Growing international attention has focussed on the potential role of urban agriculture in poverty alleviation. The aim in this paper is to analyse the existing challenge of urban poverty in South Africa and examine the potential role of urban agriculture as a component of a pro-poor urban development strategy.

1. INTRODUCTION

Over the past decade, the role of urban farming or urban agriculture as a strategy or element of poverty alleviation has garnered increasing international scholarly attention in Africa (Rakodi, 1985, 1988a, 1988b; Lado, 1990; Freeman, 1991; Mosha, 1991; Drakakis-Smith, 1991, 1992, 1994; Mbiba, 1994, 1995; Bowyer-Bower and Tengbeh, 1995; Byerley, 1996; Rogerson, 1997). In particular, the significance of urban agriculture has attracted the attention of many leading international development agencies. The report of the World Commission on Environment and Development (WCED) urged all governments in the developing world to "consider supporting urban agriculture" (WCED, 1987: 254). It stated that:

Officially sanctioned and promoted urban agriculture could become an important component of urban development and make more food available to the urban poor. The primary purpose of such promotion should be to improve the nutritional and health standards of the poor, help their family budgets (50-70 per cent of which is usually spent on food), enable them to earn some additional income, and provide employment (WCED, 1987: 254).

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New research on alleviating poverty in cities of the developing world points to the potentially important role that might be played by urban agriculture in alleviating the pressures of urban poverty (Smit & Nasr, 1992; Stren, 1992; UNDP, 1996; Rogerson, 1997; and Mougeot, 1998). World Bank research points to the need for municipal action to facilitate urban agriculture (Wegelin & Borgman, 1995; Vanderschueren et al., 1996). In studies conducted for the International Labour Organisation the fostering of subsistence food production on the urban margins was described as an "unconventional proposal" for addressing issues of poverty and unemployment in developing world cities (Singh, 1989: 37). Research for the Food and Agricultural Organisation supports this viewpoint, arguing that urban food production "in addition to improving the nutritional quality of the diet, can become a valuable income-generating activity for the unemployed and underemployed and can utilise spare and unused lands available in the cities" (Hussain, 1990: 189-90). Lastly, the international significance of urban agriculture as a policy area to address poverty, was highlighted at the 1996 Habitat II Meeting in Istanbul. To coincide with that conference the United Nations Development Programme published a seminal volume on urban agriculture, which emphasizes the activity's significance for job creation, for feeding cities and for the making of an ecologically sustainable urbanisation (UNDP, 1996).

Against this background of growing international support for promoting urban agriculture as one element for managing poverty in cities, the aim in this paper is to chart the existing challenge of urban poverty in South Africa and to examine the potential role of urban agriculture as a component of a pro-poor urban strategy. The discussion unfolds through three sections of discussion. First, the dimensions of poverty in South African urban areas are analysed. Second, the potential role of urban agriculture as part of a pro-poor urban strategy is identified and debated. Finally, an overall picture of the current state of the art of South African debates on urban cultivation is provided.

2. THE STATE OF URBAN POVERTY IN SOUTH AFRICA

In the international context of urban poverty analysis, the South African case is distinguished by the country's dismal history of denial of access of opportunities to the majority of its citizens (South Africa, 1997a). In many respects, apartheid planning served to displace geographically the problem of poverty. Under apartheid social engineering the poor were shifted to the margins, both of urban areas and more importantly to the margins of the country as a whole thus focusing the core of South Africa's poverty in the rural areas. With the march of urbanization, the impact of violence, and the breakdown and subsequent collapse of discriminatory controls on access to the cities, the question of urban
poverty and of the associated inequalities of South Africa's cities becomes of rising policy significance. In common with poverty trends observed in the rest of sub-Saharan Africa, the growing importance of urbanization is linked to a rapidly increasing proportion of the poor being situated in urban rather than rural areas (World Bank, 1996:38). With the preliminary results of the 1996 census suggesting that more than half (55.4 percent) of the estimated population of South Africa now lives in urban areas (South Africa, 1997b:11), both from a short- and long-term policy perspective, addressing poverty alleviation in urban areas is an important policy issue.

Although it must be acknowledged that certain definitional problems exist in terms of the boundaries between urban and rural areas of South Africa (see CDE, 1995, 1996), since 1994 a number of detailed studies have appeared which allow the production of a picture of the state of urban poverty. The most important of these studies are the South African Participatory Poverty Assessment, which contained a strong rural bias (May et al., 1997), and the recently completed National Project on Poverty and Inequality (May, 1998). Material from these studies together with data drawn from the 1995 October Household Survey permit the incidence and depth of poverty across South African urban areas to be measured and assessed (Woolard, 1997). In addition, from scanning a variety of sources it is possible to identify certain key markers that differentiate the urban poor.

2.1 Where are the Urban Poor?

At the broadest level of analysis, it is evident that the incidence, depth and severity of urban poverty are unambiguously highest in South Africa's small towns, followed by secondary cities and lowest in the country's four metropolitan areas, viz., the Pretoria-Witwatersrand-Vaal region, Metropolitan Cape Town, Durban and Port Elizabeth-Uitenhage. Overall, the poverty rate (i.e. percentage of households classified as poor) for all urban households is 24.4 percent; for metropolitan areas, secondary cities and small towns, respectively the rates are 15.4, 26.7 and 35.1 percent (Woolard, 1997).

Calculation of the poverty share for the different types of urban settlement further sharpens the picture of where are the urban poor. It is evident that in absolute terms, the greatest burden of urban poverty occurs in the metropolitan areas, followed by small towns, and secondary cities. Although the four metropolitan areas contain 70.5 percent of South Africa's urban population they account for 54.5 percent of the urban poor. Small towns contain only 14.1 percent of the country's urbanized population but have a poverty share of 24.8 percent. The groups of secondary cities contain 15.4 percent of the urban
population but 20.6 percent of the urban poor. Overall, therefore, these findings show that whilst the absolute numbers of the urban poor are greatest in the metropolitan areas, in relative terms the poverty burden is most severe in South Africa's small towns and secondary cities.

These conclusions are supported by the findings from a recent analysis on population and incomes by the Centre for Development and Enterprise (CDE, 1995). Moreover, the notion that poverty is primarily a rural issue in South Africa is particularly crude when the circumstances of the country's small towns and secondary cities are highlighted (CDE, 1996 and Nel, 1997). Since 1980 the populations of South Africa's small towns have been growing at a slightly higher rate than the national average and at a rate of growth sixty percent above that applicable in rural areas themselves. Many small towns were created as reception points for those thousands of people resettled under apartheid's inhumane population relocation policies. Currently, small towns are often the first port-of-call for displaced farm workers, affected by conditions of general agricultural decline, the introduction of capital-intensive farming technologies and the push of harsh working conditions on the land (Nel, 1997). This demographic growth in small towns has not been linked, however, to improved economic conditions. Indeed, the economic plight of small towns is generally very problematic with more than two-thirds recording real economic declines during the early 1990s (CDE, 1996).

The situation in secondary cities is more variable both in terms of economic and population growth because of their different economic bases and regional contexts for growth. Nevertheless, as a whole, their recent population growth has been almost twice that recorded for metropolitan areas (4.6 percent annual growth versus 2.8 percent). Although in some secondary cities (such as Nelspruit or Witbank-Middelburg), there clearly exists considerable economic growth potential, in the future many secondary cities will face challenges of urban poverty which "in proportional terms, could put the metropolitan areas in the shade" (McCarthy & Hindson, 1997:12). Examples of such places are the Free State Goldfields, Pietermaritzburg and a variety of Eastern Cape centres where "downwards pressure in a single economic sector can often bring rapid and unanticipated increases in unemployment and poverty" (McCarthy and Hindson, 1997:12).

A comparison of poverty lines between the four metropolitan areas reveals that poverty rates are somewhat similar in the PWV, Cape Town and Durban, with the Durban region showing the worst indicators among this group. The poverty index for Port Elizabeth-Uitenhage is, however, considerably higher, which points to a severe poverty problem in the Eastern Cape metropolitan area.
Disaggregating the poverty share between the four metropolitan areas discloses that both the Port Elizabeth and Durban metropolitan areas have a higher poverty than population share; by contrast, both the PWV and metropolitan Cape Town areas show a poverty share below that of their population shares. Overall, these findings suggest that whilst the largest absolute concentration of the urban poor occur in the PWV region, the metropolitan Durban and particularly the Port Elizabeth metropolitan area carry a weighty poverty share relative to their population size as a whole.

Finally, at the intra-metropolitan level, the data from the 1995 October Household Survey identify the areas of informal or shack settlements as major local concentrations of urban poverty. As compared to the national poverty rate of 24.4 percent for all urban areas, the poverty rate for shacklands is 52.1 percent. Certain significant differences emerge in terms of the different levels of urban settlement. For the metropolitan areas as a whole the poverty rate in the shacklands is 38.5 percent; in secondary cities and small towns, however, the rates are respectively 65.9 percent and 68.8 percent. These findings point to an alarming poverty problem located in the shack settlements of South Africa's secondary cities and small towns. Disaggregating the picture of poverty rates in the shacklands of the four metropolitan areas, it is evident that considerable differences exist. The severest poverty rates (64.6 percent) are recorded in the shackland settlements of and around Port Elizabeth; in metropolitan Durban and Cape Town once again disturbingly high poverty rates of 42.7 and 47.3 percent respectively are in evidence; a lower poverty rate of 29.8 occurs in the shackland areas of the PWV region.

2.2 Changing markers of the urban poor

In terms of urban policy formulation it is important to acknowledge certain 'markers' which define individuals and households who are the urban poor. Historically, race was and remains the first major marker of urban poverty, albeit a factor that has been eroded to some extent by the 1990s racial redistribution of income from the white working and lower middle classes to the African middle class (McCarthy and Hindson, 1997). Another key marker is clearly that of gender with female-headed households commonly isolated as strongly linked to poverty (Budlender, 1997). Analysis of the 1995 October Household Survey confirms the continuing significance of gender as a marker of poverty; across all levels of the South African urban system - metropolitan areas, secondary cities and small towns - levels of female unemployment were consistently above those for male workers. The largest gender gap occurs in secondary cities and small towns where recorded rates of female
unemployment are respectively 12.8 percent and 11.9 percent higher than those for male unemployment.

Notwithstanding the continuing relevance of race and gender, recent research shows that there are also new emerging factors which are likely to impact upon patterns of poverty and inequality and be important signals for future poverty markers. The first concerns a seeming narrowing divide in urban-rural income differentials, particularly for the African population. New data for the 1990s discloses that, for those who are in employment (and factoring living costs differentials) household and singles incomes "do not vary as significantly as one might expect" as between metropolitan, secondary city and small town contexts (McCarthy & Hindson, 1997:14). This closing of the income gap alongside a diminished formal work absorptive capacity of the metropolitan areas underpins the observed recent slowdown in migration trends to South Africa's metropolitan areas (CDE, 1995).

The second important national trend is rising inequality and increased social differentiation within the African urban population as a whole (Crankshaw, 1997). Recent data shows a rapid rise in the numbers of Africans that occupy senior official, managerial and legislative positions creating a social group "who now live mainly within the more affluent historically white suburbs, cut off from the majority of blacks socially, if not as yet politically" (McCarthy and Hindson, 1997:19). Another trend is growth in the numbers of urban Africans engaged in a diverse set of middle level occupations with markedly varying income levels. Although many of these people earn wages that place individuals and households well beyond the reach of formal housing in cities, if unaided by the state, a substantial proportion earn incomes which when combined with other sources of household income would put them in the market for inner city flats or small formal housing within new township developments. New processes of internal social and spatial differentiation are thus occurring within African residential areas as a result of both violence and by the availability of new opportunities to move or occupy vacant land or housing within the metropolitan area (Hall, 1997). Overall, residential class differentiation is occurring as established townships yield their poorest residents to shackleland areas and their wealthiest residents to new middle income housing estates and to the historically white city core areas (McCarthy and Hindson, 1997:25).

Despite these new trends within occupational categories at the higher, middle and lower middle levels, in South African urban areas "the vast majority of blacks remain confined to the lowest paid manual and menial forms of work" (McCarthy and Hindson, 1997: 20). Indeed, 34 percent of the total number of African employees were in jobs classed as "elementary occupations" in the 1995
October Household Survey and the vast majority of these workers earned average monthly incomes in the range R1-R999. In urban areas the majority of people working in these jobs would be residents of informal settlements and unable to afford formal housing. Workers in such "elementary occupations" are by no means the worst off sections of the economically active population. The 1995 October Household Survey discloses that rates of unemployment show an inverse relationship with size of urban area; for metropolitan areas rates are 21.3 percent, for secondary cities 26.9 percent and for small towns 27.5 percent. The unemployment situation in urban areas is currently worst among both males and females in the age group 15-24 years. In metropolitan areas unemployment levels for this particular age group are 35.6 and 42.5 percent for males and females; comparable figures for secondary cities and small towns are respectively 47.6 percent (M), 59.1 (F) and 47.1 (M) and 54.1 (F). In addition to the recorded unemployed, many others of the potential African workforce have withdrawn completely due to chronic unemployment. This creates a segment of often destitute individuals and households that survive on transfers, such as pensions and various other mechanisms of formal and informal support. New research shows that these most disadvantaged and impoverished sections of the urban fabric reside both within formal townships and in shackland informal settlements.

Profiles of the livelihood strategies of the urban poor, drawn from the 1995 October Household Survey data, support many of the above observations. First, it is evident that almost half of the urban poor are engaged in forms of wage or salaried employment. This group of the working poor in the cities confirm that whilst poverty and unemployment represent major challenges for urban policy, it is important not to overlook the situation of poverty within urban labour markets (Bhorat et al., 1997). Second, a significant section of urban households are welfare dependent or combine welfare receipts with other income sources derived from either wage or self employment. In particular, the proportion of welfare dependent households is especially important outside of the metropolitan areas, reaching one-third in the case of secondary cities and over 40 percent in small towns. Third, the highest recorded levels for the category of self-employment occur in the shacklands of metropolitan areas where almost 45 percent of households derive at least a portion of household incomes from the informal sector or micro-enterprises.

Lastly, in terms of the changing markers of urban poverty and the new population dynamics of South African cities, it is important to acknowledge the new significance of communities of international migrants. South Africa's borders are extremely porous and it is widely accepted that the flow of both legal and undocumented migrants to the country from the Southern African
Development Community region and beyond has grown markedly since 1990 (Crush, 1997). Many of these new migrants have taken up residence in urban areas seeking to secure temporary or permanent work opportunities. Although our knowledge of the scale, activities and position of these international migrants in South Africa's cities is as yet unclear, limited case study evidence from more geographically marginal informal settlements indicates the probability that a "significant proportion" of those living in poverty in urban South Africa may well be such new immigrants (McCarthy & Hindson, 1997:27).

3. THE ROLE OF URBAN AGRICULTURE IN POVERTY ALLEVIATION

In discussing the potential role of urban agriculture in poverty alleviation in South Africa, two themes will be discussed. At the outset, however, it is important to acknowledge that the concept of urban agriculture is somewhat fuzzy and ill defined, often being considered as 'urban' because it falls within local administrative boundaries. Indeed, the result is "that much of what is described as urban could equally well be described as rural" (Webb, 1996:70). Of particular concern is the blurring of urban with that of peri-urban activities, a feature that is common in the majority of international and local research undertaken on 'urban agriculture'.

In this section, the broader significance of poverty strategies that strengthen the asset base of the poor will be highlighted. Against this backcloth, the contours of policy debate surrounding 'urban agriculture' in South Africa are delineated.

3.1 Strengthening the assets of the urban poor

Over the past decade a considerable body of international research has appeared concerning strategies for urban poverty alleviation. The international experience of poverty alleviation programmes suggests that urban poverty is not a static condition among individuals, households or communities (Moser, 1996). Rather, it is recognised that while some individuals or households 'are permanently poor, others become impoverished, as a result of general life-cycle changes, specific events such as the illness of a main income earner, or a deterioration in external economic conditions" (Rakodi, 1995:42). Because people move into and out of poverty, the dynamic concept of vulnerability is increasingly applied to understand these processes of change in urban areas (Moser, 1996: 2). The asset bases of the poor and the management of their complex asset portfolios counter vulnerability to poverty. Indeed, Caroline Moser (1997: 1) argues that the "more assets that individuals, households and communities have, and the better they are managed, the less vulnerable they
are; the greater the erosion of their assets the greater their insecurity, and associated poverty”. Poverty in urban areas is therefore characterised by not only a lack of assets and an inability of the poor to accumulate an asset portfolio but an inability to devise an appropriate coping or management strategy (Rakodi, 1995:414).

It is useful to differentiate the assets of the urban poor, both tangible and intangible, into the following categories (Moser, 1996, 1997; Moser and Holland, 1996):

- **Human Capital**: health status, which determines the poor's capacity for work, and education and skills, which determine the return to their labour.

- **Productive Assets**: for poor urban households, housing and infrastructure are viewed as the most important in this category.

- **Household Relations**: a mechanism for pooling income and sharing consumption.

- **Social Capital**: this refers to reciprocity within communities and households based on trust deriving from complex social ties, networks and associations.

- **Labour**: which is commonly recognised as the most important asset of the urban poor.

Although disputed by some observers, the international consensus points to the importance of creating a broad set of programmes to address urban poverty through strengthening the asset base of the poor. Key initiatives are required to expand, *inter alia*, the asset base of the poor in terms of improving human capital, augmenting social capital, and strengthening productive assets and household relations. Potential threats to these assets, such as violence and crime, should be addressed (Moser and Holland, 1997; Moser *et al*, 1998). Lastly, and of greatest importance, are the imperative for programmes that will assist the poor in terms of expanding and improving the use of their labour. Urban agriculture offers one such policy opportunity for strengthening the asset base of the urban poor, not least in South Africa.

### 3.2 Debating the role of urban agriculture

During the past decade urban agriculture as a policy issue has been 'discovered' by South African researchers. A steady stream of writings and analysis has appeared which has contributed to debates on its role in addressing poverty
In terms of debates surrounding urban poverty, the current literature essentially divides into two different streams of writings. First, the mainstream is formed by a set of generally optimistic writings on the potentially very positive contribution of urban agriculture for strengthening the asset base of the South African urban poor. Second, there exist a set of more critical assessments on the potential for urban agriculture in addressing the challenges of urban poverty. In a set of arguments which parallel the international literature on urban agriculture, a number of local studies in South Africa suggest that groups of urban cultivators should be viewed as a special category of survivalist SMMEs (small, medium and micro-enterprise) which have an important future role as poverty alleviation actors. The promotion of urban agriculture is variously seen as contributing towards food security, the generation of providing productive income opportunities and as a strategy that is particularly geared to assisting the poorest of the urban poor (Thorgren, 1998). An array of South African research, based on local experience of cultivators, promotes a generally positive view of the potential for local intervention to assist communities of urban cultivators (Kelly, 1992, Rogerson, 1993a, 1993b, 1996, Katzschner, 1995 and Karaan, 1996). Accordingly, it has been argued that there is a need for policy makers to intervene and address the needs of urban cultivators, the largest group of whom are primarily women-headed households which are either remittance or welfare dependent (May and Rogerson, 1994, 1995). Typically, in one Soweto case study,
it was concluded that "urban agriculture is a successful strategy for the immediate relief of hunger and malnutrition and is a way for women to gain a foothold in the urban economy" (Kelly, 1992: 17). More recently, an evaluation of an urban food gardens initiative in Cape Town enthused that "urban agriculture offers gardeners an opportunity to become involved in a development strategy which holds tremendous potential and which can expand into an entrepreneurial activity if due attention is paid to issues of policy, agricultural development, land reform and the creation of livelihoods" (Karaan, 1996:1).

Outside of South Africa's metropolitan areas, once again, optimism has been expressed regarding urban agriculture in poverty alleviation. Most importantly, in a major investigation of Free State Province it was stressed that in the peri-urban areas of secondary cities and small towns, the potential for promoting the poor's greater access to natural resources and of establishing an active peri-urban agricultural sector requires serious investigation and support measures designed to improve their access to cultivable land (Task Team et al., 1997).

Overall, the argument is forwarded that if urban planning in South Africa is to become gender-aware, it will be essential for local planners to deal with the needs of these groups of cultivators (Rogerson, 1996a:79). Suggestions and guidelines for how positive planning for urban agriculture can play a useful role in reconstruction initiatives for sustainable urban development have been offered (May & Rogerson, 1994, 1995).

At a time ironically when a number of local authorities in South Africa, led by Durban, are beginning to explore the possible development of policies for assisting cultivators, other research findings are suggesting a degree of caution in seeing urban agriculture as anything more than an alternative safety net for the urban poor. In particular, the rich and important studies by Nigel Webb (1996, 1998) are highly critical of its prospects. Essentially, Webb (1996) argues that the role played by urban cultivation is exceedingly modest and that most of the optimistic claims made in South Africa on behalf of urban agriculture are more congruent with development discourse than with actual cultivation practice. In several respects Webb's (1996) work confirms findings of May and Rogerson (1995) that urban agriculture is not a refuge for 'the poorest of the urban poor' because the percentage of households in the ultra-poor participating in cultivation was considerably lower than those groups with higher income levels. In small towns of the Eastern Cape, such as Port Alfred, it was evident that urban agriculture "did not provide a significant strategy for the poorest of the poor" (Webb, 1996: 105). Moreover, as compared to alternative livelihood strategies adopted to increase household welfare in among the poor, urban
cultivation was not the most important strategy. Indeed, it is contended that the promotion of urban agriculture carries the danger of 'locking' the poor into a set of practices that consolidate their poverty and that overcoming poverty involves "assisting the poor with access to extra-agricultural activities practised by the affluent" (Webb, 1996:153). In general, cultivation "is not able to meet basic household needs" and thus it is perhaps not surprising that the urban poor will not adopt such practices to any significant extent (Webb, 1996:273). Finally, the clear conclusions are offered that urban cultivation should not be adopted "as a hedge against poverty" (Webb, 1996:275) and that in South Africa to seek the amelioration of urban poverty "in urban cultivation or a particular conception of 'urban agriculture' is misguided".

The perspective of Webb (1996, 1998) is not one that is anti-developmental or against the practice of promoting urban agriculture. Rather, Webb's work is essentially making a plea for urban cultivation to be understood in terms of those who undertake the activity. Overall, it is hoped that such an approach, which would include theory and a specific view of development, would "generate a discourse more in line with the practice, views and aspirations of the cultivators themselves" (Webb, 1998:105).

4. CONCLUDING REMARKS

Poverty is one of the most critical challenges that confront post-apartheid South Africa (May, 1998). This article has sought to locate on-going debates concerning urban agriculture in South Africa within the context of an analysis on urban poverty and strategies for poverty alleviation. It was shown that the spatial distribution of urban poverty is uneven with small towns, secondary cities and informal shacklands emerging as the major problem areas for policy attention in South Africa. New urban policy initiatives introduced since 1994 offer a window of opportunity for promoting urban agriculture as a potential policy tool for strengthening the asset base of South Africa's urban poor.

In the final analysis, the jury must, perhaps, still be out on the question of urban agriculture's role as a means to augment the asset base of South Africa's poor urban households. More especially, in light of the so far limited promotional work by South African governments (at all levels - national, provincial and local) of urban agriculture as a specific tool for poverty redressal, it is perhaps too early to offer firm conclusions on its overall merits or demerits. A strong case, however, exists for the launch of new research initiatives to interrogate at all levels of the South African urban system - metropolitan centres, secondary cities and small towns - the economic role of urban agriculture as a special case for poverty alleviation. Of particular importance is to examine the opportunities
and threats for urban agriculture to build the asset base of the urban poor in South Africa.

REFERENCES


