a working definition, research adopts Gumede’s (2011:180) conceptualisation of a developmental state as a state “that is active in pursuing its agenda, working with social partners and has the capacity and is appropriately organised for its predetermined developmental objectives”. A developmental state focuses explicitly on dealing with structural developmental issues and seeks to address developmental challenges such as poverty, inequality, unemployment and improving livelihoods (Edigheji, 2005). Moreover, according to Evans (1995), a developmental state must be able to demonstrate some key elements of being ‘embedded’ or connected to the society it serves while allowing some distance from vested interests – a relationship he refers to as “embedded autonomy”. Over and above the principle of “embedded autonomy”, Edigheji (2005: no page numbers) asserts that a democratic developmental state also embodies principles of electoral democracy and popular participation in development and governance processes – economic growth and state-driven equitable socio-economic development. As highlighted by the ANC (2007: no page numbers), besides the principles of fairness, inclusivity and accountability, a developmental state can be distinguished also by the extent to which it responds to the needs of its citizenry and specifically in terms of the following characteristics:

- **Strategic orientation:** development strategy and programmes based on high growth rates, restructuring of the economy and socio-economic inclusion;
- **Ideational capacity:** leadership in defining a national vision and mobilising society to take part in its implementation, with effective systems of interaction with all social partners;
- **Organisational capacity:** state structures and systems that facilitate the realisation of a set agenda, with appropriate macro-organisation of the state; and
- **Technical capacity:** translation of broad objectives into programmes and projects and capacity to ensure implementation, with proper training, orientation and leadership of the public service.

The idea of a developmental state is seen to promote the establishment of developmental and transformational institutions that can assist in overcoming institutional capacity challenges in South Africa. In developmental states, collaborative governance takes centre stage – where developmental institutions and other stakeholders within and outside government take full responsibility to achieving the country's development agenda (ANC, 2007: no page numbers). Here effort is made to ensure that state-society relations are developmental, democratic and socially inclusive (Edigheji, 2005: no page numbers). The developmental state goal of the South African government presents a great opportunity for UPA institutional and substantive policy management initiatives that emphasise collaborative governance.

2.2.4 Institutions and institutional policy analysis

Ostrom (1990:51) refers to institutions as a “set of working rules that are used to determine who is eligible to make decisions in some arena, what actions are allowed or constrained, what aggregation rules will be used, what procedure must be followed, what information must or must not be provided and what pay-offs will be assigned to individuals dependent on their actions”. As a result, institutional theory accentuates formal and legal aspects of government structure and particularly focuses on the way governments are arranged institutionally, their legal powers and their rules and procedures (Kraft and Furlong, 2004). According to Tolbert (2003), institutional policy (also referred to as procedural policy) deals with the rules, structures, organisation and process of government while placing a strong emphasis on developing and enhancing institutional design and the capacity of institutions to deliver substantive public policy objectives. With the institutional policy definition in mind, according to Gormley (1987), and in contrast to descriptive policy studies (that examine manipulable and non manipulable aspects of the policy process in an effort to improve the understanding of politics) and substantive policy analysis (that focuses on understanding the authoritative allocation of resources by the state through programme choices), institutional policy analysis focuses on improving government by analysing its procedural policy choices, redefining relationships within government as well as the decisions that affect the influence of outsiders on government itself. Importantly, understanding

institutions helps to appreciate their role in public policy and thus their importance to improving substantive/practical public policy delivery objectives (e.g. agriculture development, poverty alleviation, reducing youth unemployment).

2.2.5 Collaborative policy networks and governance

Policy networks are considered one of the most useful frameworks to drive progressive and transformational institutional and substantive public policy initiatives that are grounded in participatory governance, equitable and sustainable development principles. Börzel's (1997:1) definition of policy networks is one that is indeed generally accepted. This definition considers policy networks as a connection between state and society that links public and private policy actors in a set of relatively stable relationships. These relationships are non-hierarchical and interdependent, and connect a variety of actors with similar policy interest to exchange resources and pursue policy through cooperation and collaboration. Still, others see policy networks as an emerging type of institution that is fluid, evolving and interlinked (networked) – involving dialogue and demonstrating distributed intelligence characteristics (Hajer and Wagenaar, 2003). Effectively, policy networks are non-hierarchically structured institutions that are supposedly based on the equitable connectedness (networks) of the institutions and individuals involved, thus enjoying the benefits of combined human capital and institutional capacity located across the stakeholder base. Network policy institutions are therefore not just about the distributed intelligence but also about distributed human, social, physical, financial, political capital/resources that can be utilised collaboratively to pursue substantive policy goals. As a complementary procedural policy framework, policy networks are well blended with the concept of collaborative or participatory governance.

Participatory governance is a function of two concepts that are characterised by a positive, intertwined relationship (participatory development and governance). Participatory development fully involves the affected people, organisations and groups in the decision making processes. This includes planning, implementing and sharing in the benefits of development programmes as well as in their evaluation

(Cohen and Uphoff, 1977; OECD, 1997). It also involves organised efforts to increase control over resources and regulative institutions in given situations on the part of affected groups and other stakeholders that had been previously excluded from such control (Pearse and Stifel, 1979). Overall, participatory development implies a partnership built on the basis of dialogue among stakeholders, during which the development agenda is jointly set and the views and knowledge of stakeholders are deliberately sought and respected (Lyall and Tait, 2005). Governance, on the other hand, is the process of interactive, collaborative and integrated decision-making and implementation activities and the related spread of power that is applied during these processes (Stoker, 1998; Lyall and Tait, 2005; World Bank, 1992). Others see governance as the increased role of non-governmental actors in policy making. This implies more complex relations between the state and society in which networks (rather than hierarchies) dominate the policy-making process (Bache, 2003 as cited in Lyall and Tait, 2005; Stoker, 1998).

2.2.6 Policy community and issue network

Rhodes (1997) distinguishes between a policy community and issue network as the two types of networks. Rhodes uses the concept of policy network in a generic way and further outlines it into two policy network typologies. Rhodes (1997:44) asserts that a policy community is characterised by the following: a limited number of participants with frequent high quality interaction on all matters of concern around policy issues; membership stability; general consensus on basic values and broad policy preferences; the acceptance of the legitimacy of policy outcomes; the control and exchange of valuable resources with all actors in the network. As noted by Rhodes (1997:44), members of a policy community generally assume strong positions that allow for balanced power relations between government and non-state-actors. Although this kind of policy network is indeed ideal, in practice, however, it must be appreciated that the policy community characteristics may not be always realisable in its optimal form. Issue networks, on the other hand, are characterised by many participants with limited interaction and consensus, and thus, more internal conflict. In issue networks, the interaction between actors is rather based on consultation rather than bargaining or negotiation; the

power relations are generally unequal with many actors lacking resources, access and alternative choices (Rhodes, 1997:44).

2.3 THEORETICAL FRAMEWORK

The following section explores institutional theory and policy networks theory as the theoretical framework for this research. The policy network theory presented here also extends to include elements of governance that emphasise collaboration and stakeholder coordination in policy management.

2.3.1 Institutional theory

Institutional theory, particularly in its traditional form, emphasises the more formal and legal aspects of government institutions such as the legislature, courts, executives, political parties and others (Kenis and Schneider, 1991:36; Hajer and Wagenaar, 2003). In contrast, in latter settings of the institutional approach, there is a tendency to identify institutions with the way in which governments are arranged, their legal powers, as well as their rules and procedures. This latter understanding – to a great extent – helps to appreciate the importance of institutional theory in relation to how certain aspects of government structure and procedural rules can empower or even obstruct political interest (Kraft and Furlong, 2004:75). More recent variants of the institutional theory also build on the concept of governance, while attributing that a multiplicity of institutions often successfully co-govern in a range of manifestations of political power and influence (Booyesen, 2011:21). While there exists a mutual determination between institutions and policy, policy managers must also be aware of the political context in which the policy management process occurs. As noted by Dror (2006:81), “policy and politics closely interact, often overlap and in part cannot be separated even analytically”.

The definition of institutions is wider than government institutions, as noted by Jepperson (1991) who views institutions as any social pattern characterised by standard sequences of interactions that effectively relates to organisational rules and structure. According to Booyesen (2011), “rules and

structures have consequences, both for the way in which decisions are made and whether decisions are made at all". In fact, Gormley (1987:154) defines institutional policy analysis as the "study of government reform and its consequences". Consequently, at the back of their minds, policy makers must be aware of the substantive policy outcomes as consequences of specific procedural policy decisions. Gormley further argues that rules and structures, as emphasised by the procedural/institutional theory, can effectively make some policy outcomes more likely than others by simply elevating and/or advancing certain policy options over others. Booysen (2011) gathers that while institutional theory emphasises state institutions and their analysis, later variants of the institutional approach and indeed emerging institutional policy dialogue, at least in recent years, seem to strongly agree on the importance of looking beyond just state institutions into other rather less conventional institutions outside the state. As indicated by Tolbert (2003), institutional policy deals with the rules, structures, organisation and processes of government; hence the emphasis is on understanding and enhancing institutional arrangements and their capacity to deliver public policy.

As noted earlier, public institutions relate to governance structures based on rules, norms, values and systems of cultural meaning (Booyesen, 2011). Thus institutional policy analysis forms the basis to understanding institutional governance constraints. It helps identify opportunities to improve the policy-management process – through the phases of agenda setting, development, implementation, monitoring and evaluation. As such, institutional policy analysis and reform focus explicitly on enhancing the procedural policy process. The objective is to improve substantive policy delivery and transformation as a result of the effective and efficient performance of the institutions in place (Gormley, 1987).

An understanding of institutions indeed helps to appreciate their role in public policy. It further highlights the significance of institutional or procedural policy recommendations to improve substantive public policy delivery. As such, institutional or procedural policy forms the foundation for specific substantive policy governance issues. In application to the current research project, UPA

institutional or procedural policy should be seen as the foundation for concrete substantive UPA policy delivery. As such, any disconnect between the two may undermine any progress or key recommendation made on both fronts (institutional and substantive policy). It is assumed that the appropriate design of suitable institutions with the desired human capacity and the necessary resources will directly translate into the intended and desired substantive and equitable policy delivery. However, in practice there are many other factors that influence the operation of institutions in delivering policy objectives. It must be understood that policy institutions are generally not neutral (Booyesen, 2011). One must also realise that the structure of institutions, their design/arrangements and procedures, bear some important consequences for the adoption and content of public policies (Gormley, (1987).

This research project further notes that the distribution of power among UPA development stakeholders is nowhere near equal – some stakeholders enjoy more powerful positions in the development chain of the sector than others. Unfortunately, such stakeholders' power (or lack of power) directly translates into the strength of their voice to steer UPA development in a specific direction, which may not be always favourable for the sector or for other players involved. The policy networks theory, as identified and presented in Chapter 2, could be key in informing and directing power relations in policy governance in UPA. Here policy networks could be useful in creating a collaborative governance platform to emphasise distributed intelligence, voice and participation. This could be done without emphasising hierarchy but by focusing especially on service delivery through the network (as put forward by Hajer and Wagenaar, 2003; Stoker, 1998). The stakeholder engagement and coordination gaps identified for UPA in South Africa presents a great opportunity to explore the prospects that could be offered by the network policy for UPA collaborative policy management. Policy networks, as asserted by Börzel (1997:1), allow for the establishment of a patterned relationship between state and social policy stakeholders in a set of relationships that are relatively stable, non-hierarchical and interdependent. Börzel (1997:1) further notes that policy networks allows for the exchange of resources to pursue policy through cooperation and collaboration.

This research found that by working together through strategic government leadership – facilitating a conducive environment for both formal and informal participatory governance processes organised through a UPA policy network – sharing best practices/experiences and making informed collective decisions, UPA stakeholders may gain in the ability to effectively and efficiently fast-track the development of a sustainable, networked UPA sector. As established through the research interviews, there is need to build and strengthen the institutional policy arrangements that (already) work. In addition, it will be necessary to establish new institutional and substantive policy management instruments for UPA policy management. The research established that UPA governance could be enhanced through an increased formal and/or informal role of non-government actors in policy making. This requires effective relations between the state and society in which networks rather than hierarchies dominate the policy-management process (as articulated by Stoker, 1998). Based on these findings, the researcher argues that UPA governance improvements will require strong government leadership from national, provincial and city level to steer and support the development of the suggested linkages and relationships between stakeholders to establish and maintain appropriate UPA policy networks.

In re/designing institutions, care must be taken to thoroughly consider the expected relationship between the proposed institutional structure and policy (which may not always be positive), so that recommendations are justified (Dye, 2002:13). Still, other complex social and economic factors that influence both institutional structure and policy may need to be considered to ensure that procedural policy recommendations are not misplaced and perhaps too enthusiastic. Institutional design has a strong bearing on substantive policy management and performance, especially in terms of power dynamics that can easily jeopardise effective governance systems (McLennan and Ngoma, 2004). The challenge of achieving collaborative governance is the need to maintain a balance between vertical and horizontal decision-making processes for state and social institutions involved in collaborative policy networks (Hajer and Wagenaar, 2003). Policy networks are considered as the alternative to offer a new

and strongly desired look to the traditional institutional structure in search of collaborative governance (Hajer and Wagenaar, 2003). Here the emphasis should be on theories that encourage and ensure collaboration, participation, equity, consultation and participatory decision-making processes as functions of collaborative governance (Abdellatif, 2003; King, 2003).

2.3.2 Policy network theory

Policy networks for collaborative public policy delivery are considered one of the most useful procedural policy frameworks to drive progressive and transformational institutional policy and substantive public policy initiatives grounded in participatory governance and equitable development principles (McLennan and Ngoma, 2004). This research applies networks as a modern form of governance to encourage interaction between public, private and social actors, perhaps as equal partners, and in a manner that changes formal hierarchical forms of governance (Besussi, 2006; Rhodes, 2006 and Börzel, 2010). The shift towards policy networks emerged in the late 1980s as a reaction by governments to a complex and uncertain social and political environment – towards co-operation, joint resource mobilisation and collaborated policy management outside the formal hierarchical control and functionality of the state (Kenis and Schneider, 1991:36). Effectively, these networked relationships emerge as a result of a common appreciation. It is acknowledged by the actors involved that cooperation is the best way to achieve common goals (Kenis and Schneider, 1991; Börzel, 1997).

In practice, policy networks turn to take many shapes and forms that possess some shared characteristics (Deleon and Danielle 2009). Börzel's (1997) definition of policy networks is one that is indeed generally accepted. As mentioned before, this definition considers policy networks as a patterned relationship between state and society in that it links the public and private sector in policy in a set of relatively stable, non-hierarchical and interdependent relationships. These relationships then connect a variety of actors with similar policy interests to exchange resources and pursue policy through cooperation and collaboration. Others consider networks as “webs of relatively stable and

ongoing relationships which mobilize dispersed resources so that collective (or parallel) action can be orchestrated toward a solution of a common policy problem” (Kennis and Schneider, 1991). Rhodes (1997:44) asserts that the concept of policy networks is a higher level issue with two major typologies that are helpful in understanding the policy network theory, as presented in Table 3. According to Rhodes (1997), a policy community exhibits a limited number of participants, frequent and high quality interaction between members on all matters related to policy community, consistency in values and common ownership and acceptance of the outcome of their decisions. In a policy community, the participants share resources to achieve policy goals. The ideal type of policy community, according to Rhodes (1997), is characterised by an average balance of power exhibited in a positive-sum arrangement, even if the benefits are not equally distributed. Issue networks on the other hand exhibit the other extreme, with many members having fluctuating interaction, limited consensus and ever-present conflict. In essence, networks also exhibit unequal power relations between participants - reflecting unequally resources and access (Rhodes, 1997).

Table 3: Typologies of networks (Rhodes, 1997:44)

Dimension	Policy community	Issue network
Membership:		
Number of participants	Very limited number, some groups consciously excluded	Large
Type of interest	Economic and/or professional interests dominate	Encompasses range of affected interests
Integration:		
Frequency of interaction	Frequent, high quality, interaction of all groups on all matters related to policy issue	Contacts fluctuate infrequency and intensity
Continuity	Membership, values and outcomes persistent over time	Access fluctuates significantly
Consensus	All participants share basic values and accept the legitimacy of the outcome	A measure of agreement exists, but conflict is ever present
Resources:		
Distribution of resources within network	All participants have resources; basic relationship is an exchange relationship	Some participants may have resources, but they are limited, and basic relationship is consultative
Distribution of resources within participating organisations	Hierarchical; leaders can deliver members	Varied and variable distribution and capacity to regulate members
Power:		
Power dynamics within network	There is a balance of power among members. Although one group may dominate, it must be a positive-sum game if community is to persist	Unequal powers, reflecting unequal resources and unequal access. It is a zero-sum game

Klijn (1997:31) emphasises the fact that “networks develop and exist because of the inter-dependency between actors”. In this regard policy networks become self-selecting in that institutional interest to participate in a network is based on the (perceived) value that could be derived from the network, thus the drive to get involved (Klijn, 1997:41). Assuming that UPA development institutions such as the metro governments were capable of individually managing the substantive policy process without assistance, there wouldn’t be a need for cooperation in delivering UPA substantive policy. In reality however, the capacity and resources required for UPA substantive policy management are actually located within the wider stakeholder base of UPA actors. Mutual dependency, however, does not

guarantee cooperation between substantive policy actors in a network. As noted by Lewicki (2006), effective policy networks require a strong element of trust. Lewicki (2006:94) defines trust as “an individual’s belief in and willingness to act on the basis of, the words, actions and decisions of another”. According to DeLeon and Danielle (2009:69), network ties can exhibit varying degrees of formality, including contractual agreement, regulatory guidelines, procedural processes and, informal exchanges. DeLeon and Danielle (2009:69) further argue that “the level of formality of a relationship can influence the amount of trust within collaborative policy networks”. According to DeLeon and Danielle (2009:69), “in collaborative policy networks, high levels of trust have a high probability of occurring”. Lewicki (2006:94) adds that the element of trust implies a willingness of institutions or individuals to avail their skills and resources to the benefit of the network and an equal expectation to access support and assistance from other members of the network. This is needed to facilitate cooperation and collaboration between actors so that they can deliver on substantive policy goals.

Hajer and Wagenaar (2003:3) set a tone of urgency about the need for a networked society that challenges the status quo of the evident divide between public, private as well as other actors in delivering policy goals. Hajer and Wagenaar (2003:3) assert that formal political institutions are beginning to move towards a strong focus on organisational activity, negotiations between sovereign bodies and inter-organisational networks. They further claim that the “disparate actors who populate these networks find nascent points of solidarity in the joint realisation that they need one another”. Most importantly, however, Hajer and Wagenaar (2003) argue that even the evident expansive democracy within the network society, as alluded to in Warren et al. (1992), does not at any point imply that ‘classical modernist’ institutions characterised and maintained by codified and well-established patterns of behaviour, simply fade away. Clearly, much of the business of governing is still affected by the traditional hierarchical institutions of government. However, they must now increasingly compete with open-ended, often unusual, ad hoc arrangements. These arrangements “demonstrate remarkable problem-solving capacity and open up opportunities for learning and change in exactly those circumstances where classical-modernist institutions have failed to deliver” (Hajer and

Wagenaar, 2003:3). Hajer and Wagenaar's analysis cannot be more relevant to the kind of institutional reform necessary for UPA development in South Africa's metros. They hence offer a justification for considering policy networks in UPA institutional arrangements.

The emergence of networks, as argued by Rhodes (2000:55), is not necessarily the end of state 'authority', nor does it undermine specific issues of power and interest. It is rather about the networks' redefinition and in many cases relocation – towards a much more open-minded approach that allows for more diversity and experimentation, consultation and participatory decision making. There is a strong need to include non-state actors both within the development sphere and the private sector. These non-state actors will work with the state (through coordinated non-hierarchical networked relations that focus on sharing resources and ensuring policy management performance) to develop the UPA sector and ultimately contribute to develop sustainable cities in South Africa.

The non-hierarchical characteristic of policy networks in the policy management process suggests that policy management can be much more effective without hierarchical relation represented by earlier forms of governance (Hajer and Wagenaar, 2003). Although Börzel (2010:5) agrees with this observation, she argues' that "non-hierarchical coordination and the involvement of non-state actors do not necessarily hold their promise to increase the effectiveness and the legitimacy of public policy-making". Börzel (2010:5) asserts that hierarchically imposed decisions are desired for effectiveness. Scharpf (1997, cited in Börzel, 2010:5) note' that "the shadow of hierarchy cast by government provides a crucial incentive for both government and non-governmental actors to engage in non-hierarchical coordination". As such she adds that the lower the effectiveness of government, the greater the need for governance, whose effectiveness (and legitimacy) depends, however, on the presence of a strong government. This is broadly in line with Evans' (1995) idea that a developmental state has to be able to demonstrate some key elements of being embedded or connected to the society it serves while allowing some distance from vested interests.

The policy network theory is synonymous with participatory or collaborative governance, which can be seen as a mechanism through which citizens and groups articulate their interests, exercise their rights and obligations and reconcile differences (UNDP, 1997). As such, although governance has been generally used as a synonym for government, it must be understood that collaborative governance also involves a number of stakeholders outside government, including citizens, civil society and the private sector (Graham et al., 2003). Overall, governance is characterised by effective stakeholder participation. It is responsive, equitable, consensus oriented, accountable and transparent. In addition, it is context sensitive, follows the rule of law and, most importantly is effective and efficient in helping on deliver public policy objectives (Stoker, 1998; Lyall and Tait, 2005; McLennan and Ngoma, 2004; Abdellatif, 2003; King, 2003; Grindle, 2007).

Participatory development and governance are at most complementary rather than antagonistic. Governance does not merely sustain participation in development. Rather, in accordance with the evolution of the participation process, governance transforms into a process that effectively and efficiently supports much broader and inclusive stakeholder participation. Equally, participatory development does promote governance in turn (JICA, 2008). Still, the quality of participation varies, depending on the kind of stakeholders and other factors. These factors are as follows: The stakeholders' social and human capital; the participation platforms; the state and government support (including the policies in place); the degree to which stakeholders are able to respond appropriately to opportunities to participate; and on how the stakeholders or the state and society partnerships are able to improve and strengthen institutions or find a mutually complementary and strengthening relationships with both formal and informal institutions and/or networks as effort to continuously increase opportunities to participate (McLennan and Ngoma, 2004; JICA, 2008; Lyall and Tait, 2005).

2.4 CONCLUSION

Policy networks find favour as an appropriate relevant institutional design framework for the desired procedural UPA development stakeholder structure in South Africa in pursuit of collaborative

governance of UPA development. UPA institutional policy that is arranged through collaborative policy networks could be able to help advocate and facilitate the efficient UPA substantive policy management. Indeed, even at the theory front, developing effective policy networks and the related participatory governance characteristics is a complex phenomenon that can be easily disrupted and derailed, particularly by the power and related resource imbalances between stakeholders. Nonetheless, for UPA procedural and substantive policy benefits, the real opportunities lie in the efficiency of the policy community and the consequent collaboration in terms of UPA substantive policy management.

CHAPTER 3: MULTI-STAKEHOLDER NATURE OF UPA IN SOUTH AFRICA: OPPORTUNITIES FOR POLICY NETWORKS (A LITERATURE REVIEW)

3.1 INTRODUCTION

Chapter 3 reviews urban and peri-urban agriculture development (UPA) literature as a backdrop against which institutional policy development opportunities can be assessed. The review seeks to highlight the importance, development challenges and opportunities for UPA development in South Africa's metros, in relation to substantive UPA programming. This review further analyses the current UPA institutional policy design and its limitation in leading and realising the full potential of UPA within the context of South African metros. The literature review conducted in this Chapter sets tone on the institutional and substantive UPA policy status core in South Africa. It serves as a starting point to improve on and support UPA development activities in South Africa.

3.2 THE CASE FOR UPA DEVELOPMENT

As far back as the 1980s researchers pointed to UPA as a solution to the challenge of urban food security (Singh, 1989). In a study conducted for the International Labour Organization, Singh (1989:37) referred to food production in the cities as an 'unconventional proposal' for addressing urban poverty and unemployment challenges in the developing world. In recent years, some researchers and commentators have continually acknowledged that the variety and quantities of foods produced (grains, vegetables, fruit, meat, milk and fish, etc.) in urban environments are considerable and indeed of great value to the urban people, particularly the poor (Rogerson, 1993; 2002; Birley and Lock, 1999). Since then the role played by UPA in meeting urban food demands has grown significantly in its stature as a part of a comprehensive solution to the problems of runaway growth of cities in developing countries (Mougeot, 2006). The sector provides a great deal of economic, social and environmental benefits to many urban communities, while making an important contribution to urban food security and sustainable development (Henn, 2000). Mougeot (2006) asserts that at least since the early 1990s some enlightened municipalities have recognised the value of urban food self

reliance and have begun to work with ‘urban farmers’ rather than against them. In recent years UPA in Africa has been identified as an important income generation and survival strategy among both poor and not so poor households (Simatele and Binns, 2008).

3.2.1 Sustainable urban management and development

The role played by UPA has been under question amongst researchers seeking to understand the sector’s contribution to urban food security and sustainable urban development (Pinderhughes et al., 2000; Nugent, 2001). UPA development is generally dominated by partial evidence and unsubstantiated claims on its potential and benefits. As a result, policy-makers often respond with little enthusiasm to the resource needs for UPA development (Nugent, 2001). As highlighted by Binns and Lynch (1998, citing Egziabher et al., 1994:87), “most urban development studies in developing countries, particularly in Africa, concentrate on housing, services and non-agricultural informal activities, thus mainly excluding or giving little attention to urban agriculture”. Consequently, UPA development research has often been disregarded by researchers and is less understood by urban planners and decision-makers (Binns and Lynch, 1998). UPA in Africa tends to be undervalued and is often also resisted by public officials (Smit et al., 1996) and therefore is not reflected in urban development policy instruments. In fact in some countries urban agriculture is even prohibited by law (Simatele and Binns, 2008).

Dewar (1991; 1992, as cited by Rogerson, 1993) says the management of South Africa’s metros in the past regime, was driven by apartheid rather than the concern to create healthy, viable and sustainable environments. Rogerson (1993) asserts that urban management policies under apartheid were led by the demand of the dominant classes and as such failed to deliver any programmes to objectively address the problems of growing communities of poor inhabitants in South African metros. Dewar says these are but some of the major reasons why UPA in South Africa should be strongly encouraged; adding that such efforts will help reshape the tragedy of the urban poor. As argued by Ngcamphalala

(2009), UPA should be seen as significant in South Africa, especially due to lack of alternative forms of income generation and other pressures such as HIV/AIDS, poverty and unemployment.

The shift towards UPA was always inevitable, considering the rapid growth of the urban populations in the developing world (United Nations, 2007). The United Nations projections show that over the next four decades Africa's urban population is likely to triple. By mid-century, most of the urban population of the world will be concentrated in Asia and Africa, with projections of 54 and 19 per cent, respectively. The tripling effect of the urban population poses a major challenge for urban governments, especially for shelter delivery and other modalities of governance; but most importantly for ensuring adequate supply of land, water and food for the urban poor (OCHA/ IRIN and UN-HABITAT, 2007). Urbanisation presents a great challenge to food production prospects for the world. As articulated by Fernie and Pitkethly (1985); most of the people who move from rural areas to the cities actually move away from a position where they are able to produce their own food. As a result most urban people look to rural food production systems for food supply. UPA must be viewed as a vital strategy to develop sustainable food supplies for sustainable cities (Haughton and Hunter, 2003). Pinderhughes (2004) argues that there is a serious need to advance ecologically and socially responsible urban development, for which the practise of sustainable UPA in cities forms a base. As such, even with a limited contribution to the food demands of cities, UPA offers other sustainable development benefits to cities, which cannot be disregarded.

3.2.2 Urban food security and social development

Food security is considered the primary goal of UPA, especially in developing countries, as it plays a direct role in the food access and nutritional status of poor urban households (Ellis and Sumberg, 1998). Various estimates suggest that 25-100% of urban food demand globally is met through urban horticulture, aquaculture and livestock production (Birley and Lock, 1999). According to Birley and Lock, perishable high-value foods such as vegetables, eggs, poultry and milk are of particular importance as these foods are generally produced in the urban periphery and thus benefit from the

short transportation and storage times between harvest and market. Ellis and Sumberg (1998) assert that food production in cities must be understood within specific contexts; noting for instance that there are discernable patterns that link types of output with location, land access and purpose of production (between own consumption and market sale). For example, UPA in Africa emerges to be of a family subsistence nature, with many farmers pursuing food production out of sheer necessity, as the alternative is the threat of hunger, malnutrition and even starvation (Freeman, 1991).

However, a totally different picture emerges in other regions; with urban agriculture claiming its space as a critical role player in food production and supply for urban populations. For example, in Asia some cities are virtually self-sufficient in food production, including 14 of China's largest cities (Haughton and Hunter, 2003:12). Equally, the city of Havana in Cuba, the biggest city in the Caribbean with a population of approximately 2.5 million people (about one fifth of Cuba's total population) (CIA, 2009), is one of the most advanced and with a classical example of a thriving UPA sector. According to Pinderhughes et al. (2000), "Cuba is the only country in the world that has developed an extensive state-supported infrastructure to support urban food production and urban growers". The benefits of urban agriculture in Cuba have been far-reaching, with the sector providing 350,000 jobs nationwide in 2008 (Chaplowe, 1996; Rodriguez, 2008). Rodriguez also reports that as a result of the affordable vegetables supplied by urban farmers, Cubans (a nation accustomed to a less-than-ideal diet of rice and beans and canned goods from Eastern Europe) have dramatically transformed their eating habits due to UPA food output.

Numerous examples of successful cases of significant urban food production in UPA exist in a number of cities worldwide (Henn, 2000; Haughton and Hunter, 2003). As highlighted by Henn (2000: no page number) in Cuba "the act of growing food in the city has become a way of life". According to Henn, the popular garden movement in the city of Havana occupies 8% of total urban land in agriculture (about 3.4% of total urban land) and is practiced by 18,000 gardeners who produce vegetables and fruit and raise small livestock to increase food security and generate income. The

economic benefits enjoyed by successful urban farmers in Cuba are noticeable. In 1997, urban farms and gardens in Havana provided 30,000 tons of vegetables, tubers (i.e. potatoes, sweet potatoes) and fruit; 3,650 tons of meat; 7.5 million eggs; and 3.6 tons of medicinal plant materials (Pinderhughes et al., 2000).

The role played by UPA in urban food security is especially important in urban areas as it contributes to supplying or at least supplementing, the diets of the poor; and even more importantly, those infected or affected by HIV/AIDS (Crush et al., 2006). Of great concern, is the fact that people living with HIV/AIDS in resource- limited settings are often unable to follow optimal food and nutrition recommendations owing to lack of access to nutritional foods (Castleman, et al., 2003, as cited by Karanja et al., 2008). As such, the development of effective urban food security strategies such as UPA is now greatly justified.

In a study conducted in five informal settlements of the Atteridgeville township in Pretoria, Van Averbeke (2007) found that more than half of the households included in the study area participated in urban farming, particularly in home gardening, group gardening and dry-land farming in open urban spaces, with the active participants being predominantly women. The contribution to total household income and food security of the different types of farming practices found in the study area was generally modest, but the livelihood benefits derived from urban farming extended far beyond material gain, reducing social alienation and the disintegration of families associated with urban poverty (Van Averbeke, 2007). Moreover, Smith (2006) in a study titled “The diverse roles of urban agriculture – case study of South Durban basin KwaZulu-Natal” adds that resource accessible households use UPA as a means of securing their assets for a variety of livelihood endeavours that are not solely economic. These alternative endeavours include harnessing UPA as a spatial tool for community organising and social identification. Smith (2006) also found that the importance levels and scope of UPA activities varied significantly between the different communities. Smith (2006) concludes that these results

indicate that economic distortions resulting from historical discrimination are part of the variation in method and motive to practice UPA in South Africa.

In a study evaluating the contribution of urban agriculture to income generation, subsistence and food security, conducted in the Langa, Khayelitsha and Crossroads areas of greater Cape Town, it was found that the economic benefits of urban agriculture are limited (Eberhard, 1989). Nevertheless, Eberhard noted that people in low-income townships in Cape Town continue to cultivate crops in backyard plots and in communal gardens. An alternative follow-up study by Slater (2001), focusing on understanding the reasons why people engage in urban agriculture (particularly since it does not provide good financial incentives) in the same areas in Cape Town, found that urban agriculture (UA) has the following social purposes:

- UA provides a symbol of stability – after years of living as apartheid’s urban refugees, people gardened where they felt safe and secure;
- UA fosters family life – after being separated from their husbands and children for many years through urban apartheid, women were once again able to live a normal family life and reverted back to their traditional roles;
- UA fosters power relations – some women used the production of food to renegotiate patriarchal authority relations in households;
- UA develops social networks – women in UA groups developed strong social networks and used these relationships to take a stand on issues such as rape, violence and child abuse; and
- UA fosters community development through networks and involvement with welfare organisations.

3.2.3 Waste management and recycling

Agriculture is often considered one of the major sources of pollution, owing to its use of chemical fertilisers and pesticides, as well as source of waste and unpleasant odours generated by livestock

production (Food and Trees for Africa, 2007). However, the importance of agriculture for urban ecology in creating a greener city environment suggests the sector's potential to recycle and re-use urban organic waste and waste water, to reduce energy use through the provision of fresh food close to the city, to increase biodiversity, and eventually reduce the city's ecological footprint (Smit et al., 1996). The use of decomposed biomass in agriculture remains the most dominant means by which the greatest amount of urban organic waste can be reused (Baud et al., 2004:204). Furedy and Chowdhury (1996) gather that UPA farming can absorb a great volume of city waste and reduce the cost of collecting and transporting urban wastes. Since the mid-1990s UPA and urban waste reduction/reuse have been promoted as urban management strategies for developing countries, mainly to conserve and increase resources and assist low-income groups (Furedy and Chowdhury, 1996). According to Furedy and Chowdhury, these strategies (UPA and urban waste reduction/reuse) include composting urban organic wastes and feeding kitchen and food wastes to domestic livestock. The UPA's role in metros, particularly in reusing waste, not only assists in minimising waste handling or management costs (economic and environmental), but also ensures resource conservation and sustainable food production and consumption (Furedy and Chowdhury, 1996; Baud et al., 2004). UPA's importance as a waste management strategy can be illustrated in the following simple close food production and waste management cycle (Figure 1) where urban organic waste and waste-water is recycled and (re-) used in UPA to produce food.

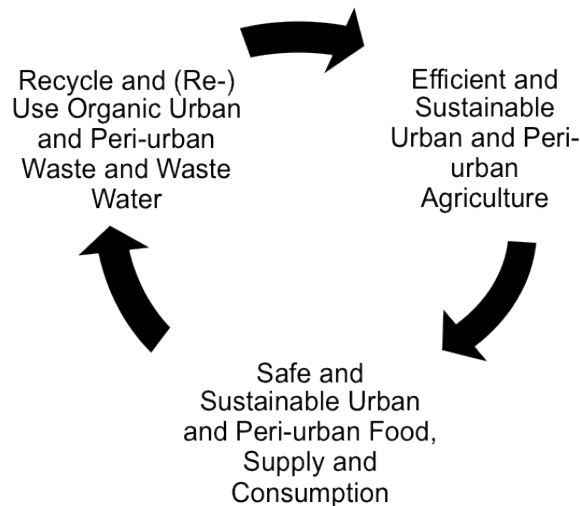


Figure 1: Closed UPA and urban waste management cycle (Source: Ngcamphalala, 2009)

3.3 SUBSTANTIVE AND INSTITUTIONAL UPA POLICY LIMITATIONS

Although UPA has been identified as an important income generation and survival strategy among both poor and not so poor urban households in South Africa (Rogerson, 1996; 2003; Austin and Visser, 2002; Smith, 2006), regrettably, the majority of UPA is unplanned and very inefficient (Rogerson, 1993; Austin and Visser, 2002). The sector provides some limited social benefits and is overwhelmingly driven by the needs of food security and economic survival (Rogerson, 1996; Slater, 2001; Smith, 2006). As noted by Ngcamphalala (2009), the current state of UPA in South Africa (and this has not changed since 2009, the time of the original study), suggests that the sector claims too much and offers too little to urban poverty alleviation, food security and environmental sustainability. Yet in hindsight, it is the limited attention and poor state support (from the national, provincial and local/city level) that continue to undermine UPA development in South Africa (Ngcamphalala, 2009; Rogerson, 2003). Importantly, it must be noted that much of the substantive UPA policy delivery can be attributed to the weak policy institutional arrangements that characterise the sector's development.

UPA development in South Africa is a matter of a local/city government 'decision' with little or no support at all from the national and provincial governance spheres (Ngcamphalala, 2009). The country

does not have UPA development policy; instead UPA development features as an extension of other policies and urban development programmes/plans (e.g. Local Economic Development plans) that tend to have a wider economic development focus and thus lack the kind of emphasis and impact that specific UPA policy would otherwise have. As such, a state sanctioned UPA development agenda (from national to the local/city-level), focussing explicitly on both substantive policy design and efficient institutional redesign, is desired to fast-track and harmonise the development and advancement of a sustainable UPA sector in South Africa (Ngcamphalala, 2009).

Emphases in developing agriculture should be on institutional policy as the bases for substantive policy developments. Here a national policy framework and some relevant national and provincial based institutions are considered as desirable to provide strategic leadership and a clear policy framework for local UPA development efforts. As noted in Ngcamphalala (2009), the Department of Agriculture, Forestry and Fisheries (DAFF) as a principal department accounting for food production and supply in South Africa (at least at the formal level) is only partially involved when in fact it is the accounting ministry. The DAFF 2012-2017 strategic plan (DAFF, 2012:5) identifies urban agriculture as a future strategic policy area that should be considered in the near future, asserting that,

“while urban agriculture is supported by various levels of government and certainly by civil society organisations, there remains a need to create an encompassing strategy on urban and peri-urban agriculture. The purpose of such a strategy would be to promote best practice, enhance the role of agriculture in urban and peri-urban livelihoods and improve coordination and cooperation among role players in this field. A particular focus of such a strategy would possibly be on using agriculture to support residents of informal settlements at the fringes of towns and cities”.

The DAFF statement above will be key to facilitating accelerated and UPA development and the most needed attention by the state. For the first time the department is showing specific interest in UPA and this will go a long way in demonstrating the state’s commitment to developing the sector. DAFF’s

commitment also presents a great opportunity for UPA development in terms of the necessary resources and political drive needed to develop the sector.

Indeed, a number of programmes, policy initiatives and planning structures have been developed or established to encourage coordinated and structured urban development and management in South Africa. Although these initiatives are not primarily focused on UPA development, UPA does appear as a secondary focus area. Nonetheless, it must be noted that these initiatives have failed to achieve the UPA impact desired for South Africa metros. Below are some examples of institutional structures that include UPA as a focus area:

- **The African Food Security Urban Network (AFSUN, 2013).** This institution is an urban food systems and food security research partnership. It partners with the African Centre for Cities at the University of Cape Town; national universities in Botswana, Zimbabwe, Lesotho, Malawi and Namibia and Swaziland; the University of KwaZulu-Natal; the University of Witwatersrand; Food and Trees for Africa; Institute for Democracy in Africa (IDASA); Kutlwanong Democracy Centre; ABC Ulwazi; Municipal Development Partnership for Eastern and Southern Africa; South African Cities Network; Care International; and four Canadian universities involved with urban food security research.
- **The South African Cities Network (SACN, 2012).** This is an urban management network established in 2002 by the then Department of Provincial and Local Government in collaboration with the South African Local Government Association (SALGA). The mandate of the network, which includes the eight South African metros and the city of Pietermaritzburg, is to promote good governance and management in South African cities; analyse their strategic challenges (in the context of global economic integration and national development challenges); facilitate knowledge management and learning; and promote partnerships between different spheres of Government to support the management of South African cities.
- **Municipal Development Partnership for East and Southern Africa (MDP-ESA, 2013).** This body was launched in May 1991 with an aim to improve the capacity of local

governments and support the process of decentralisation in Sub-Saharan Africa. MDP-ESA is an active and hands-on capacity building cities' network with the aim of enabling effective self-governance at local level in Sub-Saharan Africa; and

- **Cities Alliance.** This is a global partnership for reducing urban poverty and promoting the role of cities in sustainable development. Members of the Cities Alliance include local authorities (the United Cities and Local Governments and Metropolis); governments (Australia, Brazil, Chile, Ethiopia, France, Germany, Italy, Nigeria, Norway, Philippines, South Africa, Sweden, and the United States of America); non-governmental organisations (Slum Dwellers International (SDI) and Habitat for Humanity International); multi-lateral organisations (the European Union, UN-HABITAT and the World Bank). The Cities Alliance's overall strategic objectives are to support cities in providing effective local government services (Cities Alliance, 2012).

The institutional structures above present opportunities to establish institutional reform and collaborative governance through policy networks. Indeed, there could be a number of other UPA related policy structures and a number of public and private UPA development stakeholders that could be relevant for consideration in UPA development. The point here is to demonstrate the need to build on existing structures rather than to establish totally new ones.

3.4 STRATEGIC INSTITUTIONAL AND SUBSTANTIVE POLICY INTERVENTIONS FOR UPA DEVELOPMENT IN SOUTH AFRICA

According to Smit, et al., 1996:276) "capturing the many potential benefits of urban agriculture, solving the problems that often accompany it and overcoming the obstacles to its further development will require policies and programmes to promote appropriate urban agriculture". Initiating or in other cases significantly increasing the scope of UPA in South African metros will require the enhancement and development of institutional and substantive UPA policies that are responsive and demonstrate the necessary urgency. According to Smit et al. (1996:238), "governmental designation of agriculture as a

beneficial urban land use and economic activity is likely to provide critical impetus to the industry's growth and success". According to Ngcamphalala (2009), attempts to recognise UPA in South Africa should take the form of situational analysis, diagnosis or baseline studies concerned with describing, understanding and analysing the sector. This could include identifying immediate local/city actions (as highlighted in Table 4) to manage and develop UPA with the view to enhance and improve the benefits thereof.

Table 4: Checklist for UPA development for cities (Adapted from Ngcamphalala, 2009:24)

Activity/Task	
1. Establish the characteristics of the city's legal and planning framework related to UPA	✓
2. Conduct a land inventory for the city, including land suitability and ownership and map the results	✓
3. Conduct a feasibility study for UPA in the city (technical, economic and market information) to establish UPA's development potential	✓
4. Conduct an inventory of key issues (social, environmental, economic, infrastructural etc.) to be addressed in improving UPA in the city	✓
5. Develop a comprehensive mitigation plan to deal with the threats of UPA	✓
6. Improve and develop/establish institutional structures (UPA-Forum, UPA Development Department or Project Management Unit) as well as their capacity to deal with UPA challenges in the city	✓
7. Train current officials and recruit qualified officials for UPA development	✓
8. Identify and facilitate a city wide workshop for all UPA stakeholders	✓
9. Develop farmers' hubs for collective procurement of inputs, produce standardisation, branding and marketing	✓
10. Improve existing agricultural markets for UPA produce	✓
11. Develop a strategy for urban organic waste and waste-water recycling and (re-) use in agriculture	✓
12. Develop a climate change adaptation strategy	✓
13. Run an awareness campaign to improve the understanding and insight into UPA for both the public and all decision makers in all three spheres of government	✓
14. Create a strong link between UPA and the mainstream commercial agriculture (in rural areas) in order to improve coordination and reduce duplication and overlap of activities	✓

A number of strategic intervention areas highlighted in Table 4 (from the national to the provincial and local/city level) needs urgent and special attention as efforts to see concrete results to accelerate the development of an efficient and effective UPA sector in South Africa that is not only sustainable but also equitable (Ngcamphalala, 2009). Although the strategic areas identified in Table 4 are concerned

with distinctive issues, within the context of developing UPA in South African metros, these are at best 'connected'. This means they must be effectively addressed in a logical, systematic and holistic manner, even if different actors address them. Importantly, this creates the value to ensure stakeholder collaboration, partnerships and continuous communication. In addition this creates an opportunity to investigate means through which policy networks could be utilised to facilitate an efficient structure that allows for combining resources and ensuring coordinated stakeholder efforts.

As the bases for UPA advancement, the development opportunities and challenge for UPA depends not only on the availability of natural resources (land and water), but also on the human capacity (skilled labour) within metros to develop the sector (Rogerson, 1993; Pretty, 2002; Smit et al., 1996). Rogerson (1993) argues that the opportunity cost for land, water and labour does not favour food production in South African metros, except for the poorest of the poor who are economically marginalised and vulnerable. The challenge lies in the competition for resources (land and water) between different sectors that operate within the urban sphere. In fact, even at the household level, most decisions tend not to favour agricultural production. The point here is to emphasise challenges towards access to suitable land and water resources (especially for the poor) for agricultural production in urban spaces. The bottom line is that without land and water, it would be unfeasible to practice urban agriculture (Cruz and Medina, 2003).

The competition for land is marked especially by the pressing demands for housing in most of South Africa's largest cities as presented by urbanisation. Clearly, the dominant role played by most cities in the global economy as centres of both production and consumption is changing as urbanisation throughout the developing world is outstripping the capacity of most cities to provide adequate services for their citizens (Cohen, 2006). Metros generally tend to draw more people than they are able to absorb. As a result this leads to high demand for resources including high unemployment rates, poverty and food insecurity, the sprouting of informal shacks in most open spaces, health problems, crime and even prostitution; spiralling even further the challenges presented by the HIV/AIDS

pandemic, especially in Africa (OCHA/ IRIN and UN-HABITAT, 2007; Cohen, 2006). The extent to which urban growth specifically affects the local land-use can be controlled, to some extent, through high quality land planning and management (Cohen, 2006). According to Cohen (2006), formulating equitable land development policies remains one of the biggest challenges facing planners and policy makers in many cities in the South. As such, land for food production and security is always compromised for other needs that are seen to be more pressing and immediate, such as shelter. In fact this is commonly evident in all large cities in South Africa, with most unused urban spaces being invaded by informal settlers (Moses, 2006).

3.5 CONCLUSION

Generally, as asserted by Smit et al. (1996), the potential for UPA in cities across the world is largely undervalued and untapped. Nonetheless, from what is known about UPA in South Africa and from the numerous examples of successful UPA initiatives throughout the world, it is clear that the sector has a big role to play in contributing to the supply of fresh quality food to the urban population (especially the poor), while providing other social and environmental benefits that are equally invaluable. According to Austin and Visser (2002), South Africa is a latecomer to issues of policy development for UPA. As a result its application as a tool for pro-poor urban development is long overdue (Austin and Visser, 2002). Clearly, there is need to incorporate UPA development as a major part of the urban development policy agenda. Perhaps this is where Government must take charge, by advocating for and facilitating the development of strategies and policies that ensure ease in accessing land and water for agricultural production as incentives to encourage farmers to engage in agricultural production in cities. This can be done, for example by subsidising the cost for land and water for agricultural use in urban areas.

Institutional/procedural policy development reform initiatives concerned with improving substantive policy management cannot be conducted in isolation from the contextual base related to UPA policy management needs on the ground. As such, there is a strong need to also focus on

institutional/procedural policy as the institutional foundation to facilitate efficient UPA substantive policy management. As noted earlier, successful substantive policy implementation strongly depends on the institutional policy instruments in place and their capacity to develop and lead the implementation of innovative substantive UPA policy in South Africa's metros. This justifies a thorough investigation process on how UPA institutional policy should be designed for effective UPA development in South Africa.

CHAPTER 4: RESEARCH DESIGN, METHODOLOGY AND IMPLEMENTATION OF THE RESEARCH

4.1 INTRODUCTION

Chapter 4 outlines the research design and methodological approaches employed to conduct this research. The success of any project depends on the quality of the planning process preceding implementation. As such, research project planning helps to provide a guiding frame that acts as a blueprint to maximise control of the research during implementation. In the words of De Vaus (2001:9), “The function of research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible”. As such, the premise of designing a research project is the research question/s which then help/s to identify the relevant data needs and how best to collect and analysis the data (De Vaus, 2001:9). As noted by Yin (1989:29), research design therefore emphasises structure and logic of the research process, rather than logistical issues per se. De Vaus asserts that sampling issues, data collection (e.g. interviews and documentary analysis) and the designing of interview questions are effectively informed by the research objectives and related questions. It is therefore important to revisit the research objectives and subsequent research questions to guide specific decisions on the most relevant research tools and methods. Chapter 4 also elaborates on the brief expositions of the research design and methodology presented Chapter 1. Not only does the chapter seek to establish a common understanding of the research methods applied, but it also sets out to establish the preferred research method. The pre-research study planning is based on the set objectives and the subsequent research questions that the study seeks to address (see Table 5). The study objectives and questions almost ‘dictate’ the best means that should be employed to answer the research questions and ensure that the study objectives are achieved.

Table 5: Research objectives, corresponding research questions and research methods

Research objective	Matching research question	Research Method Employed
- To establish the state of UPA development in terms of institutional and substantive policy management in South Africa	- What is the current state of UPPA development in South African metros? - What are the UPA institutional and substantive policy management barriers and challenges?	- Literature review, interviews with key informants and documentary analysis
- To identify the role of the state (national, provincial and local/metro) in the policy management process of UPA in South Africa's metros	- What is the role of the state in the UPA policy management process in South Africa's metros?	- Interviews with key informants and documentary analysis
- To identify the role of other sector development stakeholders (private sector, research institutions, non-governmental-organisations, development partners, donors, farmers, etc.) in delivering substantive UPA policy	- What is the role of other stakeholders (private sector, social partners, etc.) in UPA policy management process in South Africa's metros?	- Interviews with key informants and documentary analysis
- To make recommendations on the development and appropriate design of institutional policy network for substantive UPA policy delivery in South Africa	- How can network institutional policy theory be used to guide procedural policy recommendations for UPA development in South Africa's metros?	- Literature review and interviews with key informants

4.2 RESEARCH DESIGN AND METHODOLOGY

In this research the researcher identified and employed exploratory, descriptive and contextual qualitative research methods (Neuman, 2011:159; Cresswell, 1994:145) as appropriate to investigate opportunities for developing efficient network UPA policy institutions for South Africa's metros.

4.2.1 Qualitative research methodology

Benoliel (1984:3) describes qualitative research as “modes of systematic inquiry concerned with understanding human beings and the nature of their transactions with themselves and their surroundings”. Others see qualitative research as inductive, holistic, emic, subjective and process oriented methods that are utilised to understand, interpret, describe and develop theory on a

phenomenon or setting (Morse and Field, 1996:199). Qualitative research methods are systematic and subjective approaches that seek to describe life experiences in order to give them meaning and increase insights (Neuman, 2011:159; Burns and Grove, 2001:61). According to Neuman (2011:160), qualitative research allows for holistic perspectives on a subject, helping to put meaning into opinions.

Qualitative research seeks to capture a much better picture of the respondents' social reality and perspectives while helping the researcher to generate an in-depth account of a phenomenon (Zandamela, 2011). The challenge for qualitative research however is to ensure that researchers suspend their pre-existing views and expectations and to listen and learn from the perspectives of the research respondents (Neuman, 2011:158; Zandamela, 2011). This calls for a good balance in that the researcher may not be able to be totally neutral. As asserted by Merriam (1998:23), results generated through qualitative research are therefore "an interpretation by the researcher of others' views filtered through his or her own".

4.2.2 Exploratory, descriptive and contextual research

Qualitative research methods were particularly relevant to this research, especially due to the exploratory, descriptive and contextual nature of the research (Neuman, 2011:34). This meant that the qualitative perspectives of the interviewed respondents were more relevant than, for example, statistical data that would not allow for a contextual and experiential feel. As noted by Babbie and Mouton (2001:646), qualitative research methods aim to describe and establish a good understanding of a phenomenon from the insider's perspective. This research is exploratory (see Cresswell, 1994:145) in that it seeks to generate new knowledge and discover new insights on UPA institutional policy design in South Africa's metros. The research aims to provide descriptive means to facilitate the development of UPA policy networks in South Africa. This meant that the qualitative perspectives of the interviewed respondents that allow for contextual meaning and understanding were more relevant in terms of achieving the research objectives. The research was conducted to explore and provide a basic understanding of UPA policy network opportunities and challenges in South Africa.

The research utilises qualitative data collected from literature review, in-depth interviews with key-informants and through documentary analysis.

The research context is specific to South African metros. This research takes a special interest in understanding UPA development policy and network policy institutions in the eight metros in South Africa, namely Cape Town, Johannesburg, Durban, Tshwane, Ekurhuleni, Mangaung, Nelson Mandela Metropolitan and Buffalo City. According to Babbie and Mouton (2001:272), contextual research is aimed at describing and understanding a particular phenomenon within a specific natural context in which it occurs. Qualitative research generally emphasises the social context as the basis for understanding social reality (Neuman, 2011:158). In fact, in qualitative research, the sum can turn out to be less than the whole. This implies the importance of understanding the holistic picture within the context, and can be compared to quantitative research (Brink and Wood, 1998:246), where data is treated as the only facts, (good enough to understand a particular phenomenon). Although contextual research has applicability, implications and limitations, overall the findings and recommendations of such research do provide fairly reliable lessons that could be relevant in altered contexts. Qualitative research does not follow fixed steps and such studies generally cannot be exactly replicated (Brink and Wood, 1998:246).

4.3 DATA COLLECTION

In qualitative research data can be sourced through interviews and questionnaires, fieldwork observations, documentary analysis and through the researcher's own reactions and impressions (Myers, 2009; Sprinthall, Schmuttes and Surois, 1992:101). Qualitative data collection involves large amounts of handwritten notes that must still be sorted and organised for analysis (Brink and Wood, 1998:246). In this research project, data was gathered through the literature review and by means of face-to-face interviews with key informants from, first, the four biggest metropolitan cities in South Africa (Pretoria, Cape Town, Durban and Johannesburg) and, second, from interviews with informants from the provincial and national government, farmers, non-governmental organisations (NGOs) and

private sector experts on sustainable urban development planning and management in South Africa. The study thus uses both secondary (literature review) and primary (telephonic interviews with key-informants and documentary analysis) data. The interview schedule is set out in Appendix 1. The documentary data retrieval is anchored in and directed by the data retrieval form, as outlined in Appendix 2.

4.3.1 Literature review

According to Zandamela (2011), a literature review “provides a context for the proposed research and demonstrates why it is important and timely”. A literature review was conducted in Chapter 3 to establish what is known about UPA substantive and institutional policy issues in South Africa. The literature review conducted for this research helped identify knowledge gaps on UPA and on particular institutional policy issues. It was thus helpful in justifying the need for this research (as a contribution to filling the existing knowledge-gap and to inform UPA institutional policy arrangements) a possibility suggested by Mouton (2001:87). In addition and with a bearing on data gathering, the literature review helped the researcher generate thorough knowledge of UPA substantive and institutional policy management issues and thus illuminated the nature and depth of the problem to be addressed. The literature review was therefore helpful to facilitate continuous refining of the research project objectives and research questions.

4.3.2 Face-to-face and telephonic interviews with key informants

Face-to-face and telephonic interviews with key informants for this research were conducted over a period of four months. Neuman (2011:410) defines a key informant in field research as an individual “with whom a field researcher develops a relationship and who tells about, or informs on, the field”. Neuman further asserts that the best informant is an expert individual who is actively involved in the field. In this research the action of interviewing key informants individually helped eliminate the risk of group-think (limited alternate views), which is common in some focus group discussions for

instance and thus allowed for more high quality contributions or information even with a limited number of individuals interviewed (a likelihood suggested by Neuman, 2011:410). As argued by Neuman (2011:410), the research process gains great value in interviewing individuals that could offer contrasting and/or objective views of the subject under question, without any limitations (such as expert individuals in the field that may not necessarily be actively involved). Effort was made to ensure that the interviewed individuals constituted a combination of UPA development experts, urban development managers, academics, policy experts, as well as network institutional policy experts, in order to offer a balanced texture of experience, views and information in answering the research questions.

Although all eight metros were targeted as research sites, the key-informants identified as part of the research did not fully represent all the eight metros. Instead the research informants were selected on the basis of their involvement and experience in UPA, along with other relevant experts and knowledgeable individuals in relation to policy networks, institutional policy and policy management in general within South Africa. Although there was a pre-list of key informants planned for the research; during the interviews more key informants were identified based on diverse expertise, knowledge and experiences in order to complement the data collected from the original list of interviewees. Key informants were thus partially selected using the snowball technique of sampling as guided by the research data needs (Neuman, 2011:222-223; Illenberger, 2008; Johnston and Sabin, 2010; Handcock and Gile, 2011). The key informants included UPA development managers, city managers, policy analyst, food policy researchers, academics, non-governmental organisations, business and farmers. Interviewees were comfortable with being identified by name. Table 6 sets out the details of key informants interviewed.

Table 6: Key informants interviewed in this research

Name and Surname	Organisation	Designation
Mr Stanley Visser	City of Cape Town	Head: Development Facilitation, Economic and Human Development
Dr Michael Aliber	Department of Agriculture Forestry and Fisheries	Director: Office of the Director General
Mr Steve Mohlabi	Department of Agriculture, Forestry and Fisheries	Director: Food Security
Mr Japhta Makgolela	Tshwane Municipality	Executive Director: Agriculture
Mr Sibongiseni Ndimande	Department of Agriculture Forestry and Fisheries	Deputy Director: Food Security Policy
Mr Derek Naidoo	eThekweni Municipality	Deputy City Manager
Dr Alec Thornton	University of New South Wales, Australia	Senior Lecturer: School of Physical, Environmental and Mathematical Sciences
Ms Desia Colgan	University of the Witwatersrand	Lecturer (Law) and PhD student: Policy Networks
Dr Jane Battersby-Lennard	University of Cape Town	Research Associate: Department of Environmental and Geographical Science (African Center for Cities)
Dr Ntsiki Maine	Tshwane Municipality	Director: Agriculture
Ms Celiwe Kgowedi	Gauteng Department of Agriculture, Rural Development	Manager: Agricultural Information Systems (Gauteng)
Mr Charles Rethman	South Africa Development Community (SADC)	Livelihoods Analyst
Mr Quinton Naidoo	Food and Trees for Africa	Programme Manager: Farmer Eco-Enterprise Development (FEED)
Ms Verena Wagner	Food and Trees for Africa	Operations Manager
Mr Russell Maphophe	Tshwane Municipality	Deputy Director: Agriculture: Special Programmes

4.3.3 Interview schedule

An interview schedule was developed and served as a guide for all interviews conducted with the key-informants (see Appendix 1). The interview schedule worked well to facilitate data collection, especially from a wide selection of key informants in terms of background, expertise and level of involvement in UPA development policy issues in South Africa. Table 7 presents the interview schedule themes utilised for this research, and as extracted from the UPA interview schedule (Appendix 1).

Table 7: Interview schedule questions (extracted from the interview schedule, Appendix 1)

Questions
As a general impression, what would you say is the state of UPA in South Africa?
Based on your experience, individually and in organisational context, what can you identify as the barriers that constrain UPA growth and development in South Africa? Or, is it your experience that there are no barriers? If you do identify constraints, could you say that these constraints are unique to your organisation or could these be equally identified as constraints across a wider spectrum of UPA actors?
In terms of your personal observations and/or experiences, can you identify any gaps/limitations in terms of the current institutional roles and responsibilities – that may help explain some of the challenges in developing UPA in South Africa? If any, could these gaps be explained by the way UPA development institutions/organisations are currently organised/designed or arranged, or are there other reasons?
Do you think that the state has done enough for UPA development in South Africa's metros? In your view, what would you say should be the role of the state in developing this sector?
Specifically with reference to the role of government, what would you say should be the role of the metro government, provincial government and national government, respectively?
From your experience, which different actors can you identify as strategically key to developing UPA in South Africa and why? What can you identify as the potential role of these institutions?
In developing UPA in South Africa, what kind of relevant actions, operations have you or your organisation been involved with in the past five years?
Are you and/or your organisation engaged in any way through partnerships, collaborations and or any coordinated effort with other organisations in developing UPA in South Africa?
Would you say policy networks have a place in institutional policy design for substantive UPA policy delivery in South Africa? What are the main reasons for your answer?
Would you or your organisation be interested in getting involved with a wider institutional policy network dedicated to UPA development in South Africa's metros? What are the kinds of benefits (if any) that you believe could result?
How, or through what kind of a process, do you believe a potential UPA institutional policy network could be designed or activated for UPA policy delivery in South Africa?

A total of fifteen interviews were conducted (inclusive of face-to-face and telephonic interviews), with each interview lasting between one and two hours. All face-to-face interviews were recorded with permission from the key informants and hand-written notes were taken for all interviews. The flow of the interviews did not necessarily follow the interview schedule questions to the letter. Instead, the interview schedule was utilised as a guide to ensure that all necessary kinds of data was collected. The interview schedule was effectively used as a question guide and checklist. In some cases the researcher noted that not all the key informants included for this study were experts in all the thematic areas under question (urban and peri-urban agriculture, governance, institutional/procedural policy and

policy networks). The interviews were conducted within a context of seeking to understand experience and meaning. Although there was a pre-list of key informants planned for the study, more key informants were identified in the course of the earlier interviews, based on diverse expertise, knowledge and experiences. The subsequent interviews then served to complement the data collected from the original list of interviewees. Key informants were thus partially selected using the snowball technique of sampling, as guided by the research data needs and as other informants were referred as relevant during the interviews (Neuman, 2011:222-223; Illenberger, 2008; Johnston and Sabin, 2010; Handcock and Gile, 2011).

4.3.4 Documentary analysis

UPA policy documents from South African metros were analysed as means to strengthen the quality of the data collected through interviews with key informants. According to Hakim (2000:46), documents are an invaluable source of policy research data that constitutes a record of the development and implementation of specific institutional decisions and activities of a particular institution. Simply put, documents can be defined as written texts produced by individuals and institutions as part of their daily activities and specifically for their own needs (Scott, 1990). According to Scott (1990), documents pose some key methodological issues that must not be overlooked before being used in research, including: *Authenticity* of the document (known author and sound content); *credibility* (accuracy and sincerity), *Representative* of the totality of the matter; and *meaning* in terms of accessibility of language and understanding.

The authenticity, credibility, representativeness and meaning of the documents utilised in this research were found to be in order for research use. A data retrieval form was utilised to filter the data from the different documents that were analysed for the study (Setswe, 2013). The specific data of interest in the documents was related to the emerging governance and institutional policy issues from metros. Documents surveyed or analysed included policy documents, portfolio committee reports, strategic plans, presentations and websites (see Table 8 for a list of all documents analysed).

Table 8: Documents analysed as part of this research

Name of document	Date	Author	Covered areas
Strategic Plan for the Department of Agriculture, Forestry and Fisheries, 2012/13 - 2016/17	2012	Department of Agriculture, Forestry and Fisheries (DAFF)	South Africa
Presentation: SACN Urban agriculture programme	2012	South African Cities Network (SACN)	South Africa
Presentation: Overview of Urban and Peri-Urban Agriculture in South Africa	2012	Marc Lewis	South Africa
Report to Portfolio committee for economic development and tourism: Feedback on urban agriculture assistance programme	2010	Mr Stanley Visser	Cape Town
Urban agriculture policy for the City of Cape Town	2007	City of Cape Town	Cape Town
Presentation: Exploratory meeting on urban and peri-urban agriculture	2012	Mr Stanley Visser	Cape Town
Presentation: Urban agriculture in Ekurhuleni	2012	Sinah Mphatse	City of Ekurhuleni
Urban Edge review Project incorporating rural land use management policy and urban densification guidelines	2007	Nelson Mandela Bay	Nelson Mandela Bay
Presentation: Urban Agriculture in Nelson Mandela Bay	2012	Johan Kruger	Nelson Mandela Bay
Urban Agriculture, http://www.nelsonmandelabay.gov.za/	2013	Nelson Mandela Bay	Nelson Mandela Bay
eThekweni Municipality Agricultural Management Unit Strategic Plan	2010	eThekweni Municipality	eThekweni
Rural agricultural policy for eThekweni	2004	eThekweni Municipality	eThekweni
Urban Agriculture in Buffalo City: A tool for sustainable municipal development	2012	Buffalo City	Buffalo City
Integrated Agricultural Strategy, Policy and Implementation Plan for the City of Tshwane	2008	City of Tshwane	Tshwane
City of Tshwane Metropolitan Spatial Development Framework	2012	City of Tshwane	Tshwane

4.4 DATA ANALYSIS

Collecting and analysing large volumes of qualitative data can be a daunting exercise (Steele, 2006; Smith and Humphreys, 2006). Qualitative research employs more manual methods of data collection, preparation, analysing and presenting, making it an arduous exercise, especially when there is a lot of information to consume (Chen and Nayak, 2007). Documentary data analysis is still dominated by computer based data analysis programmes (such as Leximance), which analyse documentary data by means of a word count (Neuman, 2011:485; Smith and Humphreys, 2006). Here, words which appear more frequently in the document are said to be of greater importance and thus more meaningful (Smith and Humphreys, 2006). Data analysis in this research however took the traditional stance of data

coding and conceptualisation in order to develop understanding and contextual meaning (Neuman, 2011:460-464).

The (qualitative) data collected in this research was analysed by extracting themes of meaning with the unit of analysis being holistic and concentrating on relationships between elements, concepts and themes (as indicated by Brink and Wood, 1998:246). The data analysis process was initiated through the organisation of the data into pre-set themes (Appendix 2) by the researcher. These were further refined in reference to the emerging themes and with quotes from the interview notes and recorded interviews. Data analysis for all collected data was conducted as an on-going process and simultaneously with the interview process. This was helpful in that it allowed for early identification of missing data and thus the necessary mitigation measure through the following interviews (Zandamela, 2011).

4.5 RESEARCH LIMITATIONS AND CHALLENGES

Although the sample cities targeted for this research were all the metropolitan cities in South Africa, due to limited financial resources, only individuals from Tshwane, Johannesburg and Cape Town were interviewed. The research sample was not necessarily based on the ideal city representation but rather on stakeholder grouping representation with a particular interest on knowledgeable individuals to act as key-informants regardless of city of origin. As such the key-informants interviewed were intentionally guided to provide a wider perspective over and above their specific metro-level experience of UPA substantive and institutional policy issues. Nonetheless, to compensate for the limited data, the research also conducted documentary analysis. The diversity and multi-sectorial nature of the key informants and their level of involvement in the UPA policy management process meant that there was a need to tailor-make the interviews in order to get the best out of specific individuals on the bases of their background, knowledge and experiences. Nonetheless, every effort was made to ensure that interviews captured all the data required in terms of the research objectives.

CHAPTER 5: DATA PRESENTATION

5.1 INTRODUCTION

Given the parameters of the current study, the data presented in this chapter cannot be comprehensive, exploring *all* aspects of the state of urban and peri-urban agriculture (UPA) in South Africa. Yet, it does offer several anchoring points to enable an up to date account of UPA, with special emphasis on current and potential partnerships, collaboration and networks. The data collected for this study unpacks and sheds light on the views and perceptions of key informants regarding the development of network policy institutions for UPA policy management in South African metros. The data presented in this chapter is analysed in Chapter 6 as evidence-based knowledge to argue the value of policy networks in UPA policy management. It is important that such networks comprise complex, multidimensional issues and involve multiple stakeholders.

The first step to data analysis is to organise the data collected (Badenhorst, 2010). Badenhorst notes that although it may generally look easier and thus tempting to collapse data presentation and analysis steps into one, the result is often confusing. As such, it is recommended to first present the data and then conduct the analysis.

Effectively, this chapter is designed to present the research data at a glance. In this chapter both interview data (section 5.2) and data from documentary analysis (section 5.3) is presented. Booth et al. (1995) argue that visual presentation of research data is one of the most critical aspects of research data presentation. They assert that visual means of data presentation helps to facilitate the communication of complex data and to discover patterns and relationships that could otherwise be easily missed. The authors argue that data presentation requires careful thinking, about how best to present a research study data and that this helps to also guide the researcher on the type of data to collect. This chapter follows their orientation and therefore serves the objective of visually presenting the research data to make the research evidence clear, showcase the data and make the results visible.

Not all data, however, can be presented through a visual means and this is especially relevant to qualitative data. As highlighted in Chapter 4, for this research, qualitative data is collected through research interviews while documentary analysis is utilised to investigate opportunities to develop UPA institutional policy networks for efficient and effective policy management. Although this research has a specific interest in policy networks, as a background to the data collection processes employed in the study, the approach employed during the research interviews was to commence the interviews on generic themes, covering all aspects of UPA as a substantive policy issue such as the state of UPA in South Africa. As the interviews progressed, UPA institutional arrangements were explored within the current state and opportunities for reform. Effectively, the interviews were focused on exploring the feasibility (practicality, opportunities and challenges) of using policy networks for UPA policy management in South African metros.

5.2 PRESENTATION OF INTERVIEW DATA

The data presentation process is effectively informed by the emerging themes gathered from the research interviews. These themes build on the questions utilised in the data collection phase. The data looks at the state of UPA, the definition of UPA, challenges and barriers to UPA development, the stakeholders involved, development roles and responsibilities (for both state and non-state-actors), current partnerships and collaborations, perceived value of developing UPA networks, and opportunities for institutionalising UPA policy networks in South Africa.

5.2.1 UPA definition and current state

The understanding of the UPA definition emerged as a key issue in the research interviews, with a number of individuals questioning the lack of a common definition for UPA in South Africa. Dr Jane Battersby-Lennard (Research Associate, African Food Security Urban Network, University of Cape Town), for example, asserted that “sometimes the problem is grounded in the meaning of UPA, the general definition of just farming in the city is too narrow for the impact required”. She added that

using the term urban and peri-urban agriculture (UPA) development is misleading in that it overemphasises the food production element, which might not be feasible in metros with limited agricultural production opportunities (for example limited space and good soils, especially for the poor). She furthermore explained that urban food systems development is the real question we should be exploring in terms of food production, supply, distribution and access as a holistic issue rather than in segregation. Other key informants, including Dr Alec Thornton (Senior Lecturer: School of Physical, Environmental and Mathematical Sciences Australia), strongly agreed with Battersby-Lennard's observations, noting that UPA has been simplified to mean just agricultural development and that this is mainly due to the kind of terminology that is utilised. UPA, according to the key informants interviewed in this research, has a series of key elements (presented in Table 9), which are key to identifying strategic substantive and institutional policy issues South Africa.

Table 9: Key elements of urban and peri-urban agriculture in South Africa – established from a range of opinions from interviewees

UPA Components					
Food Systems	Plant production	Livestock	Aquaculture	Environment/ Health	Horticulture/ Landscapes
• Food production (within and outside the city) • Resources use planning (land and water) • Safe supply of production inputs • Value adding and processing • Market development and access • Institutional and substantive policy management	• Vegetables • Fruit • Cut flowers • Medical Plants • Herbs • Grapes • Forestry/ agroforestry	• Cattle • Sheep • Goats • Pigs • Poultry • Bees	• Fish • Ornamental fish • Abalone/ oyster • Crayfish • Shrimp • Crocodile	• Waste recycling and management • Climate change GHG sequestration	• Parks and recreation • City greening

On the state of UPA in South African metros, the interviewees noted South African metros' numerous programmes on UPA that are not well-funded or supported in terms of research knowledge and services. This is mainly due to the fact that most UPA initiatives are executed in a vacuum in terms of policy and general support from the stakeholders (especially senior metro government officials and

political leaders). Importantly, very little is known or understood about the state of UPA in South African cities. According to Battersby-Lennard, UPA policy management is literally defined in terms of farming operations, rather than in relation to the entire food security values chain and its opportunities and challenges.

One of the key issues that emerged during the research interviews concerned the potential of UPA as a pro-poor urban development strategy and its contribution to urban food security. Dr Michael Aliber (Director, Office of the Director General, Department of Agriculture, Forestry and Fisheries) argued that due to the lack of research evidence on the current and potential benefits of UPA in South Africa, there is generally a lack of commitment to the sector, particularly from the state. Mr Sibongiseni Ndimande (Deputy Director, Food Security Policy, Department of Agriculture, Forestry and Fisheries) noted that the current UPA development initiatives are at best ad hoc and the evident results are not at all positive. Others, such as Mr Stanley Visser (Executive Director, Economic and Human Development, City of Cape Town), and Aliber, argued, however, that the potential of UPA might never be realised without concerted and coordinated development efforts, including the commissioning of research studies to generate more knowledge and evidence to justify the best way forward. They strongly noted that questions on whether or not to invest in UPA development, could be better answered through generating more information and knowledge by researchers to provide a clearer (short and long-term) view and understanding of the key issues that require attention.

Visser argued, however, that there is enough evidence globally to suggest that the potential of UPA in urban food security is worth the attention of urban metro managers, urban poverty and food security practitioners. He added that there are pockets of success in South Africa (e.g. in Cape Town, Durban and Tshwane) and that there is a need to build on these initiatives in order to ensure accelerated impact and ensure sustainability. Overall, there were a number of issues (in terms of barriers to UPA development, section 5.2.2) that were identified, including the current UPA definition, which asserted

the status of current UPA in the metros as narrowly focused on agricultural production rather than on the entire agriculture value chain.

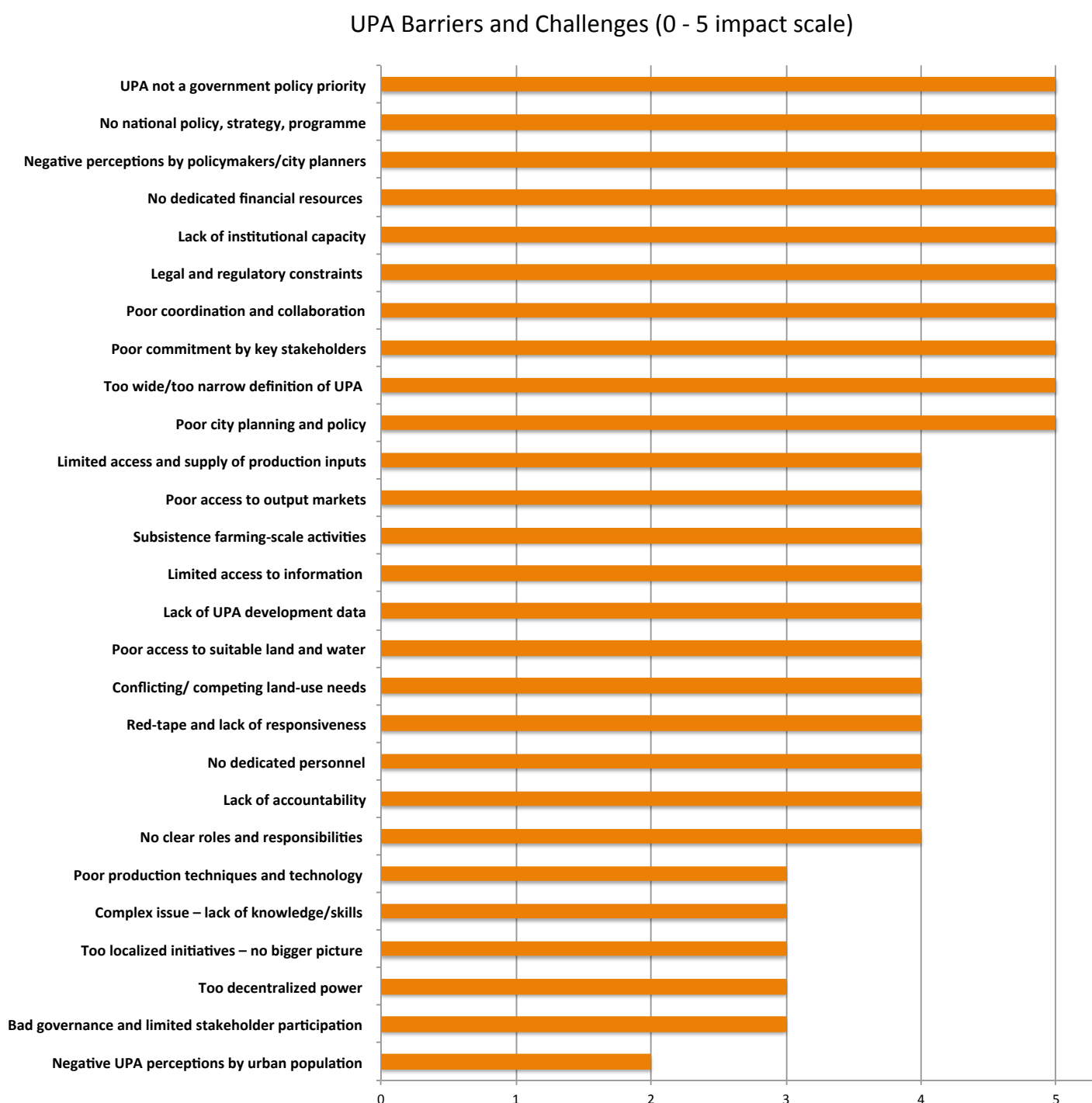
5.2.2 UPA development barriers and challenges

UPA as a policy issue in South Africa has some embedded structural and non-structural substantive and institutional policy barriers and challenges that should be prioritised in the policy management process. Not all UPA barriers and challenges can be addressed unilaterally by a single stakeholder. In fact, most of these will require a number of stakeholders, hence the need for a multi-stakeholder approach and the justification for policy networks as a relevant multi-stakeholder procedural policy arrangement framework.

Using a scale of 0-5¹, Graph 1 helps to identify major institutional and substantive policy barriers, as well as technical challenges that should be addressed while also identifying high impact areas that could be addressed as a matter of priority. Institutional/procedural policy and substantive policy gaps are some of the major ‘culprit’ issues identified for immediate attention. These were identified by key informants and have been ranked (using a 0-5 scale as detailed in the footnote) by the researcher. The scaling is based on the emphasis placed in the interviews on the impact of each one of the barriers/challenges on UPA development (see Graph 1).

¹ 0-5 Scale key: 1 = Necessary to address but not a priority; 2 = Key enablers necessary to address; 3 = Negative impact address as a matter of priority; 4 = Major barriers that must be highly prioritised; 5 = Major structural barriers (national/provincial/metro) and challenges that must be highly prioritised.

Graph 1: Barriers and challenges for UPA in South Africa - established from a range of opinions from interviewees



Note: 0-5 Scale key: 1 = Necessary to address but not a priority; 2 = Key enablers necessary to address; 3 = Negative impact address as a matter of priority; 4 = Major barriers that must be highly prioritised; 5 = Major structural barriers (national/provincial/metro) and challenges that must be highly prioritised.

5.2.3 The role of government and other stakeholders in UPA development

A number of the interviewees identified the state as the lead stakeholder for UPA development in South African metros. The general sentiment was that more government (metros and the provincial and national departments of agriculture) leadership and facilitated coordination are necessary to

achieve high impact. Mr Quinton Naidoo (Programme Manager: Farmer Eco-Enterprise Development, Food and Trees for Africa) highlighted the fact that unlike the private sector, government has authority of the metro land and can guide the development process in a direction that favours UPA development. Battersby-Lennard emphasised that “the creation of an enabling framework as the role of the state for UPA development is not good enough; in fact it is like not doing anything at all which is effectively working against urban agriculture development, urban food access and ultimately urban food security. A stronger role of government, especially in terms of city-wide planning for sustainable urban food systems (production, distribution/access), will be vital”.

Thornton and Naidoo noted that the private sector generally acts on economic opportunity, but UPA development has socio-economic and environmental benefits that are mainly of value to the state and its public development goals. As such, the state must be equally active at the project implementation level. This will be to ensure the necessary follow-through, especially in terms of city zoning and support services for urban practitioners. Overall, the generic message emerging from the interviews was a strong emphasis on the role of government in coordinating UPA activities. At a slightly elevated level, Visser also noted that there is a great need for national government presence and support on UPA development initiatives at the metro level. Visser specifically mentioned the national Department of Agriculture and Forestry and Fisheries as key to player to provide strategic UPA institutional and substantive policy support to metros and local stakeholders. This is by providing UPA policy guidelines, technical and financial support.

On the other hand, some of the key players identified by the interviewees included universities and research organisations to lead UPA research initiatives and knowledge management, and to provide evidence-based inputs for UPA policy management decisions. The private sector, in particular agribusinesses, agro-processors and retailers, and fresh produce markets, was also identified as key to play a developmental role through the establishment of agribusinesses, supply of inputs, and trade and marketing services as catalysts for UPA based business opportunities. Non-governmental

organisations were identified as key for on the ground initiatives, namely to mentor and support resource-poor urban farming communities and provide specific support to vulnerable groups such as women, youth and people living with disabilities.

Table 10 presents a collection of the potential stakeholder roles (gathered from the research interviews) that should be executed in support of and to ensure accelerated development of an equitable and sustainable UPA sector in South African metros. The roles identified in Table 10 include a number of initiatives ranging from UPA policy development (national, provincial and metro level policy formulation initiatives by government in partnership with other players as active participants); implementation and support (metro level UPA policy implementation and supporting functions); monitoring and evaluation, learning and knowledge management (overall activities concerned with continuous learning and improvement within and outside the state) to UPA related policy advocacy and outreach activities (increased UPA stakeholder voice for common appreciation of the value and limitations on UPA development).

Table 10: Stakeholder tasks/responsibilities for UPA development in South Africa – emerging from the research interviews

UPA Tasks/Responsibilities (Along the Policy Management Process)
UPA Policy (Substantive/Institutional) Development - Government, NGOs, Private Sector
• Institutional policy design • Development of a national UPA policy framework • Developing UPA development legislation • Engaging political authorities and ensuring government buy-in • Provision of funding for institutional and substantive policy management • National, provincial and local programme design • Developing and implementing UPA implementation by-laws • Developing gender and youth mainstreaming strategies and policies
UPA Policy Implementation and Support: Government, NGOs, Private Sector
• Coordinating the implementation of UPA policy, strategy and related programmes • Conducting environmental impact studies and developing mitigation plans • Managing multilateral/bilateral relations for technical support, investment and market access • Coordinating national and international stakeholders • Recycling and using organic waste and waste-water on UPA • Supporting and improving farmers' access to land and irrigation water • Market development and access support Conducting UPA business planning and supporting conducting UPA feasibility studies • Organizing, training and mentoring farmers • Providing technical support to metros • Developing functional urban food systems • Facilitating infrastructural development • Land-use planning and spatial development management • Investing and supporting the development of UPA value chain (input supply, production, value adding, distribution, retail, etc.)
UPA Policy Monitoring and Evaluation, Learning and Knowledge Management: Government, NGOs, Private Sector
• Facilitate dialogue, negotiation, learning, decision-making and collective action processes • Commissioning research programmes and projects • Convening national and international workshops, conferences, symposiums etc. • Oversight monitoring and evaluation • UPA knowledge management • Identifying, adopting and sharing best practices, models and technologies • Facilitating reporting and accountability mechanisms
Policy Advocacy and Outreach: Media, Government, NGOs
• Facilitating media campaigns to promote UPA development • Public campaigns, awareness creation, advocacy and policy lobbying

5.2.4 UPA stakeholders in South Africa and related development partnerships and collaborations

Most of the respondents cited the fact that UPA development calls for the engagement of multiple stakeholders from different sectors, including from the social, economic and environmental arenas. Specially, national government, provincial government, metro government, civil society, private sector, universities, researchers, farmers and relevant international partners were identified as potential and strategic actors to be considered in the establishment of a UPA policy management network. Specifically, institutions dealing with UPA development related issues including water, town and regional planning, human settlement, development planning, health, environment, finance, infrastructure, research, international cooperation and trade are identified as potential key players in UPA development policy management in South Africa (see Table 10). Primary stakeholders are defined as implementing and strategic planning partners at the metro, province and national levels and secondary stakeholders are supporting players in the management of UPA policy. The depiction of national, provincial and metro level stakeholders, as presented in Table 11, should not be viewed as actual demarcation of stakeholders in terms of the different spheres of governance, especially since such a classification does not generally apply to actors outside government. Table 11 is meant to indicate active and/or potential stakeholders that could be involved in UPA development.

Table 11: Key (potential) institutions involved with UPA in South Africa – as listed by the research interviewees

List of stakeholders	Involvement	National	Provincial	Metro
Urban Farmers and Communities				
Urban and peri-urban individual farmers and farming groups	Primary			x
Farmers' Associations/ Cooperatives	Primary			x
Urban Community Concern Groups	Primary			x
Urban Communities	Primary			x
Water Users Associations	Primary			x
Consumer Associations	Primary			x
Government Departments and related state institutions				
Agriculture, Forestry and Fisheries	Primary	x	x	
Cabinet/Parliament	Secondary	x	x	x
Local/City Governments	Primary			x
Cooperative Governance and Traditional Affairs	Primary	x	x	
Rural Development & Land Reform	Primary	x		
Water Affairs	Primary	x		
Economic Development	Primary	x		
Planning Commission and Monitoring and Evaluation	Secondary	x		
Health/ Social Development	Secondary	x	x	
Human Settlement	Secondary	x	x	
Science & Technology	Secondary	x	x	
Trade & Industry	Primary	x	x	
Environmental Affairs	Primary	x	x	
South African Local Government Association	Primary	x		x
South African Cities Network	Primary			x
Research and Training Institutions				
Agricultural Research Council	Primary	x	x	
Human Sciences Research Council	Primary	x		
Statistics South Africa	Primary	x	x	
Council for Scientific and Industrial Research	Primary	x		
Universities (Wits, UCT, UP, TUT Stellenbosch)	Primary	x	x	x
Primary and High Schools	Secondary			x
Non-Governmental Organizations				
Food and Trees for Africa	Primary			x
Abilimi Bezakhaya	Primary			x
World Vision	Primary			x
Red Cross	Primary			x
Private Sector				
Financiers (Investment Agencies and Private/Development Banks)	Primary	x	x	x
Insurers (Agriculture Value Chain)	Primary			x
Agribusiness (Seed, Fertilizer, Chemical, etc.)	Primary			x
Marketers and Certification Companies (Municipal/Private)	Primary			x
Agro processors (Unilever, Nestle, SAB, McCain)	Primary			x
Big Corporates (Sasol, etc.)	Primary			x
Retailers (Shoprite, Woolworths, Pick 'n Pay, Spar)	Primary			x
Media	Tertiary			x
International Agencies and Donors				
African Food Security Urban Network	Secondary			x
Cities Alliance	Secondary			x
Municipal Development Partnership: Eastern and Southern Africa	Secondary			x
UN Development Programme	Secondary	x		
UN Food and Agriculture Organisation	Secondary	x		
UN Human Settlements Programme	Secondary	x		
Donors (USAID, DFID, GTZ Germany, ETC Netherlands)	Secondary	x		
Note: Primary stakeholders are defined as implementing and strategic planning partners at the metro, province and national levels and secondary stakeholders are supporting players in the management of UPA policy.				

5.2.5 Perceived value and role of policy networks in UPA development

Colgan noted that UPA governance improvements will require a thorough understanding of the current state of UPA governance, as well as the current stakeholders' roles and needs in order to facilitate the development of a relevant UPA policy network. Colgan noted, however, that "stakeholder roles in a specific policy issue are not always clear, but the point is to start and improve [develop more clarity] as you go". She emphasised the fact that the success of policy networks depends largely on stakeholder dependencies and the need to collaborate. Colgan also noted the following key points in relation to policy networks:

- "One must always be aware of the power relations (within organisations or individuals) between different stakeholders in a network."
- "The challenge of bureaucracy is not just about the state but this is also a dominant challenge within non-state actors, as such those involved in the network should develop a practical and suitable approach to deal with such issues across the entire stakeholder base."
- "For policy networks to be successful stakeholder values (respect, integrity, trust, communication) must be considered and those who are involved should be willing to adjust and compromise where necessary."

Throughout the in-depth interviews, key informants continuously asserted the need for increased stakeholder cooperation, coordination, collaboration, integration and communication in the implementation of UPA programmes and projects. Although not all interviewees are involved with UPA, depending on their home institution (e.g. University of Cape Town dealing with urban food security research in cities across Southern Africa; Food and Trees for Africa dealing with urban organic farming in Gauteng province; or the City of Tshwane dealing with UPA development in the greater Tshwane area), some interviewees mentioned that they do currently employ partnerships, stakeholder cooperation, coordination, collaboration and communication as major elements of their specific UPA operations. However, from the highlighted partnerships or collaborations by each of the interviewees, it must be noted that these are at best bilateral and multilateral relations between project

partners with very limited strategic gains that could be accumulated to comprehensive national, provincial and metro level UPA development impact. While the current partnerships and collaborations were highlighted as effective, Visser and Aliber also noted that there is a need for metro, provincial and national level partnerships that could allow for bigger impact, learning and sharing of best practices nationally and internationally. Interviewees identified policy networks as a relevant form of procedural policy for UPA development in South Africa. The interviewees identified the following as some of the benefits that could be derived from the establishment of a UPA institutional policy network in South Africa:

- Help to identify and bring the key UPA players together as well as a stock-taking process on their interests and current roles;
- Bring the stakeholders into one stable and begin to create a united voice to advocate for sound and coordinated UPA development in South Africa;
- Share resources for the pursuit of specific goals;
- Facilitate coordinated efforts for better impact;
- Facilitate a learning platform that is built on knowledge sharing, dialogue and negotiation;
- Facilitate better transparency in the planning processes between actors, especially the state;
- Enhance governance and democratic systems in UPA development decision-making processes and, most importantly, build trust among policy actors;
- Ensure value-add in policy management through input and increased roles by actors who have the relevant capacity and resources; and
- Ensure synergies and avoid duplication and antagonistic policy and programmatic initiatives.

5.2.6 Institutionalising UPA policy network arrangements in South Africa

Although a number of elements were identified as key components of the UPA definition (see section 5.2.1), agriculture production was identified as the main component. As a result, interviewees generally highlighted the Department of Agriculture, Forestry and Fisheries (DAFF) as the most relevant institution to lead and support UPA development initiatives across South African metros.

Referring to DAFF's 2012/13-2016/17 strategy, Aliber highlighted that the department has prioritised urban agriculture as a planned policy initiative for 2013, asserting that (DAFF, 2012:4):

“While urban agriculture is supported by various levels of government and certainly by civil society organisations, there remains a need to create an encompassing strategy on urban and peri-urban agriculture. The purpose of such a strategy would be to promote best practice, enhance the role of agriculture in urban and peri-urban livelihoods and improve coordination and cooperation among role players in this field. A particular focus of such a strategy would possibly be on using agriculture to support residents of informal settlements at the fringes of towns and cities.”

Aliber, Visser and Battersby-Lennard cited a recent partnership between DAFF, metros and the South African Cities Network as the perfect platform for the establishment of a UPA policy network. Although this relationship was said to be at an early stage, key informants noted that that developing and institutionalising UPA policy networks should ride on current momentum, rather than be initiated separately. They noted that there seems to be good appreciation for the need to work together and a number of the stakeholders (especially the metro governments) are willing to engage in a UPA collaborative policy network. Interviewees further established that the participation of the DAFF as a leading institution could be key (in terms of funding) to the successful establishment of a UPA policy network, particularly in the inception phase.

Respondents highlighted the need to build on DAFF's commitment to UPA, as reflected in their strategy (DAFF, 2012:4) and their partnership with the metros and the South African Cities Network on UPA development. Furthermore, Visser (from the City of Cape Town) emphasised the fact that, “stakeholder participation, at least for state institutions, in a policy network meant for UPA development could be enhanced if such a network is led or at least endorsed by government rather than the private sector”. Although this was not an explicit view of all the interviewees, the general

sentiment was that DAFF must take leadership, which effectively implies general agreement on a government led UPA policy network.

5.3. DOCUMENTARY ANALYSIS

As highlighted in Chapter 4, this study also collected documentary data as a supplementary research method in order to strengthen the research design. Data was collected from a number of documents, including municipal policy documents, strategic planning documents, portfolio committee reports, presentations and the websites of the South African metros. The data was collected using a documentary data retrieval form (see Appendix 2), which incorporated a number of elements that were then utilised as the data presentation themes below. Although the documentary data presented in this section is not exhaustive (due to limited access to all the required documents by this researcher), the documents accessed and data gathered are sufficient to provide an updated account on urban agriculture institutional and substantive policy, especially when combined with the research interview data.

5.3.1. UPA institutional and substantive gaps

Although there are a number of UPA development projects that are run and/or supported by South African metros, only Cape Town, Durban, Tshwane and eThekwin, have institutionalised structures that are specifically responsible for UPA development (City of Ekurhuleni 2012; eThekwin Municipality; 2010; 2004; Cape Town, 2012; 2010; 2007; Tshwane, 2008). These metros have institutionalised UPA development structures either in the form of a fully-fledged UPA Unit, such as in Cape Town, eThekwin and Tshwane, or specialised teams designated to manage UPA activities within the metro, such as in Nelson Mandela Bay. This is noted specifically with the metros that have approved UPA policies and strategies. As it can be noted from the details in Table 12, other cities manage UPA as part of a wide range of other economic development projects (City of Ekurhuleni 2012; eThekwin Municipality; 2010; 2004; Cape Town, 2012; 2010; 2007; Tshwane, 2008). This is perhaps due to the fact that the establishment of UPA development units has been executed as a result

of the policy recommendations, rather than the other way around (i.e. Structure following strategy). Table 12 shows that UPA development initiatives in most South African metros occur in isolation and outside of the existence of any formal and specific policy framework (City of Ekurhuleni, 2012; Buffalo City, 2012; Nelson Mandela Bay, 2012; 2013; Lewis, 2012).

Table 12: State of UPA substantive and institutional policies in South African metros - based on documents analysis from different metros

Metros' documents analysed	Status on UPA substantive policy, current projects and responsible institutional structure			
	UPA Substantive Policy in place	Current UPA Projects	UPA specific Institutional structure	Other / Comments
City Cape Town (2007; 2012)	Approved urban agriculture policy.	Currently running and supporting a number of projects.	Urban and peri-urban agriculture (UPA) programmes managed under the Department of Economic and Human Development.	Urban agriculture gaining popularity and growing within the city.
City of Tshwane (2008; 2012)	Approved agricultural development policy and strategy.	Currently running a number of UPA projects.	Specific urban and peri urban agriculture (UPA) department established to manage UPA in the metro.	Dedicated staff for UPA development, meant to grow bigger n the current financial year with the merger of Metsweding and Sedibeng Municipalities. Overall great progress.
eThekweni Municipality (2010)	UPA substantive policy in place.	A number of UPA projects that are on going.	UPA managed under Project Management Unit, which is responsible for all project in the metro including engineering projects.	Most comprehensive policy and strategy on UPA development.
Buffalo City (2012)	Even though the city supports urban agriculture as one of its programmes, the city does not have a policy on urban agriculture yet.	Not specified.	UPA projects initially sstarted as part of the Mdantsane Urban Renewal Project but there are other projects that have been commissioned by the metro under different programmes	Clear interest and commitment to develop sustainable UPA programmes but not much done so far.
Nelson Mandela Bay (2012; 2013)	No policy yet but working on it.	Currently supporting a number of UPA development projects.	UPA specific directorate established as Market and Agriculture Urban Agriculture.	There are substantive project that are on-going in the metro as they develop a UPA policy.
City of Ekurhuleni (2012)	No specific UPA policy, but there are other economic development policies that cater for UPA development.	There are a number of agriculture support programmes that are on-going.	UPA managed under Research and Economic Development Department.	Specific focus on large-scale farms.

Out of the eight metros in South Africa, only eThekweni, Cape Town and Tshwane have formally adopted and approved UPA substantive policies in place. In addition, only half the metros have UPA specific units or directorates responsible for UPA development. However, even in cases where UPA development policies exist, such as in the City of Cape Town (2007), it is noted that considerable work still needs to be done to ensure improved coordination and collaboration and to limit duplication of activities by different stakeholders, such provincial and national government departments, farmers, non-governmental organisations, national and provincial government departments.

5.3.2. UPA definition and its key components

The other key theme of interest from the analysed documents was the emerging UPA definition as demonstrated in the metro documents. The prevailing understanding of UPA in all the metros mainly emphasises UPA as agricultural production activities (crop and livestock and fisheries) within the urban and periphery land in metros. The definitions further highlight value adding, processing, marketing and waste recycling as some of UPA production's other elements. According to the documents, the UPA understanding in South Africa also highlights a very strong element of urban food security and poverty alleviation as the major goals and justification for practicing UPA in the metros. The City of Cape Town and Nelson Mandela Bay (Cape Town, 2007:3; Nelson Mandela Bay, 2012) cite Mougeot's (2000:10) definition as their adopted UPA definition, stating that "urban and peri-urban agriculture is an industry located within or on the fringe of a town, a city or a metropolis, which grows and raises, processes and distributes a diversity of food and non-food products, using largely human and material resources, products and services in and around the urban area and in turn supplying human and material resources, products and services largely to that urban area".

5.3.3. Barriers or constraints on UPA growth and development

A number of barriers and constraints are identified in the UPA documents analysed (Buffalo City, 2012; Lewis, 2012; Cape Town, 2010) in this study. The emerging trend from the documentary analysis is a continuous demonstration of a strong appreciation of the developmental role of UPA

through the implementation and support of UPA development projects by the metros' governments. However, even with the demonstrated interest in advancing the sector, UPA policy management capacity and resources (human, social, physical, economic and environmental capital) remains limited (Kruger, 2012; Visser, 2012; Cape Town, 2010). On the policy and regulatory front, UPA still suffers limited metro-wide commitment and consequently restrictive legislation, bureaucratic red tape and limited institutional, technical and financial support. This is the case, for instance, in Cape Town (2007; 2010). As such, most of the documents highlight other internal metro departments (such as metro department/units dealing with planning and building development management, spatial planning and urban design, environmental resource management, health services, social services, community services, parks, property) as key stakeholders that should also buy in and own the metro UPA unit/directorate initiatives. This is necessary to make it a metro-wide development agenda supported by all government stakeholders within the city (eThekweni, 2010; Tshwane, 2008; Cape Town, 2010). Specific challenges and barriers identified in the documentary data include the following, which have been classified by the researcher into technical issues, substantive policy issues and institutional policy issues:

- **Technical UPA issues**

- Narrow definition of urban agriculture (only agricultural production);
- Lack of knowledge and skills, in appropriate production techniques and technology, commitment of UA practitioners, no access to finances, legal and regulatory impediments, availability of and access to land and security of tenure, availability and affordability of water;
- Poverty, food insecurity, HIV and AIDS;
- Provision of affordable basic infrastructure, personal security and theft, difficult climate factors (wind, erratic rainfall, etc.) and access to markets; and
- Negative health and environmental impacts.

- **Substantive policy issues**

- Lack of policy direction and leadership on policy for urban agriculture;

- Red tape and lack of responsiveness, urgency and priority;
 - Conflicting/competing land use needs (housing, industry, conservation, roads);
 - Theft of infrastructure, tools and produce;
 - Many urban agriculture (UA) activities continue to exist without controls and permits;
 - Illegal use of land by urban farmers; and
 - Suitable land availability and affordable water sources.
- **Institutional policy issues**
- Disintegrated farmer development;
 - Lack of firm commitment by stakeholders;
 - Negative perceptions of decision-makers and planners; and
 - Organisational inefficiencies of gardening groups and some NGOs.

5.3.4. Key stakeholders

Identified UPA stakeholders in the documents are located at different levels, either as implementing, supporting or as strategic partnership roles. In the documents of the City of Ekurhuleni (2012), eThekweni Municipality (2010; 2004), Cape Town (2007; 2010; 2012) and Tshwane (2008) different and specific stakeholders are identified, but these are not always specified. Instead, only the different stakeholder *groupings* are listed – such as local/metro level internal and external metro actors (planning and building development management, spatial planning and urban design, environmental resource management, health services, social services, community services, parks, property), donors and development assistance partners, government departments and state-owned organisations (dealing with housing and settlements, agriculture, rural development, land reform, education, health, environment, economic development and rural development, cooperative governance and traditional affairs and local government), non-governmental organisations, research institutions, farmers' unions, regional economic commissions, donors, the private sector (agribusiness, agro-processors, financiers and retailers), water authorities, universities and individual actors such as farmers, extension officers, landowners and consumers.

5.3.5. Roles of metro/provincial/national government

Specific UPA development stakeholder roles, especially for the metros level based stakeholders (generally referred in the documents as implementing or primary stakeholders), are highlighted in a number of the metro documents analysed in this study. These roles are presented below as desired roles, best practice or as the most highlighted in the analysed documents. The roles include the following (Cape Town, 2012; 2010; 2007; eThekweni Municipality, 2010; 2004; Tshwane, 2008; City of Ekurhuleni, 2012):

- Create a common vision, identify key enabling imperatives, clarify roles and responsibilities;
- Establish and maintain a comprehensive database of all UPA stakeholders;
- Commission and manage research programmes;
- Create linkages with other strategies and build strategic partnerships;
- Provide technical and resources support to resource poor urban farmers and practitioners;
- Act primarily as a facilitator to create an enabling environment for urban agricultural development and well as introducing and exercising appropriate regulations and management systems;
- Act as a catalyst, which includes, inter alia, the provision of land, the construction of infrastructure and earth works;
- The metro should also provide project management and extension services, etc.;
- Enabling citizens to participate successfully in the land redistribution programmes;
- Promote sustainable job opportunities and income generation;
- Facilitate access to markets to assist all emerging farmers;
- Support and encourage agro-processing to add value to produce;
- Facilitate the acquisition of farms for the development of agriculture;
- Provide urban agriculture land use management and physical planning;
- Provide subsidised water for vulnerable groups;
- Develop specialised strategies for livestock farming in urban areas;
- Do institutional structuring – focusing on the roles and responsibilities of stakeholders and the

creation of an institutional structure for coordination and delivery;

- Attend to land issues including a focus on land ownership, land planning and development and land rates;
- Support extension services, research, project financing input suppliers and other service providers;
- Provide guidance, specifically on integrating the conservation of the environment and the promotion of agricultural production; and
- Coordinate and manage policy.

5.3.6. Partnerships/collaboration/governance structures and UPA policy networks

Numerous partnerships, collaborations and networks are mentioned (either as current or planned) in the documents analysed for this study (Cape Town, 2012; 2010; 2007; eThekweni Municipality; 2010; 2004; Tshwane, 2008; City of Ekurhuleni, 2012). These are highlighted in Table 13 in accordance with the positions in the different metros. Highlighted partnerships and collaborations include a number of private-public partnerships, public-public partnerships, as well as public-private partnerships. These are presented as means to flag the emerging trends and the value placed on such partnerships for UPA development. As a general observation, partnerships provide great value to UPA development initiatives, especially in terms of sharing knowledge, expertise and resources. Importantly, however, the highlighted partnerships do not exhibit any form of systematic, logical design in relation to the metros. Most of the partnerships are executed in isolation and specifically for projects, which suggests that they would not be sustainable.

Table 13: Mentioned partnerships, collaborations and networks (planned or current) based on documentary analysis

Metros Documents	Mentioned partnerships, collaborations and networks (planned or current)
Nelson Mandela Bay (2012)	Promotion of partnerships involving NGOs, private sector and others
Buffalo City (2012)	Need to ensure all the highlighted stakeholders are involved
City of Ekurhuleni (2012)	- Department of Health and Ilima Agri Services; Promotion public-private-community partnerships and market linkages - Formalise the relationship between Gauteng Department of Agriculture and Rural Development (GDARD) and other agriculture supporting institutions within the City of Ekurhuleni that specifies roles and responsibilities of each stakeholder
City of Cape Town (2007; 2010)	- Partnership between the City of Cape Town, Resource Centre on Urban Agriculture and Food Security (RUAF), Municipal Development Partnership for Eastern and Southern Africa (MDP-ESA), local Non-governmental organisations and farming communities (for the initiation of the Philippi Farming for the Future Project) - Partnership between the City of Cape Town, Rooftops Canada and Communicare (to share knowledge and experiences regarding the role of urban agriculture in food security) - Partnership between the City of Cape Town, Coraid (a Dutch NGO), Urban Matters (Cape Town entity supported by Cordaid) (for the development strategy in Philippi) - Partnerships between the City of Cape Town and overseas Universities: (e.g. Queen's University, Kingston, Canada and Ryerson University, Toronto, Canada) for research and training support - Improved utilization of networks and external development assistance available from big corporates (banks, agribusiness), parastatals (Eskom, Land Bank) and overseas development agencies - Multi-stakeholder forum established for project implementation and introduced consultative forums for stakeholder participation and consultation
eThekweni Municipality (2010; 2004)	The establishment and development of partnerships between rural farmers, public and private sector institutions and NGOs should be promoted (partnerships, specifically with municipal markets and business support services located in the urban core, is viewed as particularly important)
City of Tshwane (2008)	- Promote private-private partnerships, public-public partnerships and public-private partnerships - Focus on the establishment of an agricultural forum and institutional framework within the city for agricultural development - Support linkages between smallholder farmers, input suppliers as well as provincial, national and regional actors - Ensure maximum opportunity for community participation, interaction and empowerment

5.3.7. Link to local, provincial and national policies

The data collected from the documents utilised for this study also highlighted strong links to other policies and programmes that relate to UPA development initiatives (Tshwane, 2008; eThekweni, 2010; 2004). These policies are not exhaustive, but are rather representative of the documents identified for this research. These policies and programmes are important to help identify their role in UPA development, but also stand in relation to identifying the diversity of stakeholders to get involved

in the sector's development (i.e. agriculture, land, food, economic development, etc.) that are linked to these at the different spheres. Below is a list of all identified policies and programme in the analysed documents, with relevance to networking arrangements in UPA. Importantly, these strategies highlight the need for an integrated UPA policy that builds on the different policy components as an effort to ensure collaboration, synergy and cumulative benefits:

- National Integrated Food Security Strategy (agriculture and food security, national);
- Land reform policy (land, national);
- Integrated Rural Development Strategy (national);
- Accelerated and Shared Growth Initiative for South Africa (economic development, national);
- White Paper on Local Government (local development governance, metros);
- 2001 National Strategy for Agriculture (agricultural development, national);
- Land Redistribution for Agricultural Development Programme (land, national);
- Municipal Rates Act (rates and taxes, municipal level);
- Tshwane 5 Year City Development Strategy (local economic development, metro);
- Local economic development planning (local);
- Extended Public Works Programme (infrastructure development, national);
- Comprehensive Agriculture Support Programme (agricultural development, national);
- Urban Renewal Programme (urban sustainable development, local);
- Integrated Development Planning (local development);
- Environmental guidelines to promote sustainable agricultural practices in Tshwane (local sustainable agricultural development);
- Gauteng Agricultural Strategy (provincial agricultural development);
- Tshwane Growth and Development Strategy (local development); and
- Indigent policies and other sustainable economic development policies and strategies amongst national, provincial and local authorities.

Institutional policy strengthening is equally key to ensuring substantive policy success. According to a report on the urban agricultural assistance programme of the City of Cape Town, prepared for the Portfolio Committee For Economic Development and Tourism (City of Cape Town, 2011:2), “although the urban agricultural policy has contributed significantly towards the creation of an enabling environment for urban agricultural activities, the City’s scale and scope of urban agricultural activities is still small when compared to other African cities”. This shows that perhaps developing substantive UPA policies will not be enough to ensure concrete results. The City of Cape Town needs to significantly upscale “its efforts to facilitate and support urban agriculture as a key element of its endeavours to reduce household food insecurity, ignite economic empowerment and to build a sustainable city”. Equally, this is the same message that seems to prevail in some of the other documents from Tshwane (2008) and eThekweni (2010), which justifies the need for metro-wide commitment and support from other stakeholders, including institutional reform and the need for collaborative policy networks in particular.

5.4. CONCLUSION

This chapter presented data on UPA development (including substantive and network policy data) as gathered from interviews and documentary analysis. The data presented sets a firm foundation for the next step, which is data analysis. The analysis will seek to explore the research findings that the current chapter reported on. The convergence of the two data sets presented in this chapter, namely (1) data collected through in-depth interviews with key informants and (2) data collected through documentary analysis, creates a valuable knowledge and evidence base for the data analysis phase. Finally, while the two data sets are presented separately in this chapter, the approach taken in the data analysis in Chapter 6 is to conduct a combined analysis, which will be organised into relevant theme sections while building on the theoretical framework and literature review that have been presented in Chapters 2 and 3, respectively.

CHAPTER 6: DATA ANALYSIS

6.1 INTRODUCTION

This chapter analyses and interprets the data presented in Chapter 5. This is done against the backdrop of the conceptual and theoretical framework presented in Chapter 2. The data analysis process also builds on the knowledge established in the literature review in Chapter 3. This chapter explores institutional policy design and in particular network policy with the objective of recommending improvements for UPA governance and substantive policy outcomes in South Africa's metropolitan municipalities. Institutional policy, governance and network policy theories are employed as the guiding theoretical framework for data analysis.

According to Badenhorst (2010:23), throughout a research project a researcher must constantly revisit the research questions and objectives as the guiding purpose of the research. This is especially important for data collection and analysis, as it serves as a constant reminder of the objectives of the study. Numerous related questions can be answered through a research project that was initially designed for a specific objective, but the fundamental target for the researcher is to ensure that the main research questions are answered.

6.2 UPA ADAPTED DEFINITION BASED ON THE RESEARCH INTERVIEWS

This study established that, urban and peri-urban agriculture (UPA) as a policy issue is interpreted differently by different authors. As presented in Table 9, the UPA definition has a number of components that interact with the entire agriculture and urban food security value chain. Although a definition of UPA (also see conceptual framework in Chapter 2) was included in the research interview questionnaire (Appendix 1) as the premise for this research, it became apparent during the interviews that there is a need to establish not only a common definition, but also one that is adapted to urban food security needs of South African metros as perceived and understood by the research interviewees.

The trend of responses of the UPA definition leaned more on agricultural production as a dominant part of UPA. However, there were other contrasting views, which indicated that UPA also includes components of urban greening projects as equal elements of agricultural production as noted by Thornton. Others further defined UPA as including components such as value adding, processing, marketing and waste recycling, as well as food security and poverty alleviation. Metros mainly define UPA as agricultural production activities (crop and livestock and fisheries) within the urban and periphery land in metros (Cape Town, 2007:3; Nelson Mandela Bay, 2012).

Battersby-Lennard strongly stressed that although UPA is generally understood as agricultural production, there is a need for the definition to also account for the urban food system as a whole (including food production, supply, distribution and access). According to Battersby-Lennard, the UPA definition (Chapter 2) segregates UPA and singles out agricultural production as the main component instead of an emphasis on the entire agriculture and urban food security value chain. She argued that the UPA definition should consider comprehensive components of sustainable food systems for metros, rather than just production. Food systems focus on a holistic picture of the food value chain, including issues such as production inputs, production, value adding, processing, logistics and supply, and specific issues pertaining to equal food access for all in the city (i.e. location of markets and retailers). According to Battersby-Lennard, using urban and peri-urban agriculture development to define the UPA components listed in Table 9 (entire urban food system) is misleading. However, she points out that “urban food-security systems” could be a more suitable terminology to define comprehensive UPA development in South African metros.

6.3 CHALLENGES AND BARRIERS TO UPA DEVELOPMENT IN SOUTH AFRICA

UPA development in South African’ metros could benefit from a thorough identification, analysis and accepting of policy and non-policy barriers and challenges to the sector’s development initiatives. Trends from this research portray a multidimensional set of challenges and barriers to UPA

development in South African metros. These range from institutional policy limitations to substantive policy gaps, across the different spheres of government. As seen in Graph 1, the barriers and challenges to UPA development vary, ranging from the lack of substantive policy directives, poor institutional policy arrangements, and poor institutional capacity to technical development challenges. Among others, the graph identifies institutional and substantive policy barriers at all government spheres to have the highest negative impact on UPA development in South Africa. Graph 1 points out the kind and level of barriers that should be prioritised for immediate action – as an effort to enable local institutional and substantive policy management initiatives to take off.

6.3.1 UPA policy governance analysis in South Africa

With a backdrop of collaborative policy networks theory, Table 14 provides an analytical framework that identifies the key indicators for governance used in this study to analyse the current state of UPA policy collaborative governance. It uses the data collected through interviews and documentary analysis.

Table 14: Analytical framework for UPA governance using challenges and barriers data – based on research interviews, documentary analysis and governance theoretical frameworks

GOVERNANCE ELEMENTS	DEFINITION OF ELEMENTS IN TERMS OF UPA DEVELOPMENT	RELEVANCE TO UPA GOVERNANCE IN SOUTH AFRICA	POWER LINKS and RESPONSIBILITY
Coherence of UPA development policy, Legislation and Rule of Law	• Short and long-term strategic UPA development planning • Development of UPA substantive policy • Development of UPA legislation • Quality UPA law enforcement • High and equitable resource allocation and access (natural, financial capital) • Property (land and irrigation water) rights for UPA development honoured and respected • Policy and government flexibility and responsiveness to sector needs	Only local/city level planning in active for UPA development. Only 2 metros substantive policies and related implementation, by-laws have in place. No national and related UPA policy in place. Limited and expensive and inaccessible natural and financial resources. Not property protection. Authoritative development approach Excluded institutions with the relevant capacity. No voice for the poor and vulnerable stakeholders (not organised therefore difficult to get solidarity on issues) Poor state capacity to lead the sector's development. Segregated Monitoring and Evaluation of projects and no clear demonstration of use of results (knowledge management) Opaque UPA development initiatives, lack of collaboration, poor coordination and limited integration of efforts. Limited stakeholder participation. Limited stakeholder involvement and consensus building in UPA development agenda setting. Poor stakeholder capacity building and public awareness efforts. Low stakeholder expertise and skills and inequitable power relations between stakeholders.	Local/city government holds all the power to decide on the sector's development policies and relevant legislation with no national UPA policy guiding framework
Formal and informal institutional capacity	• Stable formal and informal institutions • High institutional capacity and the related human capital • Equity and respect of the voice of marginalised groups and institutions • Government capacity to develop UPA • Social partners' capacity to support UPA development • Inclusive and effective and efficient UPA development monitoring and evaluation		Limited current involvement of the National Department of Agriculture, Forestry and Fisheries and Provincial Departments of Agriculture
Transparency, accountability and stakeholder participation	• Transparency in UPA development • Collaboration, coordination and integrated stakeholder efforts • Multi-stakeholder participation in UPA Development • Accountability of UPA officials and UPA development agencies within and outside government • Consensus on UPA development agenda setting • Good conflict management processes • Stakeholder capacity building and public awareness • High and equitable social and human capital • Balanced power relations		Sporadic multi-stakeholder involvement depending of difference governance mechanisms for specific cities – with some cities allowing for much wider stakeholder engagement such as eThekwin Municipality and the City of Cape Town

6.3.2 Coherence of UPA development policy, legislation and rule of law

South Africa as a whole does not have a national UPA development policy. At the local level, only three metros (Cape Town, Tshwane and eThekwin) have developed and formally adopted UPA policies. Other metros are at initial phases of the UPA policy formulation process. Although only three metros (e.g. Tshwane, Cape Town and eThekwin), as gathered from the documentary analysis (Table 12), have formal UPA policies, UPA substantive projects are currently being implemented in most of the metros. Generally, UPA features as an extension of other policies and urban development plans that have a wider economic development focus and limited specific emphasis on UPA development. In all the metros, however (even those with concrete policies), UPA development has limited financial resources and it is continuously not prioritised in terms of land access. As such, developing UPA

substantive policies and the establishment of UPA implementation directorates or units are not adequate to successfully operationalise UPA.

Based on the insights gained from the literature review and the trends emerging from the research interviews, the lack of UPA policy objectives and limited state leadership at the national, provincial and metro levels is one of the major barriers to UPA development in South African metros. This has further implications on transparency, public participation and equity, accountability, effective allocation of resources and control of UPA development initiatives in South Africa (Stoker, 1998; Lyall and Tait, 2005; McLennan and Ngoma, 2004; Abdellatif, 2003; King, 2003; Grindle, 2007). As highlighted in the proposed stakeholder tasks and responsibilities (Table 10), there is a great need to develop and agree on a national UPA development agenda. There is also a great need to foster well-coordinated national, provincial and metro-level UPA development policies and strategies, in order to accelerate the development of a sustainable and equitable UPA sector in South African metros. Strong political will is also required to allow for the prioritisation of UPA as a development thrust for metros.

6.3.3 Formal and informal institutional capacity

As observed from the literature review and analysis of the empirical data, institutional capacity (expertise, skills and resources: financial, human, infrastructure) constitutes one of the major limiting factors for UPA development in South African metros. As highlighted in Graph 1, UPA development management in South Africa is characterised by poor human and institutional capacity from an institutional and substantive policy and technical UPA project implementation perspective. Different UPA development institutions in South Africa do not have enough capacity and expertise to lead equitable and sustainable UPA development on their own. This capacity could, however, be realised through partnerships and collaboration between stakeholders that allow for the combination of resources, skills and efforts, as noted by Börzel (1997:1). In fact, governance is said to be the process of interactive, collaborative and integrated decision-making and policy implementation related to the spread of power that is applied during these processes (Stoker, 1998; Lyall and Tait, 2005; World

Bank, 1992). This further justifies more action to explore policy networks as procedural policy design mechanisms to facilitate and promote the sharing of resources and combining efforts to pursue specific policy initiatives (as stressed by Klijn, 1997:31).

6.3.4 Transparency, accountability and stakeholder participation

Although governance has been generally used as a synonym for government, it must be appreciated that participatory governance also involves a number of stakeholders outside government, including citizens, civil society and the private sector (Graham et al., 2003). However, as noted from Table 13, a major part of UPA project partnerships in South Africa is generally project based, with partnerships and institutional collaboration generally focusing on specific projects rather than national, provincial and metro-wide programmes and policies.

Although there are a numerous active stakeholders of UPA development in South African metros (government, NGOS, civil society, private sector, etc.; as gathered from the from the research interviews, Graph 1), a greater part of the UPA development challenges and barriers are functions of poor governance in the sector. UPA policy management exhibits limited stakeholder participation, collaboration and coordinated decision making. Overall, stakeholder participation, collaboration and coordination in UPA development remain one of the major challenges for UPA development in South Africa. As it can be noted from the documentary analysis data as well as Graph 1 (and as based on the emerging trends from the research interviews), even in metros where UPA policies exist, the full adoption and enforcement (even within the wider metro directorates or units) of existing UPA development policies still remains one of the major challenges. As a result, UPA development initiatives remain small, fragmented, poorly coordinated and localised without any metro-wide accumulated benefits, as noted in Graph 1.

This research further notes that the distribution of power among UPA development stakeholders is nowhere near equal – some stakeholders enjoy more powerful positions in the development chain of

the sector than others. Stakeholders' power (or lack-of) does translate directly into the strength of their voice to steer UPA development in a specific direction, which may not be always favourable for the sector or other players involved. Therefore, the challenge in encouraging participation in the sector's development is also to ensure that all stakeholder involvement (including vulnerable and marginalised groups, such as the poor) equally translates to true influence. Still, it should be noted that the power and influential voices associated with stakeholders are generally related to institutional capacity. Without the necessary capacity, even with the perfect platform to participate, the intention to participate and influence may not be realised. With decentralised power and authority, metros currently enjoy the power to make UPA institutional and substantive policy decisions.

6.4 IDENTIFIED STAKEHOLDER ROLES AND RESPONSIBILITIES FOR UPA DEVELOPMENT IN SOUTH AFRICA'S METROS

UPA as a policy issue in South Africa has some embedded structural and non-structural substantive and institutional policy barriers and challenges that should be addressed in the policy management process. Graph 1 in Chapter 5 presents a list of major institutional and substantive policy challenges and barriers that should be addressed as part of wider efforts in South Africa's metros. The graph also identifies high impact areas that could be addressed as matters of priority. Importantly Graph 1, as well as the documentary data that is also presented in Chapter 5, highlight the lack of institutional and substantive policy as some of the major structural constraints that should be prioritised in pursuing sustainable and equitable UPA development goals.

A good understanding of UPA development challenges and barriers sets a solid base for designing informed institutional policy networks to lead UPA development in South African metros. Lack of integration, collaboration and coordination and the overall poor UPA governance structures, as identified in Graph 1, are some of the major challenges identified as issues that should be addressed in order to successfully develop UPA in South Africa. The lack of data, knowledge and evidence-based UPA development initiatives must also be addressed, for example through research and efficient

extension services. The task for UPA development stakeholders is to address the identified barriers and challenges, including issues related to land use and planning, access to water resources, policy financing and regulation standards for enforcement.

The research findings pointed to the need to create an enabling framework role of the state, which includes a practical role at all levels of the policy making process – setting the policy agenda, designing policies, implementing these policies, monitoring and evaluating the overall process. Government is directly responsible for developing and designing national UPA policies and related legislation, also for facilitating a realistic, practical short and forward-looking approach that seeks to ensure policy management success. The research suggested that the state must be equally active in playing a technical, coordination and advisory role on UPA development in South Africa. On the other hand, non-state actors also have a responsibility to objectively engage and support the state on UPA institutional policy issues, and UPA substantive policies and strategies and development programmes – through dialogue, negotiation, learning, and collective action process.

6.5 Current and potential key players in UPA development in South Africa

As noted in Dunn (1994:17), policy management employs a number of steps (agenda setting; policy formulation, policy adoption, policy implementation and policy assessment), which may imply the need to engage different actors and groups at different stages in the process. Although these steps are classifiable, in practice, however, they are often blurred and without a constant logic. Therefore, in this research, different stakeholder tasks and responsibilities, as identified by interviewees in Table 10 in Chapter 5 and further analysed and elaborated in this chapter (Section 6.4.), are rather viewed in totality as a set of tasks and responsibilities that must be executed by the entire group of stakeholders in their different capacities. The numerous tasks and responsibilities identified in this research (Table 10) help to acknowledge the need to engage a wide range of multi-sectoral stakeholders that can collaboratively manage UPA development.

This research identifies a multidimensional set of UPA development stakeholders at national, provincial and local governance levels. The stakeholders here include social, economic and environmental development actors, including government, civil society, private sector, universities, researchers, farmers and relevant international partners and United Nations agencies that are involved with UPA development related issues such as water, town and regional planning, human settlement, development planning, health, environment, finance, infrastructure, research, international cooperation and trade. Accordingly, the involvement of the different stakeholders offers different skills, resources and opportunities for UPA development policy management. Table 11 identifies strategic UPA development stakeholders that could be considered in the development of a UPA policy management network.

As established from the research interviews on the barriers and challenges to UPA development, it is noted that the activities of institutions are currently not well integrated and coordinated. This has resulted in poor flow of information (on issues that directly or indirectly affect UPA development) between the players, including government institutions. Table 11 also indicates a number of primary UPA institutions such the Department of Agriculture, Forestry and Fisheries, that are not fully involved in the sector development. As noted in Graph 1, limited stakeholder participation, collaboration and lack of coordinated efforts are highlighted in the interviews and documentary analysis data as major gaps in UPA development.

Although there exists a number of project-based partnerships, as noted from Table 13 in the documentary analysis data, poor stakeholder engagement, involvement and active participation are noted as a serious institutional gap overall and especially on metro-wide policies and programmes that directly or indirectly affect UPA development. Moreover, UPA institutional policy management gaps are noted as a major challenge, not only at local/metro level but also at provincial and national levels.

6.6 POTENTIAL AND PERCEIVED VALUE AND ROLE OF UPA POLICY NETWORKS AS A CONTEMPORARY INSTITUTIONAL POLICY DESIGN FRAMEWORK

As gathered from the research interviews, addressing the identified UPA development barriers will require a well thought-out process that employs a logical and holistic approach. This is a prerequisite to deal with structural UPA barriers including the lack of a robust national UPA policy framework as well as metro-specific UPA policies and implementation by-laws at the metro level. In the documentary analysis conducted for this research, there are numerous substantive UPA development initiatives that are currently on-going, at least in the metros. Therefore, a comprehensive approach that prioritises institutional and substantive policy issues while simultaneously supporting programmatic or project-based initiatives is warranted. This would entail the active engagement of a wide range of stakeholders that deal with different issues at different stages of the UPA value chain (although some overlap between phases is probable), from policy formulation to implementation, monitoring and evaluation.

As noted by Booysen (2011), institutional policy analysis and reform happen neither in a substantive vacuum nor is it pursued as an objective in its own right. Instead, she notes, institutional policy reform or design comes as a response to substantive policy management challenges in a specific context. UPA institutional policy in South Africa should therefore be informed by an enhanced understanding of the sector's development needs and, most importantly, a good understanding of the institutions involved and their current and expected roles and responsibilities. This would help to facilitate the development of relevant and well-designed policy institutional structures that are structured for the achievement of policy goals. This research specifically explores policy networks not only as a contemporary institutional arrangement framework, but importantly also as a relevant institutional design framework in response to the current substantive UPA policy management challenges in South African metros.

The wide range of multidimensional barriers and challenges, and the stakeholder tasks and responsibilities identified for UPA development during the research interviews and through the

documentary analysis conducted for this research, help to create an appreciation for the need to engage multiple stakeholders with different skills and resources to lead the development of UPA in South Africa. Assuming that UPA development institutions were capable of individually managing the substantive policy process without assistance, there would not be a need for cooperation in delivering UPA substantive policy. However, the knowledge, skills and resources required for UPA development and to address the barriers and challenges identified in this research, cannot be easily found or organised into a single institution. Rather, it could be accessed from different institutions to lead or contribute to the implementation of specific strategic roles on UPA development in South Africa. Clearly, the UPA development barriers and challenges and the different stakeholder tasks and responsibilities identified for UPA development cannot be addressed unilaterally. Instead addressing these challenges and barriers will require the involvement of a number of well connected, organised and committed stakeholders that collaboratively develop a vibrant, equitable and sustainable UPA sector.

Interviewees in this research continuously emphasised the need for increased stakeholder cooperation, coordination, integration and communication in the implementation of UPA programmes and projects. As gathered from the research interviews, accelerating sustainable and equitable UPA development calls for the engagement of multiple stakeholders from social, economic and environmental development arenas (including agriculture, food security, natural resources management, social development, political management, climate change, environment and health) as active development partners. In the documentary analysis (and as extracted in Table 13) it was also noted that there are a number of on-going partnerships, collaborations and networks based on UPA development projects rather than metro-wide, province or national initiatives. These stakeholder relations (formal or informal) were highlighted in the interviews as effective (Visser and Aliber). Yet, the interviewees also noted the need for stakeholder cooperation, coordination, integration and communication aimed to develop and implement strategic UPA policies and programmes with a wider metro, province and national concentration in order to ensure maximum impact and sustainability.

Policy networks as an institutional policy arrangement framework were specifically highlighted in the research interviews as a relevant framework for UPA institutional/ procedural policy design. A number of policy network benefits were mentioned in the interviews to justify their exploitation for UPA procedural policy. Overall, policy networks were said to have the potential to play an invaluable role in the facilitation of the most desired UPA stakeholder coordination, collaboration, cooperation and continuous communication (Stoker, 1998; Lyall and Tait, 2005). Interviewees noted that a UPA policy network could be instrumental in facilitating and stock-taking exercises on the different UPA stakeholders and their current interests and roles. They further noted that the establishment of a UPA policy network could help bring the stakeholders together and allow for participatory planning, avoid duplication of efforts and ensure transparency, relationship strengthening and trust among stakeholders. The research informants further emphasised that bringing UPA stakeholders together would be instrumental to ensure a united front and voice, as well as to facilitate the sharing of resources. Interviewees noted that a policy network could allow for enhanced UPA governance on UPA planning and decision making processes while facilitating increased coordinated knowledge management, dialogue and learning for all stakeholders and for the benefit of UPA substantive initiatives on the ground.

While policy networks were identified as the outright favourite as far as procedural policy frameworks go, Colgan warned that policy networks are not a panacea and that there are key downsides that will have to be carefully managed in order to gain success. She highlighted, for example, issues that are specific to the poor distribution of power among stakeholders. She also pointed out that disparity in resource dependencies between policy actors generally creates a serious imbalance of power within a network. She further emphasised that “one must always be aware of the power relations (within organisations or between individuals) between different stakeholders in a network”. Importantly, the potential introduction of policy networks in substantive policy management processes is not necessarily about replacing state authority, nor is it about undermining specific issues of power and the

interests of the state (Rhodes, 2000:55). Policy networks are rather about redefining power and indeed in many cases its relocation. As gathered from the policy network theory section, policy networks are about introducing an open-minded approach to policy management that will allow for more diversity and experimentation, consultation and participatory governance. This is in line with Börzel's (1997:1) definition of policy networks. For the purpose of this research it is necessary to paraphrase this definition once again: Networks are patterned relationships between state and society that link public and private actors in a set of relatively stable relationships. These relationships are non-hierarchical and interdependent, and the aim is to exchange resources in pursuit of specific policy objectives through cooperation and collaboration. Although it may be difficult to achieve the policy networks characteristics defined by Börzel (1997:1, see Chapter 2), the characteristic elements of network policy are typical of the desired UPA institutional policy network as the foundation of UPA institutional policy delivery in South Africa.

With hindsight, however, according to Colgan, for policy networks to be successful there is a great need to ensure the network is built on clear stakeholder roles. It needs to be noted, however, that this may not always be the case at the initiation phase and that sometimes clarity on the different tasks and responsibilities is better understood with time. As asserted by Klijn (1997:31), policy "networks develop and exist because of the inter-dependency between actors". Colgan also emphasised the fact that the success of policy networks depends almost entirely on the created value and incentives for stakeholders to participate. Klijn (1997:31) explains that "networks develop and exist because of the inter-dependency between actors". By all indications from this research this is also the case between UPA policy actors in South Africa. Mutual dependency in policy networks and commitment to achieving policy goals facilitate a self-selecting character for policy networks in that institutional participation in a network is based on their own perceived value that is derived from the network (Klijn, 1997:41).

Importantly, Colgan also notes that the success of policy networks depends on the stakeholder values (respect, integrity, trust, communication) in place. She adds that those involved should carefully consider these factors, and therefore be willing to adjust and compromise where appropriate. She added that “the challenge of bureaucracy should not only be seen as a government problem but that “this is also a dominant challenge with non-state actors. Those involved in the network should therefore develop a practical and suitable approach to deal with such issues across the entire stakeholder base”. Colgan’s inputs put a specific emphasis on trust as a key factor for the success of policy networks. Effective policy networks thus require a strong element of trust between actors. According to Lewicki (2006:94), the element of trust in a network implies willingness of institutions or individuals to avail their skills and resources to the benefit of the network and an equal expectation to access support and assistance from other members of the network, which in turn helps to facilitate cooperation and collaboration between actors to deliver substantive policy goals. In reality however, as argued by Lewicki (2006), trust is not always characteristic of a successful network. Fortunately policy networks are about getting things done, which means that the emphasis is on progressive relations rather than just on theoretically prescribed solutions. These solutions may not always be practical or suitable. As a result, in some cases a good appreciation of the mutual dependency between actors does continue to warrant sustainability of the network (Lewicki, 2006). The latter could potentially be the case for UPA policy network in South African metros.

6.7 INSTITUTIONALISING UPA POLICY NETWORKS IN SOUTH AFRICA

Considering the multi-sectoral UPA institutions listed in Table 11 (Chapter 5) and the eight South African metros spread across five provinces, UPA institutional policy arrangements pose serious operational challenges. These challenges require innovative institutional policy design to achieve procedural policy efficiency in delivering efficient UPA policy governance. As noted by Colgan, the challenge for getting too many institutions involved in the UPA substantive policy reform process lies in the ability to clearly define roles and responsibilities for the different institutions. It is also essential to consider the stakeholders’ values that get applied in the process. Interviewees further suggested that

there is a need to ensure that the responsibility to lead and play specific key roles in UPA policy management (institutional and substantive) is given to committed institutions and individuals (policy advocacy champions) that believe in the value and potential benefits of objectively developing UPA.

Although a number of elements were identified as key components of the UPA definition in Chapter 5 (see section 5.2.1), agriculture was identified as the main component with a number of the highlighted areas, including urban food security, food production, food supply and accessibility and food utilisation as the dominating elements of the UPA definition. As such, the Department of Agriculture, Forestry and Fisheries (DAFF) is identified as the preferred and by all indications the most relevant institution to lead the establishment, administrative and operational management support functions for a UPA institutional and substantive policy network in South Africa. Aliber further noted that DAFF has prioritised urban agriculture as a planned policy initiative in its 2012-2017 strategic plan (DAFF, 2012:4). In the strategy DAFF notes the need to create an encompassing strategy on UPA development, which aims to promote and enhance UPA's role as an urban livelihoods strategy, especially for the urban poor. DAFF further identifies the need for an encompassing strategy for improved UPA development coordination and cooperation among UPA policy actors. Visser further emphasised the need for national government leadership in UPA development and in particular DAFF as the likely lead ministry in UPA development.

Moreover, DAFF's partnership with the metros and the South African Cities Network (SACN) was highlighted as an appropriate platform for the establishment of a UPA policy network. Although this partnership was said to be at an early stage, key informants noted that efforts to develop and institutionalise UPA policy networks in South Africa should be based on current partnerships and UPA institutional policy initiatives. DAFF's involvement in leading UPA policy initiatives in South Africa was also highlighted as key from a financial support point of view. This could be a central issue in establishing the success of a UPA policy network particularly in its initiation phase. On a different note, Visser from the City of Cape Town emphasised the fact that the involvement of the government at the leadership level for a UPA institutional policy network would be necessary to ensure the active

participation of stakeholders, especially of those who are located within government. Although this was not a dominant view of the research interviewees, the general trend was that a government-led UPA policy network is recommended.

A government-led UPA policy network, as suggested in this research' interview data, resonates well with Börzel's (2010:5) view on the involvement of government in the leadership of policy networks. Börzel's analysis of policy networks, however, flags a slightly different focus, noting that although policy networks emphasise non-hierarchical coordination and the involvement of non-state actors as a positive attribute, this does not always hold promise for enhanced collaborative governance. As noted by Jasay (1989:12), policy networks also possess some characteristic elements of being indefinite, uncommitted and least formally enforceable. According to Börzel (2010:5), the strong presence of government and its consequent hierarchically imposed decisions are sometimes desired for effectiveness and enhanced strong governance outcomes. The DAFF, SACN and metros' partnership emerged from the interviews as key to providing an institutional leadership balance between state actors at the different spheres of government (national, provincial and metro levels).

Institutionalising UPA policy networks would require the involvement of numerous institutions. This could make it difficult to manage due to the heavy administrative burden and the diversity of the voices involved. As noted from the research interviews, the task to manage UPA policy should rather be given to a few committed primary stakeholders, probably including relevant national government departments, provincial government departments, metro governments, researchers, non-governmental organisations and the private sector as a close policy community (in line with Rhodes, 2006). Equally, the involvement of the wide set of secondary stakeholders could be facilitated through a wider or looser issue network of supporting partners, as also alluded to by Rhodes (2006). As noted through the UPA development stakeholders tasks and responsibilities identified in this research, the organisation of UPA policy institutions could be facilitated through the development of a national UPA institutional policy network that encompasses smaller policy networks organised at different governance levels,

and in terms of the different sectorial components covered in the UPA definition in Chapter 5 (Table 9). The different areas noted as key components of the UPA definition also help to clarify the different areas that will need specific institutional policy attention while being addressed systematically as part of the inclusive urban food-security systems approach. Although smaller and specialised UPA substantive policy networks could be designed in accordance with the different and specific elements of the UPA definition, in practice, however, these do not exhibit a real divide. As such, these networks should also be connected with each other at the different governance levels.

6.8 CONCLUSION

Overall, it seems that progress and traction are being established by South African metros on the policy front. Yet, there is still a long way to go before concrete governance objectives through objective institutional and substantive policy development will be evident. Importantly however, it is to be noted that the failure of UPA development is not only experienced in cities without UPA policies, but also in cities where substantive policy instruments are in place. A great deal of this failure is due to the poor governance mechanisms of the sector that signify lack of a functional institutional policy in South Africa and across the metros. The decision-making capacity and power of the existing institutions are some of the major challenges that continue to hold back UPA development. Improvements on UPA governance will require a wider stakeholder-base involvement in South Africa through an efficiently designed UPA procedural policy framework. This mission, particularly in the light of the associated characteristic benefits, warrants the exploitation of policy networks as a contemporary framework for UPA institutional policy arrangements.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

The goal of this research was to explore the institutional policy design concerning urban and peri-urban agriculture (UPA), to test the notions of UPA policy networks to solicit stakeholder dialogue and to help develop relevant and substantively beneficial institutional policy in South African metros. As noted by Gormley (1987:165), “institutional policy analysis, like substantive policy analysis, poses trade-offs between breadth and depth, between credibility and relevance, between confirmation and discovery. Analysts must decide whether to provide definitive answers to small questions or tentative answers to big questions, analysts must decide if they should concentrate on familiar institutions or should venture forth into uncharted territory. And they must decide whether to appeal to consensual norms or to attempt to change them”. The institutional policy recommendations made in this research provide options rather than definitive answers. Even in cases where set answers are offered, the efficiency of recommended policy institutions must still be proven in practice through implementation, monitoring and evaluation. Institutional policy analysis is about generating knowledge to guide the policy recommendations to deliver sustainable and equitable UPA policy goals. With this background, this chapter presents a summary of the research findings and recommendations to be considered for institutional and policy enhancement in South Africa. The chapter also seeks to consolidate the overall picture through a summative conclusion.

7.2 SUMMARY OF FINDINGS

While Ngcamphalala (2009) found that UPA has a role in the development of South African cities, there are a number of key issues for accelerated development and growth of the sector. These issues include national government support to cities, substantive policy support by the department of Agriculture (as the line ministry responsible for food security), and coordinated partnerships as determinant indicators for UPA development success in South African cities. This research finds UPA

network policy institutions as the most appropriate institutional/procedural policy arrangement framework for UPA policy development in South African metros. This research identifies specific sectors, groups and stakeholders that could be engaged as UPA policy network partners through collaborative policy networks. Overall, this research confirms and generates useful information and knowledge from which lessons for the development of appropriate UPA policy network recommendations are drawn.

7.2.1 Need to adapt the UPA definition for South Africa

As a premise for the rest of the research findings presented in this section, this research confirmed that the UPA definition as presented in Chapter 2 does not give enough attention to key components of interest for UPA development for South African metros. The definition over-emphasises agricultural production components and therefore loses the desired understanding of the UPA definition as the inclusive value chain with equally important components, ranging from planning phases to consumer involvement. The research established that there is need for an adapted UPA definition that clearly recognises holistic urban food-security systems value chains, rather than just agricultural production. In this regard the study collects that there is a need to rephrase urban and peri-urban agriculture towards ‘urban food-security systems’ development. This can be defined as a systems approach to the development of sustainable and equitable urban food value chains that incorporates a strong focus on elements of urban land-use planning, access to production resources (land and water), food production, safe supply of production inputs, value adding and processing, market development and access, and the development of responsive institutional/procedural and substantive policy management instruments.

7.2.2 Need to address institutional and substantive UPA policy challenges and barriers

The barriers and challenges to UPA development identified in this research (Chapter 6, section 6.3) vary from a lack of substantive policy directives and poor institutional/procedural policy arrangements to poor institutional capacity to substantive policy management challenges. Here institutional and

substantive policy management barriers at the national level have been identified to have the highest negative impact on UPA development initiatives at metro level.

With a few exceptions (i.e. City of Cape Town, City of Tshwane and eThekweni Municipality) UPA development initiatives in South Africa generally occur outside the existence of any formal policy framework. Even in cases where UPA development policies exist, it has been noted that UPA programmes and projects still occur haphazardly with different stakeholders (such as metro government, farmers, NGOs, national government with its programmes, etc.) leading their own initiatives without much coordination and collaboration, and thus with no overall incremental gains for the sector. Moreover, poor coordination and collaboration of UPA development initiatives are exacerbated by the lack of national goals and a strategic direction for UPA development in South Africa. UPA development initiatives remain small, fragmented and localised without metro-wide accumulated benefits. The sector is generally characterised by localised activities, with limited provincial or national level initiatives and support.

Overall, the insights from the research interviews are that UPA barriers at national level must be addressed as a matter of priority in an effort to create an enabling atmosphere for local institutional and substantive policy management initiatives to take root. The multi-sectoral and complex nature of UPA development in South Africa requires a versatile and innovative management approach.

7.2.3 Need to strengthen and enhance UPA collaborative governance through policy networks

UPA policy management in South Africa does not exhibit the desired amount of stakeholder participation and governance principles (see Table 14). Although some pockets of progress prevail, the state of UPA governance in South Africa is poor. Overall, a greater part of the UPA development constraints and barriers are functions of the poor governance of the sector. Limited stakeholder participation, and lack of collaboration and coordination in UPA development are two of the key barriers to achievement of sustainable and equitable UPA development impact. Many UPA

development actors operate in silos and with limited integrated efforts. The challenges for UPA development in South Africa are strongly grounded in the lack of substantive policy direction and collaborative governance. Thus the researcher argues that UPA development initiatives in the metros can only be as progressive as the national UPA institutional and substantive policy that is in place, as the foundational components for development. Moreover, the successful development, implementation and overall management of institutional and substantive policy could also be strengthened with the deepening of collaborative governance structures that are built on networks that encourage the active participation of all identified stakeholders for UPA development in South Africa.

As noted in Figure 2, the goal for UPA institutional policy development in South Africa is to ensure the establishment of procedural polices – policies that are capable of supporting transformational growth of the UPA sector towards one that is prosperous, equitable and sustainable. Policy networks as seen in the top triangle of Figure 2 are identified in this research as a capable procedural policy arrangement framework that could ensure efficient growth and development of UPA in South African metros. The research confirmed that policy networks in South Africa have the potential to facilitate collaborative governance through increased frequency of stakeholder interactions. The interactions will allow for combined efforts and resources to pursue local and national UPA development goals. As seen from Figure 2, currently the UPA institutions do not interact frequently enough. In fact this hardly happens, especially in terms of policy management collaboration. The research found that policy networks could help facilitate close links between stakeholders and help to create a common goal that could be owned by the different stakeholders, thus creating increased appreciation for combining efforts and resources to pursue the set target.

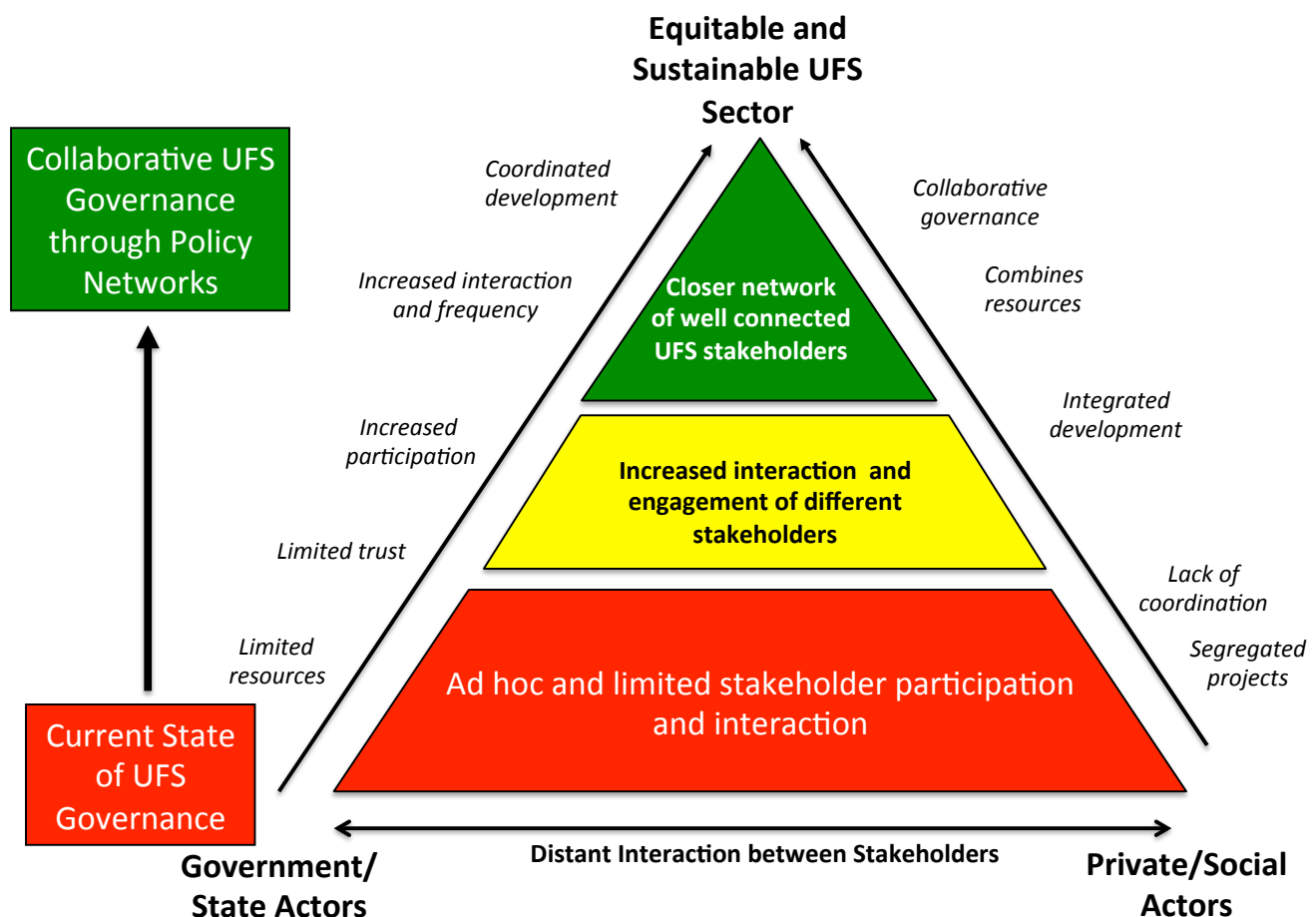


Figure 2: The role of policy networks in facilitating progressive substantive policy management through increased stakeholder interaction, coordination and collaboration

Overall, this research established that UFS collaborative network development in South Africa should consider instruments and means to ensure that a wide range of public and private stakeholders are engaged as active partners in UPA development policy management. Achieving efficient collaborative governance is noted in the research as a prerequisite to ensure consensus when setting UPA political, social, economic and ecological development goals. This is seen here as a catalyst to ensure informed and inclusive decisions that consider and respond to the voices of all stakeholders including the poor and most vulnerable groups along different phases of the UFS development policy management processes.

Furthermore, as gathered from the documentary analysis and interviews, South Africa does not have a national UPA development policy. As a result, metros continue to individually address the

development and implementation of UPA development policies at local level (Cape Town, eThekweni and Tshwane) without any national guiding UPA policy framework to support and direct their efforts for impact. UPA substantive initiatives in South African metros generally feature as an extension of other policies and economic development and institutional structures, instead of being specific UPA development policy and specifically dedicated institutional structures. This is particularly notable in the documentary analysis where a number of the metros currently run UPA substantive development projects as part of their economic development strategies and institutional structures. UPA policy management in South Africa is characterised by poor human and institutional capacity, arbitrary policy making, social exclusion, unengaged civil society and non-state actors, closed and centralised decision making processes, lack of accountability, unaffordable and inequitable resource allocation (i.e. land and water) and consequent unsustainable sector development initiatives.

Furthermore, UPA development institutions in South Africa do not individually possess the capacity and comprehensive expertise needed to lead technically sound, equitable and sustainable UPA development. This is exacerbated by the evident poor coordination, cooperation and cooperation between stakeholders (between the state and non-state actors, or mutually between non-state actors). It implies that the different skills and resources possessed by different actors are fragmented and not utilised collaboratively in UPA policy management.

This research project further notes that the distribution of power among UPA development stakeholders is nowhere near equal – some stakeholders enjoy more powerful positions in the development chain of the sector than others. Unfortunately, such stakeholders' power (or lack of power) translates directly into the strength of their voice to steer UPA development in a specific direction, which may not be always favourable for the sector or for other players involved. The policy networks theory, as identified as presented in Chapter 2, could be key to inform and direct power relations in policy governance in UPA. Here policy networks could be useful in creating a collaborative governance platform to emphasise distributed intelligence, voice and participation. The

emphasis would not so much be on hierarchy but on service delivery through the network (as put forward by Hajer and Wagenaar, 2003; Stoker, 1998). The stakeholder engagement and coordination gaps identified for UPA in South Africa presents a great opportunity to explore the prospects that could be offered by the network policy for UPA collaborative policy management. Policy networks, as asserted by Börzel (1997:1), allow for the establishment of a patterned relationship between state and social policy stakeholders in a set of relationships that are relatively stable, non-hierarchical and interdependent. Börzel (1997:1) particularly notes that policy networks allow for the exchange of resources to pursue policy through cooperation and collaboration.

This research found that by working together through strategic government leadership – facilitating a conducive environment for both formal and informal participatory governance processes organised through a UPA policy network – sharing best practices/experiences and making informed collective decisions, UPA stakeholders may gain in the ability to effectively and efficiently fast-track the development of a sustainable, networked UPA sector. As established through the research interviews, there is need to build and strengthen the institutional policy arrangements that (already) work. In addition, it will be necessary to establish new institutional and substantive policy management instruments for UPA policy management. The research established that UPA governance could be enhanced through an increased formal and/or informal role of non-government actors in policy making. This requires effective relations between the state and society in which networks rather than hierarchies dominate the policy-management process (as articulated by Stoker, 1998). Based on these findings, the researcher argues that UPA governance improvements will require strong government leadership from national, provincial and city level to steer and support the development of the suggested linkages and relationships between stakeholders to establish and maintain appropriate UPA policy networks.

7.2.4 Institutional policy: roles and responsibilities for UPA development

The state is directly responsible for developing and designing national UPA policies and related legislation, as well as for facilitating realistic, practical short and forward-looking policy institutional structures to facilitate management of the policy management process. Not only should the state be concerned about the creation of an enabling framework, the state should also be equally active in playing a technical, coordination and advisory role on UPA development in South Africa. Creating an enabling framework role of the state therefore includes a practical role at all levels of the policy management process – setting the policy agenda, designing policies, implementation, monitoring and evaluation. In other words, the deficits of integration, collaboration and coordination and the overall poor UPA governance structures need to be urgently addressed through strategic institutional policy that arranged through a network policy framework. The lack of data, knowledge and evidence-based UPA development initiatives must be addressed through research and efficient extension services. UPA development policy in South Africa must address issues such as institutional policy, land use and planning, access to water resources, food security, policy financing and regulation standards for enforcement. This should also include specific issues that address urban spatial planning, land zoning and market development to encompass the entire food system, rather than just food production.

This research identifies the Department of Agriculture, Forestry and Fisheries (DAFF) as the most relevant institution to lead the establishment, administrative and operational management support functions for UPA institutional and substantive policy management in South Africa. Non-state actors are also confirmed to play a critical development role of the sector. Non-state actors have a responsibility to objectively and actively engage and support both the state institutions on UPA institutional policy issues and UPA substantive policy programmes. This would be done through dialogue, negotiation, learning and collective action processes. In particular, the following key activities and responsibilities will be essential in facilitating comprehensive, accelerated, inclusive, equitable and sustainable development of UPA in South Africa. These activities are presented in section 7.3.

7.3 RECOMMENDATIONS

Taking into account the different components of UFS development (Table 9) and the different interviewee perspectives on urban food-security systems, it is recommended that UFS be referred to as ‘urban food-security systems’ and defined as a systems approach to the development of sustainable and equitable urban food value chains. Such chains will incorporate a strong focus on elements of urban land-use planning, access to production resources (land and water), food production, safe supply of production inputs, value adding and processing, market development and access, as well as the development-responsive institutional/procedural and substantive policy management instruments.

To achieve concrete results in advancing and developing UFS in South Africa, the sector cannot afford to continue with current practice. UFS development and advancement in South Africa should become a key part of the food security (sustainable food production, supply and accessibility) agenda from the national perspective. Innovative institutional policy recommendations that integrate current UFS development programmes/ institutions and their subsequent resources into collaborative network policy institutions that are defined by practices that prioritise constant interaction, learning and adaptation - will be key going forward (Hajer and Wagenaar, 2003). Here there is need to introduce collaborative policy institutions that emphasise trust, transparency, participation, reciprocity and a good balance of vertical and horizontal power/governance structure as outputs of the policy network are warranted (Deleon and Varda, 2009:67-71).

The evident policy deficiencies and institutional gaps identified in this thesis substantiate the need for both institutional and substantive policy reform as effort to establish a viable UFS sector in South Africa. In line with South Africa’s commitment to becoming a developmental state, the state’s involvement through strong leadership and the provision of strategic resources would be pivotal. Equally, the role of non-state actors can never be over emphasised. According to Börzel (2010:3), government has “to be strong so that non-governmental actors have an incentive to cooperate”. Still, according to Evans (1995), a developmental state has to be able to demonstrate key elements of being

‘embedded’ or connected to the society it serves, while allowing some distance from vested interests – a relationship he refers to as “embedded autonomy”. Edigheji (2005) asserts that the idea of a developmental state is seen to promote the establishment of developmental/transformational institutions that can assist in overcoming capacity weaknesses that are a major challenge in South Africa. In developmental states, collaborative governance takes centre stage – where developmental institutions and other stakeholders within and outside government take full responsibility for achieving the country’s development agenda. These principles form the foundation for UFS development institutional policy recommendations for South Africa.

It is recommended that an ‘Urban Food-security Systems Community of Practice’ and ‘Urban Food-security Systems Secretariat’ be established at the national level to lead national strategic UPA substantive and institutional policy issues as well as a wider Urban Food-security Systems - Community of Practice to be established at provincial/local and national level.

7.3.1 Establishment of a UFS Community of Practice

It is recommended that an Urban Food-security Systems Community of Practice (UFS-COP) be established to play a technical, coordination, research, knowledge management, advocacy and advisory role on UFS development (best) practices in South Africa (see demonstration in Figure 3). This could be organised and established through stakeholder knowledge platforms that meets regularly but also utilises web-based instruments information, best practices and knowledge. At the national level, the UFS-COP would be comprised of local/city, national and provincial government departments, South African Local Government Association (SALGA) and other related government structures, regional and global city networks (i.e. Cities Alliance, MDP-ESA), NGOs/CBOs, private sector, universities and research institutes, as well as organised farmer groups representatives and consumer associations, etc. At this level, the Forum will be responsible for influencing, lobbying and shaping the national dialogue on UFS development policy, regulations and national programmes, by playing a technical, coordination, advocacy and advisory role.

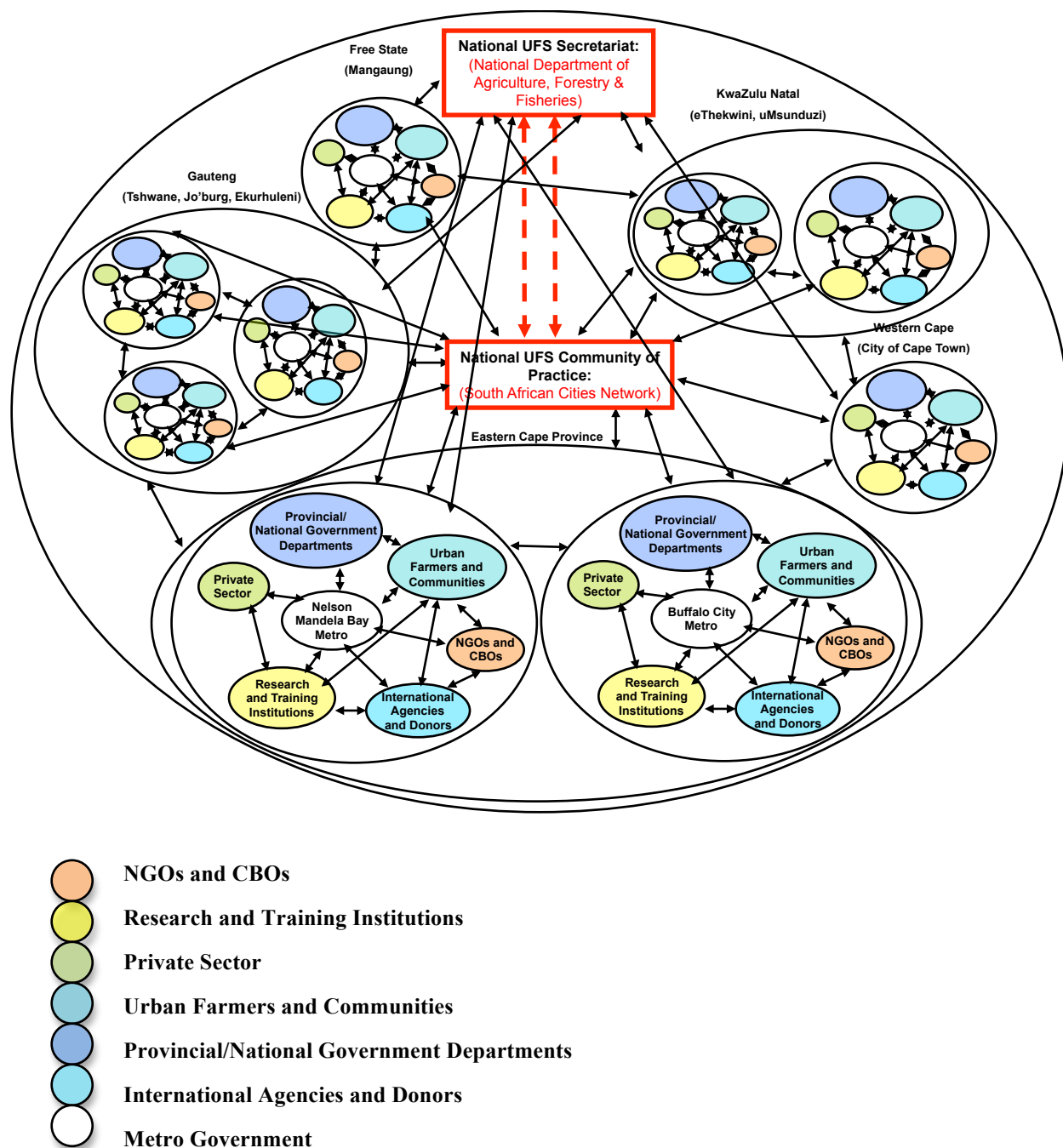


Figure 3: Proposed UFS Community of Practice for South Africa

With the UFS-COP policy network established at national, provincial, provincial and local levels, similarly, there is also a need for smaller specific policy communities. These could respond to specific UFS issues such as agricultural production. Such policy networks do not need to be predetermined but should rather self-select and become established based on demand for specialised attention on specific

issues. The following potential areas are identified for the establishment of smaller specialised UFS-COP policy communities:

- Agricultural production, trade, food/nutrition security and research;
- Trade and marketing and research;
- Environmental, health management and research; and
- Spatial development and land-use planning and research.

Although these specialised UFS substantive policy areas are indeed different, in practice however, these do not exhibit a real divide but rather more connectedness to UFS as a whole. As such, these networks should also be connected with each other also at national, provincial and local levels. A UFS-COP could help to facilitate a platform where key UFS policy management players can get involved in a dialogue, negotiation, learning, decision making and collective action process. This could include a web-based UFS-COP platform that allows for constant interaction and access to knowledge products outside the standard schedule of face-to-face meetings. Identifying and advocating for the transfer of best practices, models and technologies between metros could be one of the major responsibilities of the UFS-COP. Similar but more practically oriented UFS communities of practice could also be established at the provincial and local metro levels to facilitate enhanced UFS collaborative governance at the local level. These collaborative policy networks at local level will be represented at national level through UFS development policy champions but will also have full access to the recommended web-based UFS Community of Practice platform. Importantly, the desired UFS COP for South Africa is one that has strong financial, human, social and political capacity, power and influence.

7.3.2 Urban Food-security Systems Secretariat

The amount of operational and administrative support needed to provide substantive and institutional UPA policy support to a UFS COP network implies the need for dedicated secretariat services to facilitate the operational and administration support. It is therefore recommended that a formerly

organised and fully mandated UFS development secretariat be established to manage the crosscutting affairs of a UFS COP policy network. Such secretariat services would be vital as a platform to facilitate a neutral playing field that creates an invaluable equilibrium of power between UFS policy actors. This could also guarantee the success chances of any efforts to organise UFS institutional policy into a networked community. The UFS Secretariat would play the states' role of strategic planning, policy-making, enforcement, regulation and development facilitation and to drive the UFS development agenda as a whole. This could be solely a government institution that is institutionalised into a government department (national, provincial, local) either as a directorate or as a team of seconded individuals that are desiccated to UFS development.

Here the Department of Agriculture, Forestry and Fisheries is identified as a potential host institution for the UFS Secretariat. The national UFS Secretariat should be able to support provinces and local/metro governments in driving the UFS development agenda as informed and advised by the UFS COP as an active technical expert, knowledge management and learning policy community. The role of the UFS Secretariat (as a government body) should be to create an enabling platform for advancing UFS development in South Africa. In line with the developmental state intention of the South African government (ANC, 2007), the following elements will be central as part of the role of the UFS Secretariat (ANC, 2007), providing strategic orientation; providing leadership in defining a national vision and mobilising relevant stakeholders to take part in its implementation; ensuring state structures and systems that facilitate the realisation of the set agenda (including supporting the institutional policy networks) and translating broad substantive policy objectives into programmes and projects as well as supporting cities in the implementation, monitoring and evaluation of programmes.

7.3.3 Specific task for UFS development

A number of specific UPA stakeholders' tasks and responsibilities for the development of a sustainable and equitable UPA sector are elaborated in Chapter 5 (Table 10). Similar or rather related roles and responsibilities are also identified from the documentary analysis. The suggested tasks and

responsibilities are built around government as a lead-stakeholder. These are classified into the following four specific areas:

7.3.3.1 UPA policy (substantive/institutional) development

Metro-level UPA deployment initiatives will benefit from the establishment of clear institutional and substantive policy goals as the guiding policy framework. In this regard a national UPA policy framework is necessary as are the development of specific UPA development strategies, implementation legislation, gender and youth mainstreaming programmes and strategies and well as metro-level policies and implementation enforcement by-laws. This would include advocating for the establishment of specific UPA institutional structures to lead and deal with UPA specific development at the metro level. Importantly, these strategies must be practically supported through the provision of other necessary resources (e.g. technical and financial support required for implementation). The development of these policies, regulations and strategies by the state will require that private and social sector partners are actively engaged. This will ensure inclusive plans that are well informed and owned by the stakeholders.

7.3.3.2 UPA policy implementation and support

Another key set of stakeholder tasks and responsibilities for UPA development relate to practical UPA substantive policy implementation and institutional support for metro level activities. These would include coordinating the implementation of UPA policy, strategy and related programmes by facilitating the development of necessary partnerships and running technical support initiatives for UPA practitioners. UPA substantive policy implementation would also include efficient planning and development of required infrastructure (including market development and related support) and allocation of resources such as land and water in support of the sector's growth. Such activities here will be aimed at supporting the development of a holistic UPA value chain from input supply onward to production, value adding, distribution, retail, etc. While the state will also take a leading role on this

front, the role of other UPA development stakeholders will be equally key in terms of sharing resources, workload determination and employing combined efforts to ensure impact. This will also include conducting feasibility studies and environmental impact assessments and building the capacity of UPA practitioners.

7.3.3.3 UPA policy monitoring and evaluation, learning and knowledge management

The sustainable development of an equitable UPA sector will require the employment of a knowledge-based approach that ensures continuous learning and improvement. There is a need to document the UPA development process and to build upon best practices that emerge from substantive policy formulation to implementation, including the requisite institutional policy arrangements. An emergent implementation strategy that is continuously adaptive and improving, and is based on the feedback of monitoring, evaluation and other related research studies will be an essential part of the proposed process. Knowledge and lessons from different actors (i.e. government, private sector, civil society, etc.) will have to be gathered and shared among the wider stakeholder base.

7.3.3.4 Policy advocacy and outreach

Developing UPA also calls for a paradigm shift and the creation of the necessary appreciation of the role of UPA in South Africa among key stakeholders and especially policy decision makers and political leaders as well as UPA development champions with influence. This would include running public media campaigns, along with advocacy and policy lobbying for the inclusion of UPA as a key urban development strategy in South Africa. Civil society, the media and government actors will play a major role in this regard.

7.4 CONCLUSION

This research established that South African metros continue to demonstrate strong interest in UPA development (as emerged from both the research interviews and the documentary analysis). However,

they lean towards seeing UPA as agricultural production rather than the entire value chain. This presents limitations in that it over-emphasises agriculture in settings where other components of the food security and agriculture values chain may be more feasible, e.g. processing and distributed retail of agricultural products across the metro, thus better enabling equity of food access especially by the poor. The bias towards agricultural production is further exacerbated by the commonly used urban and peri-urban agriculture terminology. Instead, as gathered from the interviews, this research identifies urban food-security systems (UFS) development as relevant terminology that could be used to refer to UPA initiatives in their totality. Here UFS is understood to as a systematic approach to urban food-security systems that prioritises all the elements of food security (especially food production and food accessibility), as well as other means to ensue comprehensive development of a sustainable and equitable urban food sector (see section 7.2.1 for the UFS definition).

South Africa's metros, such as the City of Cape Town, eThekweni and Tshwane, demonstrate an appreciation of the developmental role of UFS through small and concrete initiatives. These include the development and implementation of UFS development policies and formal institutional structures (as demonstrated in the research interviews and confirmed in the documentary data). However, the emerging trend shows that in most of the South African metros the interest to develop UPA has not really produced much progress, neither in institutional nor in substantive policy areas for the metros. Even with the demonstrated interest in advancing the sector, UFS still faces a number of barriers that relate both to institutional and substantive policy issues. In fact most of the barriers recorded through this research relate to poor governance, poor institutional/procedural policy, and the lack of a substantive policy framework (ranging from national to local levels). Policy management capacity and resources (human, social, physical, economic and environmental capital) remain limited. UFS suffers overall limited state attention and commitment and consequently restrictive legislation, bureaucratic red tape and limited institutional, technical and financial support.

UFS substantive policy in South Africa lacks the prerequisite institutional policy arrangements to facilitate sound and strategic decisions and achieve the necessary impact on the ground. This is the case at all the three spheres of government. Although metros have the authority and responsibility to develop their own policies and implementation by-laws, this research found that national level institutional and substantive policy support could go a long way to realising UFS development goals at the local level. On the basis of the research findings, the researcher therefore argues that UPA development initiatives would benefit from government's demonstrated commitment and prioritization. The sector's governance would be enhanced through the assertive development of UPA institutional policy that is arranged through participatory and adaptable policy networks with a developmental thrust. Thus far decentralised power, and development planning and implementation without strategic national leadership, have proven to be a great drawback for UFS development in South Africa. Hence, national strategic institutional and substantive policy development and implementation legislation frameworks are justified.

This research notes the need for state sanctioned interventions that will initially be focused on the development of strategic institutional policy networks as a development foundation for comprehensive, accelerated, equitable and sustainable UFSs interventions rather than just agricultural production. This calls for the engagement of multiple stakeholders from social, economic and environmental development sectors (including agriculture, food security, natural resources management, social development, political management, climate change, environment and health, etc.) as active UFS development partners. The research further identified policy networks that employ participatory governance principles as the most appropriate procedural policy framework to bring together state and non-state actors in a progressive UFS policy network. The research recommends the establishment of a national level UFS policy network that could be led through the Department of Agriculture, Forestry and Fisheries in partnership with the metros and other strategic state and non-state actors. The research also noted that UFS development in South Africa would require engaging numerous specialised skills and functions; hence the need for the establishment of smaller and specific substantive policy

networks within the national UFSs policy network. These could be led and constituted of specialist institutions that have the capacity and skills required for specific needs in UFS development. Potential smaller specific substantive policy networks could span agricultural production, trade, food/nutrition security; agro-processing, trade and marketing, environmental management, and spatial development and land-use planning. The researcher recommends that such policy networks be institutionalised at national, provincial and local/metro levels.

As a justification for policy networks, this study found that UFS development as a multi-stakeholder and multi-sectoral public policy issue could benefit not only from the distributed intelligence presented as a benefit of policy networks, but also from the distributed human, social, physical, financial, political capital/resources that can be accessed and utilised collaboratively. The research also notes, however, that although an appreciation of the characteristic benefits of policy networks does indeed warrant the exploitation of policy networks as a contemporary framework for UFSs institutional policy design in South Africa, policy managers need to note that policy networks are not a panacea and that major challenges in the way of collaborative governance must be continuously addressed.

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APPENDIX 1: Interview Schedule

Research Project:	Developing network policy institutions for efficient urban and peri-urban agriculture (UPA) development in South Africa's metros.
Researcher:	Sandile Ngcamphalala (Student: Masters of Management in Public Policy, University of the Witwatersrand, Johannesburg)
Student number:	592289
Supervisor:	Prof Susan Booysen (Graduate School of Public and Development Management, University of the Witwatersrand, Johannesburg)

Introduction and objectives

Thank you for agreeing to do this interview. Please note that this research is part of the degree requirements for the Master of Management in Public Policy that I am currently studying for at the University of the Witwatersrand's Graduate School of Public and Development Management. The output of this research project will be a thesis, which could be published for purposes of knowledge sharing. Please note that your contribution to this process is entirely for learning purposes, allowing the researcher to develop a deeper understanding of UPA development and related institutional policy challenges in South Africa. In this context, I am very interested to hear more about your experiences, specific observations and personal views on the sector's development, with a particular reference on identifying specific UPA institutional policy gaps for interventions. Your expertise is viewed as key and your contribution to this research project will be invaluable in facilitating this learning process. This could facilitate substantive and institutional UPA policy reform for the advancement of UPA and hence for sustainable development of South Africa's metros.

The proposed research project seeks to gather information to inform specific government procedural policy decisions on the development of progressive UPA institutions that are designed for maximum and sustainable developmental impact.

The objectives of this research are to:

- Identify the role of the state (national, provincial and local/metro) in the policy management process of UPA in South Africa's metros;

- Identify the role of other sector development stakeholders (private sector, research institutions, non-governmental organisations, development partners, donors, farmers, etc.) in delivering substantive UPA policy;
- Make recommendations on the development and appropriate design of institutional policy networks for substantive UPA policy delivery in South Africa.

Key concepts used in this interview

A number of concepts form the frame of the proposed project. These are defined here as an effort to establish a common understanding of the concept applied in the context of UPA development policy delivery challenge in South Africa. As established in the literature review for this research, UPA development initiatives cannot operate in isolation from the institutional base that leads and controls the substantive policy direction, through individuals and organisations.

- For the purposes of this research, the concept urban and peri-urban agriculture (UPA) is defined as any agricultural production activity (livestock, agronomy, horticulture, etc.) that occurs within the administrative boundaries of the metropolitan municipalities.
- The concept of institutions refers to any social pattern characterised by standard sequences of interactions (Jepperson, 1991). Specifically with reference to public policy and politics, institutions are seen as governance structures that are based on rules, norms, values and systems of cultural meaning (Booyesen, 2011). Institutional/procedural policy deals with the rules, structures, organisation and process of government while putting a strong emphasis on understanding and enhancing institutional arrangements and their capacity to deliver substantive policy objectives (Tolbert, 2003).
- Policy networks on the other hand are patterned relationships between state and society linking the public and private sectors in policy in a set of relatively stable relationships that are non-hierarchical and interdependent, linking a variety of actors who share similar policy interests and exchange resources to pursue policy through cooperation and collaboration (Börzel, 1997). Effectively, networks are concerned with a particular design of policy institutions. Others note that policy networks are fluid, evolving and inter-linked institutions that involve dialogue and shows distributed intelligence characteristics (Hajer and Wagenaar, 2003). Effectively, policy networks are non-hierarchically structured institutions that are supposedly based on the equitable connectedness (network) of the institutions and individuals involved and that thus enjoy the benefits of combined human capital and institutional capacity located across the stakeholder base.

Network policy institutions are therefore not simply about the distributed intelligence but also the distributed human, social, physical, financial, political capital/resources that can be utilised collaboratively to pursue particular substantive policy goals. This understanding of policy

networks, particularly in the light of the associated characteristic benefits, further warrants the inclusion of participatory governance as part of the underlying conceptual framework for this research.

- Institutional/procedural policy: Understanding networked policy institutions therefore helps to appreciate their role in public policy and thus the importance of institutional or procedural policy aimed at improving substantive public policy delivery through cooperation and collaboration of key actors. According to Tolbert (2003), institutional policy (also referred to as procedural policy) deals with the rules, structures, organisation and process of government while placing strong emphasis on developing and enhancing institutional design and the capacity of institutions to deliver substantive public policy objectives.

Questions:

1. First, please tell me more about yourself and/or your organisation, with particular reference to UPA in South Africa.
2. As a general impression, what would you say is the state of UPA in South Africa? [Follow-up:] Please tell me what the main reasons for your answer are.
3. Based on your experience, individually and in organisational context, what can you identify as the barriers that constrain UPA growth and development in South Africa? Or, is it your experience that there are no barriers? If you do identify constraints, would you say these constraints are unique to your organisation or could these be equally identified as constraints across a wider spectrum of UPA actors?
4. In terms of your personal observations and/or experiences, can you identify any gaps/limitations in terms of the current institutional roles and responsibilities – that may help explain some of the challenges in developing UPA in South Africa? If any, could these gaps be explained by the way UPA development institutions/organisations are currently organised/designed or arranged, or are there other reasons?
5. Do you think that the state has done enough for UPA development in South Africa's metros? In your view, what would you say should be the role of the state in developing this sector?
6. Specifically with reference to government's role, what would you say should be the role of the metro government, provincial government and national government, respectively?
7. From your experience, which different actors can you identify as strategically key to developing UPA in South Africa and why? What can you identify as the potential role of these institutions?

8. In developing UPA in South Africa, what kind of relevant actions, operations have you or your organisation been involved with in the past five years?
9. Are you and/or your organisation engaged in any way through partnerships, collaborations and or any coordinated effort with other organisations in developing UPA in South Africa?
10. Would you say policy networks have a place in institutional policy design for substantive UPA policy delivery in South Africa? What are the main reasons for your answer?
11. Would you or your organisation be interested to getting involved with a wider institutional policy network dedicated to UPA development in South Africa's metros? What kinds of benefits (if any) do you believe could result?
12. How, or through what kind of a process, do you believe a potential UPA institutional policy network could be designed or activated for UPA policy delivery in South Africa?

Thank you!

APPENDIX 2: Data retrieval form for documentary analysis

Title, type, author and year of document	
UPA policy in place	
UPA definition and its key components	
Barriers or constrain UPA growth and development in the metro	
Key institutions/stakeholders	
Roles of metro/provincial/national government	
Partnerships/collaborations/governance structures and UPA Policy Networks	
Link to other local, provincial and national UPA (substantive/institutional policies)	
Other	