

A Framework for Vacant City-Owned Land to Be Utilised for Urban Agriculture: The Case of Cape Town, South Africa

P. S. Van Staden, M. M. Campbell

Abstract—Vacant City of Cape Town-owned land lying unutilized and -productive could be developed for land uses such as urban agriculture that may improve the livelihoods of low income families. The new City of Cape Town zoning scheme includes an Urban Agriculture zoning for the first time. Unstructured qualitative interviews among town planners revealed their optimism about this inclusion as it will provide low-income residents with opportunities to generate an income. An existing farming community at Philippi, located within the municipal boundary of the city, was approached and empirical data obtained through questionnaires provided proof that urban agriculture could be viable in a coastal metropolitan city such as Cape Town even if farmers only produce for their own households. The lease method proposed for urban agriculture is a usufruct agreement conferring the right to another party, other than the legal owner, to enjoy the use and advantages of the property.

Keywords—Land uses, urban agriculture.

I. INTRODUCTION

THE world population is expected to increase from 6.8 billion to 9.1 billion from 2009 until 2050 and this population growth is to take place mainly in urban areas, particularly among the lower income residents [1]. Poverty results in households becoming vulnerable to food insecurity; with a large share of the household budget spent on the purchasing of food [1]. In Sub-Saharan Africa, food security in cities will be affected by major demographic migrations from rural to urban areas. In the 1990s, two thirds of the population of Africa lived in rural areas, but projections show by 2035 half of the population will be living in urban areas [1]. With these demographic changes, food security is likely to become an urban problem in the future. Therefore, urban agriculture or food gardening is receiving increasing attention by policy makers and local government officials around the world.

The South African Minister of Finance, Pravin Gordhan, announced that unemployment is critical in South Africa, with 41% of the employable age groups having a job and 4.5 million South Africans are currently unemployed [2], [3]. Against this background, this research aims to determine whether a city council can address these issues via a strategy where residents can address their own poverty and sustain

their families by developing the skills to become entrepreneurs who grow food crops and also sell the surplus crops.

This study also aimed to determine what factors are crippling the possibility of utilizing vacant City of Cape Town-owned vacant land for producing crops. Vast spaces of vacant land are lying sterile, also roadsides and along railway tracks, costing the city council thousands of rand to maintain and, to keep clean. A research question posed was if urban agriculture has been considered in Cape Town and if urban agriculture has been investigated in Cape Town what are the reasons for not implementing it. The study also researched the possibility of leasing out City of Cape Town-owned land to the public to produce crops. In addition, it also investigated the negative and positive impact such an agreement may have on the owner of the land and the lessee. Policies and planning guidelines were researched to understand the process that should be followed for urban agriculture to be implemented and to highlight the complexity or simplicity of the process. Qualitative interviews and quantitative questionnaires were applied to shed light on this topic. Successful international and national case studies were researched to determine what lessons can be learnt and will be put forth while strategies applicable to the City of Cape Town case study will be highlighted and unpacked. Existing small scale agricultural activities within the municipal boundary of the City of Cape Town occur, but the land is not owned by the city [4]. An example is the Philippi horticultural area that was researched to, amongst others; determine how to produce a profitable crop.

II. RESEARCH METHODOLOGY

Philippi, an existing horticultural area in Cape Town where the individual farmers are the land owners themselves was researched to determine when and how a person will be able to ensure a profitable return. 42 qualitative questionnaires were distributed among farmers from the 139 farms in the area of Philippi. Systematic sampling was applied to randomly select the 42 farmers. Systematic sampling is the most practical way of sampling as every kth item on a list is selected where k, the sampling interval, is calculated as: $k = \text{population size (N)} / \text{sample size (n)}$ [5]. The author calculated a sample size of 42 out of a possible 139 farms and also created a percentage factor required for the study, in this case 30%, resulting in the 1st farm selected on the list and then every 3rd farm until 42 farms were selected. A pilot study [6] was conducted to

P. S. Van Staden is a Master student in Urban and Regional Planning at the University of the Free State, Bloemfontein 9300, South Africa (Phone: +27 84 673 1388; fax: +27 21 551 4020; e-mail: pvstaden@wpplanning.co.za).

M. M. Campbell is a senior lecturer at the University of the Free State, Bloemfontein 9300, South Africa (e-mail: campbemmm@ufs.ac.za).

identify ambiguous or vague questions in the questionnaire such as a question not being understood correctly, that a question may be misleading or that a respondent interprets a question differently [6].

Two unstructured qualitative interviews were also conducted with consulting town planners since they were able to advice on how to apply for such urban agricultural farms in the city and from what internal municipal directorates or departments one might experience resistance. Two property valuers were also interviewed in order to determine what the influence of urban agriculture will be on the adjacent properties as well as the wider area. Two municipal officials of the City of Cape Town were interviewed, one from the Spatial Planning Department and another from the Directorate Development Facilitation and Economic Development as these two departments were identified as being the most influential in land issues.

III. LITERATURE REVIEW

The problem of urban and agricultural landscapes been driven further apart, due to urbanization, was identified as the reason for crops being cultivated far from cities [7]. The public in general are opposing agriculture being practiced in or near cities out of fear for diseases, odors, environmental pollution, and animal welfare [7]. Therefore, the image of agriculture in urban areas needs to be improved for urban agriculture to succeed. Major opportunities for agricultural entrepreneurship exist even more now where the city and the countryside have become separated. Regarding urban agriculture in developing countries, Van Leeuwen, Nijkamp and de Noronha Vaz [8] state that green urban spaces materialize according to their context. They also said that in poor countries, where most of the largest cities are to be found, it is necessary to take advantage of every opportunity to supply nutritional and adequate food to the inhabitants [8]. Though Viljoen [9] says that anyone who thinks that urban farming is only a phenomenon in poorer countries should take a look around certain parts of New York City where the Bronx has massive numbers of vegetable gardens. Other major cities with thriving urban vegetable gardens include cities in California, in the United States of America as well as cities in the United Kingdom [9] and Copenhagen.

According to research by Frayne [10] a regular household producing crops in their own back yard could save up to 60 Namibian dollars (six US dollar) a month. This is a substantial amount of money that a household could save. If the amount for producing crops is so high for such a small piece of land then leasing vast vacant city spaces by the public can certainly generate an income for their households. This also shows that unemployment can be addressed through urban agriculture and a household should be able to produce enough to sustain it if the whole family is involved in cultivation on a piece of city-owned land.

One of the most prompted points that were highlighted in surveys on urban agriculture was theft of the crops [11]. She finds this alarming as it seems that the issue of theft will be one of the major concerns to any entrepreneur. Another

observation was that entrepreneurs that participated in Verwey's [11] surveys indicated that customers would rather pick the crops they choose to purchase than buy from a small informal stall on the land. By picking your own vegetables you as customer are assured that the products are fresh. These customers also indicated that they get value for their money [11].

Areas not generally thought of as being able to be utilized for cultivation are roadsides and along railway tracks. Large portions of towns and cities are taken up by road and railway verges that are unoccupied and these areas normally become eyesore areas due to illegal dumping of waste, crime hotspots due to long grass and little surveillance [12].

The following five arrangements for gaining access to land were identified:

- Economic lease where the farmer has official access to the land and pays rent.
- Usufruct lease which means the farmer has official access to the land and the right to it, provided that he keeps on cultivating it.
- Licensed farming where the farmer has official access in return for maintaining the land.
- Informal agreement where the farmer does not have official right to the land but has the owner's permission.
- Unsanctioned farming where the farmer does not have consent to farm on the land [12].

The first three options of the access arrangements are best in equilibrium as both the farmer and the land owner gain from this arrangement [12]. Other laws and rights will be included in such an agreement according to the lessor and lessee's requirements. A usufruct agreement gives rights to a person other than the legal owner, normally for a limited period of time [13]. The lessee has the right to use the property and enjoy the fruits and income from it. They have the right to use the property but cannot dispose of it [13].

IV. SOUTH AFRICAN POLICIES AND LEGISLATION

Harrison [14] states that, "...the Integrated Development Plan (IDP) is the focus of South Africa's post-apartheid planning system and is also regarded as a key instrument in an evolving framework of intergovernmental planning and coordination". A key aspect of this policy is to stimulate functional and integrated local economic development. The objectives of the IDPs, facilitated at community workshops, are linked to the municipal budget. One of the five strategic focus areas in the IDP of the City of Cape Town is The Opportunity City [15]. Its core focus is to identify environments in which investment can take place and jobs created which the city council will support economically. The IDP states that only by having a job, people can make the most of their lives. According to the IDP the city council will use various levers to attract investment that will create economies that are city-based while sustaining future growth and provide employment opportunities for the individual. The IDP further elaborates on how the city council will encourage small business growth and entrepreneurship through skills training while public-owned land should be leveraged to stimulate the

economy and boost job creation [15].

A second strategic focus area in the IDP is The Caring City [15]. Relating to this study is the plan concerned with City Parks Programmes. The IDP mentions the possibility of private stakeholders being afforded the opportunity to upkeep the parks and in turn receive some benefit, like free advertising rights. It further mentions that the city council will facilitate the development of community gardens in community parks. The city council still has to conclude formal lease agreements but some projects have been initiated [15].

The Spatial Development Framework (SDF) of the IDP mentions urban agriculture under the second key focus areas namely cultural areas, existing farmed areas and horticultural areas threatened by urban encroachment and the support of urban agriculture [16]. The SDF also identified various policies, of which policy number 28 focuses on agricultural land. The SDF identifies agricultural areas as essential for food security for the city and therefore support and undertake to promote food security. According to the SDF of the 2012 IDP the city council will identify and consider high potential agricultural areas, investigate areas of significant agricultural value, and encourage agricultural development in those areas to expand urban agriculture. The SDF discourages the subdivision of land in areas already used for urban agriculture like Philippi and any development or business that undermines agricultural activities [16].

It is evident from the Urban Agriculture Policy [17] that not much thought was given to urban agriculture in the past years, but promising changes occurred and the new policy will ensure smoother implementation of urban agricultural activities. Research done during the investigating phase of the policy shows that urban agriculture can improve household food security, but that very few people are currently involved in urban agricultural activities. The fundamental scope of the policy is to increase urban agricultural activities in the City of Cape Town [17]. The primary focus of the policy is on agricultural activities of the poorest of the poor within the urban areas and it does not include commercial farmers or other agricultural activities outside the municipal boundaries of the City of Cape Town.

The study area comprises of two land use zones. Most of these land parcels are zoned as Public Open Space 2, but some of it is located in Limited Use Zones. In the section on the City of Cape Town as a case study the zonings are unpacked according to the new City of Cape Town Zoning Scheme Regulations. The purpose of Public Open Space (OS2) is to provide for active and passive recreational areas on public land, as well as for the protection of landscape and heritage areas including woodlands, ridges, watercourses, wetlands as well as the coastline. It is important to recognize the interests of the general public in respect of access to and preservation of public open spaces [18]. The purpose of the Limited Use Zone (LU) is to serve as a transitional mechanism to deal with land that was zoned as 'undetermined' in previous zoning schemes. Existing lawful uses may continue, but no other uses are permitted. The aim is to progressively phase this zone out. Any development that requires additional use rights beyond

the existing Limited Use shall require rezoning from the Limited Use Zone to another more appropriate zone [18]. The development regulations of the Limited Use Zone state that no change of an existing use or alteration of the external structure of an existing building or structure is permitted [18].

V. LESSONS LEARNED FROM SUCCESSFUL NATIONAL AND INTERNATIONAL CASE STUDIES

Kuruville [19] studied the rigid zoning regulations in Oakland, California and showed how urban agriculture improved once these regulations were amended. Zoning regulations in Oakland always allowed the growing of vegetables and the raising of animals on privately owned residential properties. These residents were not allowed to sell, barter or give away any products without a permit and all produce was to be used for own personal consumption. In retrospect the city officials planned to revamp these zoning codes to allow not only the growing of vegetables and the raising of animals, but also the selling, bartering or to give the produce away without a permit [19]. Officials, however, have their concerns as animals are likely to be a most contentious issue since neighbours may complain about the noises [19]. Animals form part of a critical cycle in urban agriculture, because manure functions as fertiliser and the chickens or the ducks eat snails as well as the bugs that are harmful to crops while the hens help to till the soil [19].

In another study Broadway [20] researched urban agriculture in Montreal, Canada. Canada actively promoted urban agriculture in the post-war period. The urban agricultural sector has grown to over 76 garden plots, 6 400 allotments and 10 000 participants since implementation. These gardens developed vastly from the 1970s to 2009 and are currently producing between seven and ten tons per annum. Conditions were imposed on other farming activities like the rearing of chickens and currently one may only have four hens on a property while the closest it may be able to be to another dwelling is 25 yards. An important issue raised by Broadway [20] is the presence of bees. He said that bees should be allowed in every city to pollinate plants, because without bees, pollination will have to be done by hand. Broadway [20] concluded by saying that residents will only get involved in urban agriculture once they have reached the poorest stage of their life.

A successful national case study researched for this article is the Philippi horticultural area. Philippi was initially located outside the urban edge of the City of Cape Town, but as the city expanded Philippi is now included in the metropolitan area. These farmers are the land owners and produce crops as well as other agricultural-related products. A small vegetable garden experiment was carried out in the City of Cape Town to provide insight on what the result would be if a family would convert an existing garden into a vegetable garden. The experimental garden comprised of 61 square meters of which 40 square meters was covered by lawn. Eight square meters of lawn was removed and converted it into a vegetable garden. This experiment showed if the whole 61 square metres of garden would be replaced, this specific household could make

or save a total of R 671, 61 (67 US dollar) per month.

VI. THE CITY OF CAPE TOWN: A CASE STUDY

The study area is located within the metropolitan area of the City Cape Town situated in the Western Cape Province of South Africa. The vacant plots identified and included in the study extend to 168, 61 hectares in total and Table I contains the property details of each of the plots in the study area. The plot numbers, listed in the first column, are used as the main classification, and in the second column the area within the city where each particular plot is registered is listed. Each plot has a title deed number that was used to obtain a copy of the title deed to look for restrictive or encouraging conditions registered against the plot in the title deed. The Surveyor General (SG) number is required when a surveyor's diagram is requested from the Surveyor General's office and these numbers for each plot are listed in the fourth column. The extent of the plot is indicated in the fifth column to show exactly how much land is under investigation for this research. The owners are listed in the sixth according to data gathered from the title deed to show who the owner is and in the seventh column the zoning of the property is indicated.

A section of plot 65245 and the remainder of plot 65852 Cape Town are used as sports fields. The sports fields are not included in the study, but the land surrounding it is included in the case study. All the other plots are vacant. The plots are unutilised and overgrown with vegetation at the moment. Footpaths exist across some of the plots. These footpaths are used on a regular basis by the residents in those areas. The land is fairly flat across all the properties in the study area, ranging from 118 meters above sea level to 121 meters above sea level [21]. Some up to 30 meter high trees are found distributed sparsely across these plots with smaller Port Jackson trees which are found more frequently. The Port Jackson trees are not indigenous to South Africa and were brought in from Australia to compact the sand dunes, but have since grown and spread so rapidly that it negatively affect Cape Town's indigenous plants [22]. Grass overgrows the plots during the winter months and the city council has it mowed once a year.

According to a local farmer, Mr. Beukes [23], from the Philippi horticultural area, the soil in the study area lacks nutrients. He said that much effort and fertilizing needs to be done to turn the soil's poor quality around. This statement is substantiated by the City of Cape Town and Botanical Society of South Africa [24], stating that the sand found in the area can be classified as acid sand. The area is located in the Sand Fynbos biome as most of the Western Cape [24]. However, the Sand Fynbos has almost completely been removed from its original habitat by farming, urban development and other services [24].

Pedestrian movement only occurs on the properties in two suburbs. This is due to the other properties being fenced off. Pedestrian movement over these properties will have to be acknowledged when agricultural gardens are developed as it is evident that these footpaths are used on a daily basis.

Pedestrian movement over these property are restricted by a deep river stream flowing south across the properties. This stream is fed by storm water and wetland areas from the neighboring suburbs and ends in a nature reserve dam. These footpaths are however not used when the land is overgrown due to the pedestrians, especially the women, being scared of violent attacks as it is easy for attackers to hide and escape in the long grass and bushes [25].

VII. RESULTS

Empirical data was obtained from the 42 questionnaires completed by the farmers in Philippi. Since some farms are registered in the name of a company, trust or close cooperation, a representative on those farms completed the questionnaire on their behalf. The qualitative interviews with the consulting town planners were done to also reveal where challenges are expected when urban agriculture is promoted by the City of Cape Town. The qualitative interviews with City of Cape Town employees were done to reveal the reasoning of the city council regarding the new zoning for urban agriculture and the problems that were addressed as well. The qualitative interviews with property evaluators were done to highlight the expected impact of urban agriculture on the adjacent properties.

A. Responses Obtained from Farmers in Philippi

The first four questions tested the farmers' knowledge on land ownership in Philippi as well as on the ownership of vacant land in the City of Cape Town and the results are presented in Table II. The farmers clearly understand ownership of land as 90% of the farmers indicated in response to question one that not all vacant land belongs to the City of Cape Town. A majority of 62% indicated in response to question two that the land in Philippi does not belong to the City of Cape Town. In question three it was asked if parks, road reserves and other vacant land belong to the City of Cape Town and 88% of the respondents said yes while 12% was indecisive and none of them said no. A slight majority of 57% of the 42 farmers acknowledged that maintaining vacant City of Cape Town-owned land is costly to the city council.

It is clear from the responses to question five that 45% of the farmers are indecisive when asked if the City of Cape Town could perhaps use the vacant land for some other use. A lower percentage of 33% however said yes and 22% said no. In question six farmers were asked if it could be viable for residents to grow crops on the vacant City of Cape Town-owned land and 57% responded yes while 31% were indecisive and 19% said no.

TABLE I
CITY OF CAPE TOWN CASE STUDY PLOT INFORMATION

| Plot number | Registered division | Title deed no. | SG number | Extent Hectares | Owner | Zoning |
|-------------|---------------------|----------------|---------------|-----------------|-----------------|--------------|
| Re/65245 | Cape Town | CPF26-21/1908 | CPF26-21/1908 | 36.43 | Local Authority | Open Space 2 |
| Re/65852 | Cape Town | 63045/1995 | 63045/1995 | 9.15 | Local Authority | Open Space 2 |
| Re/90477 | Cape Town | 1262/1936 | 1262/1936 | 45.01 | Government | Open Space 2 |
| Re/90479 | Cape Town | 11611/1944 | 11611/1944 | 11.39 | Government | Open Space 2 |
| Re/90478 | Cape Town | 13712/1941 | 12005/1939 | 3.78 | Government | Open Space 2 |
| Re /3160 | Ottery | Unregistered | 6664/1989 | 17.61 | Local Authority | Limited Use |
| Re /1940 | Ottery | 2633/2003 | 4668/1978 | 40.43 | Local Authority | Limited Use |
| Re/4527 | Ottery | Unregistered | 3552/2009 | 4.81 | Local Authority | Limited Use |

TABLE II
KNOWLEDGE ON LAND OWNERSHIP IN PHILIPPI AND THE CITY OF CAPE TOWN

| Responses | Yes | Indecisive | No | Total |
|--|-----|------------|----|-------|
| Vacant land in the city is the property of the City of Cape Town | 1 | 3 | 38 | 42 |
| Land in Philippi is the property of the city of Cape Town | 5 | 11 | 26 | 42 |
| Parks, road reserves, land along railway tracks is the property of the city of Cape Town | 37 | 5 | 0 | 42 |
| The costs are high to maintain vacant land in the city | 24 | 12 | 6 | 42 |

TABLE III
WILLINGNESS OF THE PHILIPPI FARMERS TO LEASE VACANT LAND FROM THE CITY COUNCIL FOR THE PRODUCTION OF PROFITABLE CROPS

| Responses | Yes | Indecisive | No | Total |
|--|-----|------------|----|-------|
| I am willing to apply to the city council to lease vacant land to plant crops | 13 | 23 | 6 | 42 |
| I am willing to apply to the city council to lease vacant land to plant crops if the water and lease of the land is free | 39 | 3 | 0 | 42 |
| I am willing to provide food for the local soup kitchen in my free time | 3 | 24 | 15 | 42 |

Questions seven, eight and nine tested the responses of the Philippi farmers regarding their willingness or unwillingness to lease vacant land from the city council for the production of profitable crops. Table III shows that 31% of the farmers indicated that they would apply to the city council to lease vacant City of Cape Town-owned land if they would be provided the opportunity, 55% were however indecisive and only 14% said no. These percentages changed in the responses to question eight to 93% saying they would apply and 7% being indecisive when the land and water are made available free of charge. The purpose of question nine was to ascertain whether the farmers in Philippi would help others in the need and only 7% said they are willing to assist while 57% were indecisive. Question ten tested the farmers' knowledge on crop production. The vast majority of 95% of the farmers who own land in Philippi responded that they know how to produce crops while only 5 % do not know and it is assumed that they are not using the land that they are currently farming on for the production of crops, but could be using it for other agricultural activities. In response to a question testing if the vacant land in the city would be used for producing crops would it create jobs, 36% of the 42 farmers said yes while two farmers said no, with the majority consisting of 60% of the farmers being indecisive. A final question raised the issue of unemployment and the farmers were asked if the production of profitable crops on vacant City of Cape Town-owned land would have the ability to solve the unemployment problem in the city and the vast majority of 90% of the respondents said no

B. Interviews with Consulting Town Planners

The inclusion of Urban Agriculture as a land use in the new zoning scheme will put the City of Cape Town in a position to

regulate an existing land use [26], [27]. Regarding the lease of city council land being opposed by internal City of Cape Town departments it was disclosed that the Department of Environmental Health could oppose the notion due to previous experiences with other applications on city council land while the Water and Sanitation- as well as the Health Department could oppose it as there would be no regulation of the produce [26]. In terms of the new zoning scheme urban agriculture is allowed only with the council's consent and the application fee to obtain consent is currently R1779,30 (US Dollar 178) [26]. Two interviewees were of the opinion that this fee should be waived by the city council in order to encourage prospective farming applicants to apply for the council's consent [26], [27]. The same two interviewees were also of the opinion that if urban agriculture increases dramatically it would have the ability to create jobs and promote food security [26], [27]. However city departments should be sufficiently capacitated in order to be able to regulate these activities and to ensure sufficient control over the utilized land. Goosen [26] and Roux [27] identified the problems that farmers would face. They said the farmers will require assistance that includes tools, seeds, compost and the provision of water with the most important factor being theft that needs to be addressed. Both interviewees were of the opinion that theft would only be addressed once the agricultural activity would have such a social coherent influence on the community that the community would feel part of the project and would take ownership of the garden.

C. Interviews with Officials of the Spatial Planning and Development Facilitation Departments

De Jager [28] indicated that the inclusion of urban agriculture in the new zoning scheme was pursued because of

the value it could add and that it was a land use that had been overlooked for a long time. De Jager [28] continued that the waiving of council fees required for an application will be a difficult issue. To enable entrepreneurs to succeed in urban agriculture the capital needed to start has to be cut to the minimum [29]. De Jager [28] concluded that the fees could be waived if the Urban Agriculture Unit would submit a motivation to the Land Use Department. According to Visser [29] the Urban Agriculture Unit can provide a successful applicant with free water, tools, seeds and compost. The Urban Agriculture Policy of the City of Cape Town proposes support to emerging farmers in respect of food provision through training sessions. The City of Cape Town has currently no capacity to control the quality of the produce or to address air pollution that may affect the crops [29]. Most likely the unemployed farmers will be subsistence farmers producing crops for their own households and only excess produce will be sold locally. Visser [29] stated that currently no formal lease agreement is signed with an urban farmer that the city council assists. Formal lease agreements are required and it may have implications for farmers who stop farming for no reason after the City has invested in and trained those [29]. The lease agreement should be able to be cancelled by a farmer after a period of time or determined by the city council.

D. Interviews with Property Evaluators

The impact of urban agriculture in industrial areas may be far less than in a middle class residential neighborhood although urban agriculture could add nice greenery to an urban area [30]. Though the same class of neighborhood might react differently to the agricultural activity in different areas since people reside where they feel most welcome and generally speaking the people in that area have more or less the same values and enjoy the same activities [31]. Urban agriculture is prone to have a more negative rather than a positive impact on adjacent properties as compost consisting of garden-, food-, human- and animal waste normally brings an unwanted smell to the area and it also attracts flies and other insects [31].

VIII. DISCUSSION AND PROPOSALS

The questionnaires unveiled that urban farmers need support and if the opportunity is provided they will make use of it. However, these farmers expect to be assisted due to their lacking circumstances, but are not willing to produce crops for a local soup kitchen in their free time. The town planners interviewed are in general optimistic about the inclusion of urban agriculture as a land use in the new zoning scheme as it will provide low income residents with a livelihood opportunity. This study showed that the City of Cape Town has all the legislative frameworks and policies in place for urban agriculture to be implemented successfully, but because of budget constraints the City of Cape Town do not have the staff capacity to process applications for urban agriculture or to control such activities. It is imperative to address this issue for urban agriculture to succeed. A most prompted point that was highlighted in a survey done in South Africa on urban agriculture was theft of the crops. A city council should take

cognisance of this finding and put measures in place to address the theft of crops as theft is a major concern to any entrepreneur.

The inclusion of the new Urban Agriculture land use in the new zoning scheme of the City of Cape Town is a big step forward. Although all zones, except residential zone 2, require some kind of application to the council, the council should consider waiving the application fees of an application for urban agriculture since it may discourage low-income prospective farmers to apply. Areas not generally considered to be utilized for the cultivation of crops that should be considered are roadsides and along railway tracks. As large portions of towns and cities are taken up by road- and railway verges that are unoccupied, these areas normally become areas of illegal dumping of waste or used for criminal activities due to the long grass and little surveillance.

The lease method proposed for urban agriculture is a usufruct agreement and the extent of the contract should be determined by the lessor who should specify what the land may be used for. It is also proposed that these urban farmers are allowed to sell their surplus products to sustain their families.

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