Property Assessment for Rating Purposes in Southern and East Africa: Present Status and Future Prospects

Riël CD Franzsen University of South Africa

Paper to be presented at the 8th annual conference of the Pacific Rim Real Estate Society in Christchurch, New Zealand, from 21-23 January 2002.

Note:

This paper reflects on preliminary results of a research project, funded by a David C. Lincoln Fellowship grant, undertaken on behalf of the Lincoln Institute of Land Policy, Cambridge, Massachusetts on land-value and other property tax systems in some of the member states of the Southern African Development Community (SADC) specifically (2001) and member states of the British Commonwealth generally (2002). The views expressed in this paper are those of the author and should not be attributed to the Lincoln Institute of Land Policy.

Abstract

This paper presents a brief and exploratory overview of aspects of property assessment for rating purposes in nine southern and eastern African countries. Generally the lack of properly qualified and skilled valuers presents itself as a serious stumbling block in improving the quality of *ad valorem* property tax systems in all of the countries referred to. Capacity building (in the areas of professional, technical and management skills, training, computerisation, collection and enforcement procedures) is imperative. Regional co-operation could also be beneficial.

Author's Contact Particulars:

Professor RCD Franzsen
Department of Mercantile Law
University of South Africa
PO Box 392
Pretoria 0003
South Africa

Tel: + 27 012 429 8504 Fax: + 27 012 429 3343 e-mail: <u>franzrcd@unisa.ac.za</u>

1 Introduction

This paper presents a brief and exploratory overview of property assessment for rating (i.e. property tax) purposes in the following southern and east African countries: Botswana, Kenya, Lesotho, Malawi, Namibia, South Africa, Swaziland, Tanzania and Uganda. It reflects on the current status of the valuation profession in the context of producing and maintaining municipal valuation rolls, highlights a number of key problem areas and tenders possible solutions to some of the problems experienced.

By way of introduction it is pertinent to refer to some basic information regarding the above-mentioned nine countries.

TABLE 1: BASIC INFORMATION REGARDING THE NINE COUNTRIES

Country	Size (km²)	Capital	Population	GDP per capita (US\$)	GDP 2000 est. (US\$)
Botswana	600,370	Gaborone	1.59 million	6,600	10.4 billion
Kenya	582,650	Nairobi	30.77 million	1,500	45.6 billion
Lesotho	30,355	Maseru	2.18 million	2,400	5.1 billion
Malawi	118,480	Lilongwe	10.39 million	940	9.4 billion
Namibia	825,418	Windhoek	1.80 million	4,300	7.6 billion
South Africa	1,219,912	Pretoria	43.59 million	8,500	369.0 billion
Swaziland	17,363	Mbabane	1.11 million	4,000	4.4 billion
Tanzania	945,087	Dar es Salaam	35.31 million	710	25.1 billion
Uganda	236,040	Kampala	23.98 million	1,100	26.2 billion

Source: The World Factbook 2001 - CIA

All of the above-mentioned countries have a colonial history and have had property tax systems introduced by and based on the rating systems of early 20th Century England, Australia and South Africa. In its modern guise property tax was introduced as a source of revenue for local government in South Africa in 1836. From South Africa it spread to South Rhodesia (now Zimbabwe), North Rhodesia (now Zambia), and also to Niassa Land (now Malawi), Tanganyika (now Tanzania), Uganda and Kenya.

2 Property Taxes

Property tax, as an annual tax on the ownership (or occupation) of immovable property (i.e. land and/or buildings), is - as in many countries elsewhere in the world - an important source of local government revenue in all of the above-mentioned countries. However, before dealing with property taxes (or 'rates' as it is known in most of these countries) in this narrow sense, it should be mentioned that in all of these countries the income from, use, acquisition and/or alienation of immovable property is/are generally also taxed by means of other property-related taxes.

2.1 Property-related Taxes at all Levels of Government

TABLE 2: PROPERTY-RELATED TAXES LEVIED

Country	VAT	Property Transfer Tax	Capital Gains Tax	Estate Duty & Donations Tax	Urban Property Tax
Botswana	(2002)	Yes	No	Yes	Yes
Kenya	Yes	Yes	?	Yes	Yes
Lesotho	(2002)	Yes	Yes	Yes	Yes
Malawi	Yes	Yes	Yes	Yes	Yes
Namibia	Yes	Yes	No	No	Yes
South Africa	Yes	Yes	Yes	Yes	Yes
Swaziland	No	Yes	No	No	Yes
Tanzania	Yes	Yes	Yes	No	Yes
Uganda	?	Yes	?	?	Yes

Source: Deloitte & Touche: Guide to Key Fiscal Information: Southern Africa 1999/2000

2.2 Property Taxes at Local Government Level

It is noteworthy that a variety of tax bases are utilized by and even within the various countries.

TABLE 3: TAX BASES PROVIDED FOR IN LEGISLATION

Country	Land value (site value)	Improved value	Site & improvements (as separate objects)	Improvements only	Annual value
Botswana ¹		X			
Kenya ²	X				
Lesotho ³		X			
Malawi		X			
Namibia ⁴	X	X	X	X	
South Africa	X	X	X		
Swaziland ⁵	X	X	X	X	
Tanzania				X	
Uganda ⁶					X

- Although the rate is levied on the (total) improved value, that value is the aggregate of the value of the land and the value of the improvements on the land.
- The Valuation for Rating Act provides for the following bases, namely area rating (rural areas), agricultural rental value rating (rural areas) or site value rating in combination with an improvement rate. In practice only land value is used.
- In practice tax is levied on the value of site plus the value of improvements, although the Act seems to provide for a tax on improvements only. A ground rent (collected by national government) may be payable for the use of land.
- The Local Authorities Act (s 79) provides that with the approval of the Minister, a town council or village council may determine a rate 'upon a basis other than that of valuation'. In practice local authorities use site and improvements (as separate taxable objects) as tax base, with a higher rate on land than improvements.
- Although legislation provides four options, it is not clear yet whether all of these options are actually used in Swaziland.
- The tax base in Uganda is the annual value of the total value of site and improvements.

TABLE 4: TAX BASES UTILISED IN THE CAPITAL CITIES

Country	City	Tax base	Responsible Valuer
Botswana	Gaborone	Aggregate of site + improvements	National government
Kenya	Nairobi	Site only	In-house
Lesotho	Maseru	Aggregate of site + improvements	In-house ¹
Malawi	Lilongwe	Improved value	In-house
Namibia	Windhoek	Site + improvements	In-house
South Africa	Pretoria	Site only	In-house
Swaziland	Mbabane	Site + improvements	Private firm
Tanzania	Dar es Salaam	Improvements only	In-house + private
Uganda	Kampala	Annual value of site + improvements In-house	

¹ From March 2001. Before that date it was the responsibility of national government (Franzsen, 2001b).

TABLE 5: STATUTORY VALUATION CYCLES AND CURRENT PROPERTY ASSESSMENT FOR RATING ISSUES

Country	Valuation Cycles	Current Issues regarding Property Assessment and Rating		
Botswana	max 5 years	\$ Capacity of valuers to prepare proper valuation rolls \$ Comparable market/sales evidence \$ Coverage ratio (rates only levied in 6 jurisdictions) \$ Exemption of low-cost housing \$ Ministerial approval of tax rates \$ Late billing and lump-sum annual payments (in contrast to monthly utility billing) \$ Low collection rate (approximately 65%) \$ Strained council-taxpayer relationships \$ Political interference when councils want to enforce the law \$ Communication with and education of taxpayers to address the lack of understanding		
Kenya	max 10 years	\$ Extending the coverage ratio to peri-urban areas and informal settlements \$ Keeping to statutory valuation cycles \$ Revenue yield is low and generally on the decline \$ Improving collection ratios		
Lesotho	3 years (+ 3) ¹	\$ Extending the coverage ratio (within Maseru) \$ Extension of rates to other municipal and urban councils \$ Lack of capacity to properly assess land \$ The lack of funds and resultant poor services, resulting in non-payment \$ Collection of current and arrear rates		
Malawi	max 5 years	\$ Capacity to assess property and maintain valuation rolls \$ Standard of training of valuation staff \$ Collection of current and arrear rates \$ Taxpayer education		
Namibia	max 5 years	\$ Introduction of a land tax on rural land (commercial farm land) \$ Surpluses on trading services as a subsidy of the rates account \$ Sectional (i.e. strata) titles (valuation and collection of rates) \$ Rates may be levied on the value of >deemed= improvements (where an undeveloped plot was not improved within an agreed period) \$ Circumvention of conveyancer=s certificates \$ Arrears		
South Africa	max 5 years	\$ Diversity of tax bases (e.g. site value versus capital improved value) \$ Exclusion of 'public infrastructure'		

		\$ Taxation of agricultural land and communal land \$ Valuation methodology and capacity \$ Responsibility for valuation quality control \$ Valuation of sectional title (strata title) schemes \$ Setting of tax rates, differential tax rates and rate- capping \$ Municipal rates (i.e. property tax) policies \$ Capacity of especially non-metropolitan councils to collect (e.g. proper billing) and enforce payment of property taxes \$ Taxpayer education
Swaziland	max 5 years	\$ Limited coverage \$ Wide range of possible tax bases \$ Collection of current rates and arrears \$ Pending reforms
Tanzania	?	\$ Tax base coverage \$ Outdated legislation and policies \$ Capacity to assess property and maintain proper valuation rolls \$ Numerous exemptions \$ Collection of rates \$ Taxpayer education
Uganda	5 years (+) ²	\$ Low coverage ratio \$ Inefficient land information systems \$ Outdated valuation rolls (some more than 20 years) \$ Lack of co-ordination between government valuers and rating authorities \$ Capacity to assess properties is lacking \$ Public relations with taxpayers

The legislation states 3 years, but the responsible minister may extend it annually for an overall maximum of 6 years (i.e a further 3 years).

A number of the problem areas are practically common to all nine countries (with South Africa in most instances, but by no means in all instances, the exception). These could be summarised as:

- \$ Generally a wide range of possible tax bases is available. Especially the option of taxing improvements only (Lesotho, Namibia, Swaziland and Tanzania) is noticeable. It probably stems from a land tenure system in terms of which land belongs to the king or the nation collectively, and only improvements can legally be possessed.
- \$ The introduction or extension of a property taxation, in one form or another to rural properties (e.g. in South Africa, Namibia and to some extent Botswana and Lesotho). This is usually coupled with the demand for the extension of municipal services to more remote rural areas. In a number of countries there are local authorities that do not yet assess properties and levy rates.
- The coverage ratio within jurisdictions (e.g. in informal settlements and peri-urban developments) that do assess properties and levy rates are often suspect (e.g. in Kampala it is estimated at 60% (Nsamba-Gayiiya, 2001) and also in a country like Zambia it is stated as a serious problem (Chirwa, 2000)).
- \$ The shortage of qualified and skilled professionals to survey land, record and maintain an accurate

² The minister responsible may approve an extension (Okellokello and Nsamba-Gayiiya, 1996).

deeds register (proper cadastral information), to assess properties and prepare proper valuation rolls, to do interim valuations, to do regular general revaluations - all of which are usually prerequisites for a legitimate and efficient property tax system. (This applies equally to other countries in southern Africa, e.g. Zambia (Chirwa, 2000) and probably Zimbabwe.)

- \$ >Country-appropriate= and theoretically sound valuation and rating legislation generally seem to be in place. However, putting the legal principles into practice in an equitable and sustainable manner is difficult with political interference reported in some instances (e.g. in Botswana and Kenya).
- \$ The retention of properly qualified valuers within the civil service is also a serious problem (Botswana, Kenya, Tanzania and Zambia (Chirwa, 2000)).
- \$ Statutory valuation cycles are not adhered to. In may instances valuation rolls are hopelessly outdated (e.g. in Maseru (Lesotho), Nairobi (Kenya) and generally throughout Uganda).
- \$ Outdated rating systems, legislation and practices abound.
- \$ Assessment for rating purposes is not a priority for government valuers (Kenya and Lesotho).
- \$ Lack of understanding of assessment by municipal officials responsible for rating (Zambia, Uganda).
- \$ All nine countries lack appropriate practical training programmes.
- There is little if any regional co-operation between professional associations (all countries), or in some instances a total absence (Lesotho, Swaziland) or a dormancy (Uganda) of professional associations.
- \$ There is an absence of statutory-required external quality controls with regard to municipal valuation rolls (in all nine countries).
- S Often there is only limited technical and logistical support (such as computer hardware, software, vehicles, etc) exists (Kenya, Tanzania, Zambia).
- \$ Land tenure reform programmes and government policies (e.g. privatisation) in some instances result in an increased workload (South Africa, Zambia).
- \$ Collection and enforcement leave much to be desired in all nine countries.
- \$ Taxpayer education is mentioned as an area that has to be addressed to improve public knowledge and perceptions regarding assessment, rating and the provision of local government services (South Africa, Tanzania and Uganda).

3 Specific Issues regarding Assessment for Rating (i.e. Property Tax) Purposes

3.1 Municipal Assessment: Lack of Capacity

One of the most critical issues in southern Africa is the lack of capacity to assess properties for property tax purposes. In many countries (South Africa being - for the most part - an exception) valuation rolls are generally out of date, undermining the tax base and also the legitimacy of rating as an important source of local revenue. Current events in Nairobi, Kenya (see *IPTI Observer*, 2001) and Cape Town, South Africa (Marten, 1999) are striking examples of the problems that can occur if revaluations are undertaken irregularly.

TABLE 6: REGISTERED OF VALUERS AND RESPONSIBILITY FOR VALUATION ROLLS

Country Number of Valuation Rolls					
	registered valuers	In house valuers	Government valuers	Private valuers	Govt quality control
Botswana	60	No	Yes	No	No
Kenya	<400	Yes	Yes	No	No
Lesotho	<6	No	Yes	No	No
Malawi	<20	Yes	Yes	Yes	No
Namibia	<10	Yes	No	Yes	No
South Africa	2,030	Yes	No	Yes	No
Swaziland	<6	No	No	Yes	No
Tanzania ¹	<150	Yes	Yes	Yes	Limited
Uganda	25	Yes	Yes	Yes	No

Although most local authorities have in-house valuers, the responsibility for the preparation of valuation rolls have been that of the national government, utilizing private contractors (Kelly and Masunu, 2000).

As Table 6 clearly indicates, there is a serious problem in respect of the capacity to properly assess properties for property tax purposes. With the exception of South Africa, Kenya and Tanzania, the number of registered valuers are very low. Even in South Africa it is argued that the valuers= profession will probably not be able to cope with the implementation of the proposed new dispensation when the Property Rates Bill is enacted (Marten, 1999; Franzsen and McCluskey, 2000). Lack of capacity is also stated as a serious problem in Kenya (Konyimbih, 1996; Olima, 2000) and Tanzania (Masunu, 2000; Masunu, 2001). The position is similar in other countries within southern Africa, such as Zambia (Chirwa, 2000). Further afield, Nigeria with a population in excess of 120 million people, only has about 1,400 valuers (Olunbunmi, 2001).

The critical shortage of skilled valuers and technical staff requires urgent attention. There are no proper training facilities in Botswana, Malawi, Namibia, Lesotho, Swaziland, Uganda or Zambia at present. Kenya, South Africa, Tanzania and Zimbabwe offer - to a lesser or larger extent - appropriate academic programmes at university and/or technikon level. Regional co-operation (e.g. regional training facilities) seems to be the way forward.

It is suggested that national professional institutions (e.g. the Tanzanian Institution of Valuers and Estate Agents (TIVEA), Kenya Institute of Surveyors and the South African Institute of Valuers) should also work toward closer co-operation.

International professional institutions (e.g. RICS, IAAO, IPTI, IRRV) could also play an important role in building capacity through the provision of appropriate practical training programmes. It is important to point out, however, that international assistance must be appropriate and the goals set sustainable. Not one of the countries presently monitor the quality of municipal valuation rolls at a provincial or

national level of government. South Africa is to introduce quality control when the Local Government: Property Rates Bill is eventually enacted (Franzsen, 2000b). Where valuation rolls in Tanzania have been prepared by private contractors, limited and informal quality control by government officials has occurred (Kelly and Masunu, 2000), although this is not required by legislation.

3.2 Responsibility for Municipal Valuations

The question could be asked: Who should be primarily responsible for preparing municipal valuation rolls - national government, in-house departments (i.e. municipal employees) or private contractors?

It is noteworthy that in some countries there are pressures to move towards privatising property assessments (e.g. Botswana, South Africa and Swaziland), whereas in others to appoint in-house municipal valuers (Lesotho and Tanzania). Presently some of the larger municipal councils in Namibia and South Africa have in-house departments responsible for valuations, whereas smaller councils make use of private valuers. In Kenya, Malawi, Uganda and Zambia government valuers are generally responsible for municipal valuation rolls in respect of smaller councils.

3.3 Assessing Traditional Forms of Land Tenure, Communal Land and the Concept of >Value=

The extension of the rates base to include communal land and land held in terms of traditional forms of land tenure is on the cards in South Africa (Franzsen, 2001b) and has been mooted in other countries too. This will present new challenges to the valuation profession.

The concept of 'value' itself presents possible challenges. Mwasumbi (2001) cites the example of the typical Swahili house where the concept of 'space' is perceived quite differently when compared to a 'western perception' thereof. Maybe one could add that not only is valuation as much an art as a science, but also a culture?

3.4 Lessons

There are some lessons to be learnt from current property tax reforms in South Africa and elsewhere in southern and eastern Africa:

- The drafting process should be transparent and consultative, involving all stakeholder groups. Where reforms also pertain to property assessment, it is imperative that the property valuation profession must be consulted in a constructive manner this has unfortunately not happened in South Africa or elsewhere (Franzsen, 2001b; Nsamba-Gayiiya, 2001) to date.
- \$ Ideally the legislative provisions pertaining to valuation of properties (for rating and/or other purposes) and those pertaining to property tax administration should be addressed in different statutes. This is unfortunately not happening in South Africa.
- Although various large municipalities in South Africa have in-house valuation departments with unique assessment expertise, municipalities should preferably not be seen to be involved in the assessment process. Assessment issues and tax issues should be kept apart. Valuations should not be manipulated or corrupted to attain equity. Equity is best attained through proper property categorisation, adjustments to tax rates or the use of tax rebates.
- \$ Ministerial (i.e. political) control or intervention, especially in assessment-related matters, should be limited or preferably avoided altogether (Chirwa, 2000; Franzsen, 2001a; Nsamba-Gayiiya, 2001).
- \$ Legislation should not be too detailed (e.g. listing property categories or valuation methodologies), nor should it be left vague or ambiguous (e.g. in respect of something as crucial as the tax base).

- \$ The tax base should be as inclusive as is practically possible, exclusions should be avoided and exemptions kept to a minimum. Valuation rolls should ideally reflect all properties, even those excluded from the tax base or exempted from paying tax.
- Valuation rolls should not be too detailed. In Botswana, Lesotho, Malawi, Namibia, South Africa and Swaziland valuation rolls must reflect three values (i.e. land value only, improved value and also the value of improvements) irrespective of the actual tax base used. This is costly and time consuming.
- Successful property tax reforms are usually 'collection-driven' rather than 'valuation-pushed' (Kelly, 2000). Reforms in Tanzania since 1993 have been valuation-driven (Kelly and Masunu, 2000). It is probably correct to say that proper valuation and efficient collection are both prerequisites for successful reform. Pilot studies generating valuation rolls using computer-assisted mass appraisal (CAMA) have recently been undertaken in two small towns (Nyeri and Mavoko) in Kenya and also in rural areas of South Africa (Ward, 2001) with apparent success. However, it must be remembered that CAMA is data hungry, requires high levels of skills and also requires appropriate computer hardware and software presenting problems in most if not all nine countries.
- \$ Before any reforms are implemented, it must be clear that the goals set are attainable. The capacity to assess properties and to collect and enforce the tax must exist and be maintained (Ahene, 2001).
- Successful reforms require the support, commitment and proper comprehension of municipal and national politicians, municipal officials and taxpayers. If the reforms are not perceived as necessary and legitimate, it is bound to fail. Taxpayer education is critical (Franzsen, 2001a; Nsamba-Gayiiya, 2001, Masunu, 2001).

4 Conclusions

It is commonly acknowledged throughout southern and eastern Africa that property tax is an important source of revenue for local government and that there is much scope for improvement in all of the important aspects that are integral parts and prerequisites for a well-administered property tax system.

A crucial element is that of property assessment. On the one hand the preparation of a proper valuation roll requires accurate data pertaining to rateable property parcels, but on the other hand, it is all in vain if the tax assessed is not collected. The municipal valuer, albeit unwillingly, is a team player. His/her own performance unfortunately is dependent on how the other players (e.g. those responsible for accurate property records and those responsible for tax collection and enforcement) perform. It will take a considerable effort and commitment on the part of all concerned if the current, rather dismal state of municipal assessment for rating purposes is to improve significantly.

References

- Ahene, R. 2001. 'Land Policy and Land Taxation in Malawi', paper presented at the *International Conference on Local Government Property Taxation* organised by the *Institute of Revenues, Rating and Valuation* and the *International Property Tax Institute*, Cambridge, United Kingdom, 23-25 May.
- Chirwa, B.B. 2000. 'Property Taxation in Zambia', paper presented at the *African Property Tax Renaissance Conference* hosted by the International Property Tax Institute, Cape Town, South Africa: 21-23 June.
- Cloete, C.E. and Chikiafalimani, S.H.P.2001. 'Overview of the Property Industry in Malawi', paper presented at the 3rd African Real Estate Society Conference, Arusha, Tanzania: 23-25 October.
- Franzsen, R.C.D. 2001a. 'Property Tax Reforms in South Africa', paper presented at the Lincoln Institute of Land Policy and City of Porto Alegre conference regarding *Opportunities for Improving the Equity and Efficiency in Property Tax Administration*, Porto Alegre, Brazil: 27-30 April.

- Franzsen, R.C.D. 2001b. 'Future Prospects for Property Taxation in Southern Africa', paper presented at the 3rd African Real Estate Society Conference, Arusha, Tanzania: 23-25 October.
- Kelly, R. 2000. 'Designing Effective Property Tax Reforms in Sub-Saharan Africa: Theory and International Experience', paper presented at the *African Property Tax Renaissance Conference* hosted by the International Property Tax Institute, Cape Town, South Africa: 21-23 June.
- Kelly, R and Masunu, Z. 2000. 'Implementing Property Tax Reform in Tanzania', paper presented at the *African Property Tax Renaissance Conference* hosted by the International Property Tax Institute, Cape Town, South Africa: 21-23 June.
- Konyimbih, T. 1996. 'Aspects of rating practice in Kenya' in *Property Tax in Eastern and Southern Africa: Challenges and Lessons Learned* MDP Working Paper 2.
- Konyimbih, T. 2001. 'Urban Ad Valorem Land Tax: Implementation Experiences in Some Kenyan Towns' Journal of Property Tax Assessment and Administration (Vol 6 No 3) pp 19-44.
- Marten, R. 1999. 'Practical implications arising from pending changes to the municipal valuation and rating systems in the new South Africa=, paper presented at the *World Valuation Congress VIII*, Melbourne, Australia: 19-21 April.
- Masunu, Z. 2001. 'Property Tax Reforms in Tanzania Case Study Dar es Salaam and Eight Major Urban Centres', paper presented at the 3rd African Real Estate Society Conference, Arusha, Tanzania: 23-25 October.
- Monagen, N. 2000. 'Property Tax in Botswana', paper presented at the *African Property Tax Renaissance Conference* hosted by the International Property Tax Institute, Cape Town, South Africa: 21-23 June.
- Mwasumbi, A. 2001. 'The Challenge in Applying the Sales Comparison Approach to Value in Residential Properties in Tanzania', paper presented at the 3rd African Real Estate Society Conference, Arusha, Tanzania: 23-25 October.
- Nsamba-Gayiiya, E. 2001. 'Property Assessment and Taxation in Uganda', paper presented at the *International Conference on Local Government Property Taxation* organised by the *Institute of Revenues, Rating and Valuation* and the *International Property Tax Institute*, Cambridge, United Kingdom, 23-25 May.
- Olima, W.H.A. 1999. 'Real Property Taxation in Kenya' in McCluskey, W.J. (ed.) *Property Tax: An International Comparative Review* Ashgate: Aldershot.
- Olima, W. H.A. 2001. 'Property Tax Issues in Kenya', paper presented at the *International Conference on Local Government Property Taxation* organised by the *Institute of Revenues, Rating and Valuation* and the *International Property Tax Institute*, Cambridge, United Kingdom, 23-25 May.
- Olubunmi, A.S. 'The Training of Real Estate Professionals and its Effects on Inter-professional Cooperation: A Nigerian Experience', paper presented at the 3rd African Real Estate Society Conference, Arusha, Tanzania: 23-25 October.
- Silayo, E.H. 2001. 'The Real Property Cadastre in Tanzania', paper presented at the 3rd African Real Estate Society Conference, Arusha, Tanzania: 23-25 October.
- Ward, R. 2000. 'Can CAMA and GIS Work in Rural Africa?', paper presented at the *African Property Tax Renaissance Conference* hosted by the International Property Tax Institute, Cape Town, South Africa: 21-23 June.