



Title: Livelihood change in rural Zimbabwe over 20 years: insights from wealth ranking

Citation: Mushongah, Josphat, and Ian Scoones. "Livelihood change in rural Zimbabwe over 20 years." *Journal of Development Studies* 48.9 (2012): 1241-1257.

Official URL: <http://www.tandfonline.com/doi/abs/10.1080/00220388.2012.671474>

More details/abstract: This paper explores the changing livelihood strategies among a group of households in southern Zimbabwe across 20 years. The study uses a 'wealth ranking' method to examine livelihood change, combined with survey approaches and in-depth interviews. The sample households studied in the 1986-87 were all traced two decades on and transitions in ranks were explored. In addition, a set of 'secondary households', offshoots of the original 'primary households', were also traced revealing important changes in livelihood opportunity for the next generation. The key dynamics of livelihood transitions over this period are highlighted, along with the implications these have for rural development policy.

Version: Submitted version (Author's Original Manuscript)

Terms of use: This is an Author's Original Manuscript of an article whose final and definitive form, the Version of Record, has been published in the *JOURNAL OF DEVELOPMENT STUDIES*, 2012, copyright Taylor & Francis, available online at:

<http://www.tandfonline.com/doi/abs/10.1080/00220388.2012.671474>

This is a download from OpenDocs at the Institute of Development Studies

Livelihood change in rural Zimbabwe over 20 years: insights from wealth ranking

Abstract

This paper explores the changing livelihood strategies among a group of households in southern Zimbabwe across 20 years. The study uses a 'wealth ranking' method to examine livelihood change, combined with survey approaches and in-depth interviews. The sample households studied in the 1986-87 were all traced two decades on and transitions in ranks were explored. In addition, a set of 'secondary households', offshoots of the original 'primary households', were also traced revealing important changes in livelihood opportunity for the next generation. The key dynamics of livelihood transitions over this period are highlighted, along with the implications these have for rural development policy.

Introduction

Most insights into rural and agrarian change are based on snapshots. There is often poor understanding of longer-term changes, and the implications this has for changing livelihoods. Yet livelihoods are always dynamic, involving transitions between different strategies (Ellis, 2000). Livelihoods comprise a range of elements – including assets, resources, claims and capabilities (Conway and Chambers, 1992; Bebbington, 1999). Any study of rural livelihood change must capture this diversity, focusing on on- and off-farm income, the individual and household material asset base, social connections and relations, health and disease status, among other variables (Scoones, 1998). Each, in turn, is influenced by different drivers, whether demographic, environmental, economic or political (Carney, 1998). Over time, a number of livelihood change processes can be distinguished.

Dorward (2009) contrasts processes of 'stepping up' (accumulating household assets and improving income and well-being through local production), 'stepping out' (diversifying income sources, including off-farm work) and 'hanging in' (surviving through a mix of local farm production, labouring and off-farm income earning). Mushongah (2009) adds the category 'dropping out' to encompass those who are destitute, reliant on external support or in the process of migrating away.

Using Dorward's framework to analyse long-term livelihood change in Mazvihwa communal area in southern Zimbabwe, this paper assesses the effectiveness of a repeat use of the wealth ranking methodology (Grandin, 1988), combined with household surveys and in-depth biographical interviews, to illuminate the complex dynamics of livelihood change in southern Zimbabwe over a 20 year period. The paper contributes to a growing body of literature on methods for understanding livelihood change. For example, longitudinal panel surveys, life history interviews, sustained ethnographic studies and some participatory appraisal methods have all been tested (cf. Baulch and Scott, 2006; Davis and Baulch, 2009; Whitehead, 2002; Narayan *et al.*, 2000). In different ways they offer important insights into poverty dynamics (Baulch and Hoddinot, 2000; Addison *et al.*, 2009), and in particular the role of asset thresholds in livelihood transitions (Carter and Barrett, 2006). Much work recognises the importance of combining quantitative and qualitative methodologies (White, 2002; Kanbur, 2003; Hulme and Toye, 2006), while acknowledging the challenges (Kanbur and Shaffer, 2006). This in turn is allied to a long tradition of holistic approaches to livelihood analysis, encompassing diverse methodological traditions (Francis, 2000; Murray, 2002).

A unique opportunity to contribute to this debate arose as part of a study of long-term livelihood change in southern Zimbabwe. This work complements a number of important panel studies looking at changes in poverty and livelihoods in Zimbabwe's rural areas, both more broadly through repeat surveys (Alwang *et al.*, 2002; CSO, 1998) and in the resettlement areas through a long-term panel study (Gunning *et al.*, 2000). The Mazvihwa study allowed a highly focused assessment of livelihood change over 20 years – from 1986-87 to 2006-07¹ – centred on the application of a 'wealth ranking'

methodology among a small sample of households, all of whom were traced in the follow-up study. This paper therefore has two aims. The first is to reflect on and test the applicability of wealth ranking as a methodology for understanding patterns of livelihood differentiation, and as a way of tracking livelihood change over time. The second, building on the results of this approach, is to offer insights into livelihood change in this particular context over a 20 year period; a time when major shocks and stresses have impinged on people's livelihoods, with the aim of examining local responses and consequences both for development policy and for agrarian change more generally. The two studies which this paper draws on were undertaken as part of the PhD studies in the same area, working with the same sample of households, but separated by a period of 20 years (Scoones 1990; Wilson, 1990; Mushongah, 2009). The wealth ranking methodology was used in the 1986-87 study and reported in Scoones (1995). Exactly the same approach was used in the repeat study, including involving the same workshop facilitators and many of the same informants.

The study site is situated in Zvishavane district in the Midlands province of southern Zimbabwe. Mazvihwa communal area is a dryland smallholder farming area, where crop farming combines with livestock rearing, and off-farm activities. As with most nearby communal areas, migration to work in towns, mines and farms has been characteristic of people's livelihood strategies (Potts, 2000). Over many years, livelihoods in this region have been marginal, with extensive and entrenched poverty (Campbell *et al.*, 2002). There has been much continuity, with farming systems and livelihood strategies showing broad stability. Yet there has also been change. With Independence in 1980 came investment in education and health services, which affected the opportunities for many. There have also been major droughts, often decimating crop production and causing large livestock mortalities (notably in 1982-4 and 1991-2), resulting in shifts in livelihood strategies, including the taking up of illegal off-farm activities such as gold panning and cross-border trading to South Africa (Scoones *et al.*, 1996). From the 1990s the HIV/AIDS epidemic hit rural populations hard, peaking in the late 1990s, with major impacts on household structures, labour and gender and other social relations (Feeney, 2001)ⁱⁱ. From 1991 structural adjustment had dramatic effects on the formal economy, with

reductions in employment opportunities and a retreat in state support (Marquette, 1997). In many ways this pre-figured the economic decline which started in the late 1990s, the result of fiscal indiscipline, political patronage and economic mismanagement which accelerated through the 2000s, resulting in hyperinflation and ultimately the almost complete collapse of the formal economy (Bond and Manyama, 2003). Land reform was an important part of government policy from Independence (Moyo, 1995), but the resettlement programmes of the 1980s and 1990s had little impact on Mazvihwa, although substantial out-migration to frontier areas in the Zambezi valley was important (Nyambara, 2001). From 2000, the land invasions and the subsequent 'fast-track land reform programme' had significant ramifications for those living in Mazvihwa and the country as a whole (Hammar *et al.*, 2003). The political and economic crisis in the period from 2000 has had a huge impact on the country in terms of macro-economic indicators, provision of state services and indicators of human development (Raftopoulos, 2009).

Over this 20-year period, therefore, there have been a range of shocks and stresses – ecological, economic, social and political - affecting livelihoods in different ways. In this paper we want to ask a set of simple questions. What happened to people's livelihoods over this time? What factors, at different times, influenced livelihood change, precipitating patterns of 'steeping up', 'steeping out', 'hanging in' or 'dropping out'? The paper is organised as follows. In the next two sections, we introduce the methodology, both the details of the sampling and the wealth ranking method. Next, the data from Zimbabwe are presented, both in terms of local perceptions of wealth across the two time periods, and in terms of the livelihood transitions observed. These are further highlighted by two illustrative cases. The final section concludes with an overview of the findings and a discussion of their implications for development policy and practice.

Tracking household change

In 1986-87 a small sample of 71 households (made up of 721 individuals) was defined. This was selected across a series of household clusters in a way that represented a range of different

households, according to some key criteria, notably cattle ownership (Scoones, 1990; Wilson, 1990)ⁱⁱⁱ. Comparing with wider survey data (e.g. Jackson and Collier, 1988), the sample was broadly representative of the rural population in communal areas in this part of the country. Being a small sample, intensive interaction was possible over a sustained period of fieldwork. Indeed, contact with many households was maintained over 20 years, which made the re-study feasible, and widely welcomed. This process was made even easier as the author of the 2006-07 study (Mushongah, 2009) had worked during the 1990s in local government in the area as an assistant district administrator, and so already knew many people.

In this paper we term the original sample households, 'primary households'. For the re-study much effort was invested in tracing all of these. While five households had dropped out because of deaths and a lack of a next generation to maintain them, all others were traced. Thus the re-study had a sample of 66 primary households, representing 979 individuals. Because of the relatively small sample size and the good contacts with people, the problems of tracing households and sample attrition, which so often undermines other longitudinal studies and panel survey, was substantially reduced (Rose, 2000; Alderman *et al.*, 2001).

By 2006-07 most of the original 71 primary households were still resident in Mazviwha (78%), but others had moved to frontier districts as part of informal migration to new rural areas (4%), to pre-2000 resettlement schemes (1%) or to the new resettlement areas as part of land invasions and fast-track land reform (10%). Only one household proved very difficult to locate. Mandebvu (not his real name) migrated to Hurungwe district, around 500 km away. He had completely lost contact with his close relatives, including those who remained in Mazvihwa. No one knew anything about him, let alone his whereabouts. It took almost two weeks to trace him. He was eventually found in a commercial farming area, but had just lost his job as a farm worker, although he had been given a temporary residence and a piece of land at a neighbouring farm, in exchange for his labour.

Of course 20 years on, there had been a substantial demographic shift in the original primary households, with important consequences for household structure and livelihood strategies. The average age of the household head^{iv} in the 1986-87 study was 49.5 (range 29-93 years), but by 2006-07 it was 62.4 (with an even larger range of 18-90 years). In some cases the household had been taken over by a son, especially when the father died. In three such cases, the mother was still resident and the household retained its unity, although with a different composition.

In order to have a sample linked to the original one, but of a more comparable age profile to the primary households in 1986-87, a group of 173 'secondary households' was defined. These were all households established by male children or other extended family members who were resident in the original primary households. Daughters were also traced but, because of patrilocal and patrilineal descent systems households are usually established by men on marriage, only male-origin households were included in the definition of secondary households.

The tracking data showed the wide dispersal of next-generation households, including abroad in the diaspora, notably in South Africa (8.1%), Botswana (1.2%) and the UK (1.7%). This generation also took up resettlement opportunities, both before (5.2%) and after 2000 (6.9%), and some moved to other districts as part of informal rural-rural migrations (7.5%). While overall 36.4% of secondary households established rural homes close to their parents (32.9% with independent fields), a comparable proportion (32.9%) had established homes in Zimbabwean towns and cities, without a rural home base. This pattern of migration and household location is a major departure from earlier forms of circular migration, involving a temporary absence in town for work, having established a rural home following marriage.

For the study of livelihood change in 2006-07, there were therefore two samples – the primary households (N=66) and a sub-set of all secondary households who had established new homes with independent home fields in Mazvihwa communal area (N=57) plus five households with independent

home fields in a 'fast-track' resettlement area immediately adjacent (total N=62). Some emerging secondary households in both sites, while having a separate home shared the primary household's home field, and so were not included in the sample. These 62 secondary households had an average age of household head of 32.7 years (range 21 to 71)^v.

Wealth ranking: understanding differentiation and longitudinal change

Wealth ranking is a simple, participatory research tool that evolved from the 1980s alongside the growth of participatory rural appraisal (Grandin, 1983, 1988; Guijt, 1992). It has been widely used to gain qualitative understandings of patterns of social differentiation within communities, and as a complement to survey techniques (Hargreaves *et al.*, 2007). The method involves a group of local informants first discussing what they mean by the term 'wealth', in ways that tease apart the multiple meanings and nuanced implications through an in-depth dialogue. Then cards, on which are the names of all households derived from a household list, are sorted into different groups. Multiple groups can be used and an average ranking developed, which is subsequently grouped.

As this approach became widely used, adaptations, refinements, as well as critiques, emerged (Adams *et al.*, 1997). Some have preferred to use a more generic criterion, such as 'well-being' (Gough and McGregor, 2007) or 'success' (Scoones, *et al.*, 2010), to set off the discussion, as it is sometimes felt that 'wealth' is too narrow a concept, and can get focused on income and material assets rather than on wider criteria. Others have argued that the focus on households and household lists ignores some of the more complex domestic relationships that exist between and across notional household units and that, in any case, households are very difficult to define (O'Laughlin, 2007). Picking up on this critique, others point to the problem of focusing on households as a unit, as this misses the many important intra-household relations, and results sometimes in the emphasising of male head livelihood activities, to the exclusion of others, especially women and young people (Guyer and Peters, 1987). A household focus also means that relations between households within 'clusters' can be under-emphasised (Drinkwater 1993). Some have reported that carrying out such

'participatory' exercises in even small groups is culturally inappropriate and can potentially result in shame and dispute, and a reluctance for some people to speak up (Mosse, 1994).

Bearing these limitations in mind, the 2006-07 ranking workshops followed the same methodology as used in 1986-87. Workshops were held separately with men and women and started with an extended discussion of 'wealth', followed by a household ranking approach. Participants included people employing a diversity of livelihood strategies and who were knowledgeable of the whole area. In the 2006-07 17 men and 21 women were involved, while in 1986-87 there were 13 men and 10 women. In both groups there was some continuity in participation between the two periods.

In discussing the term 'wealth', the vernacular Shona translations which consistently emerged were *upenyu hwakanaka*, *kugara zvakanaka*, *mupfumi*; all composite terms/phrases meaning 'good life', 'relating to one's happiness and well-being, being rich'. '*Upenyu hwakaipa*, *kutambudzika*, *kushushikana*' had the connotations of 'ill-being' 'vulnerability' or 'bad life'; all associated with suffering due to scarcity in material and non-material terms, also linked to deprivation or unfulfilled psycho-social needs, defencelessness or lacking in strength to meet the uncertainties and stresses of life including the death of family members. Causes of 'bad life' ranged from droughts, diseases, unemployment, inflation, social relationship problems caused by intra-household tensions emanating from unequal power relations and being accused of witchcraft, among others.

As in 1986-87, these were lively workshops lasting over several hours, involving much good-humour, but often heated debate. No-one seemed to shy away from the discussion. Reflecting on the experience, Panze, a woman in her 60s, declared: 'I look forward to doing better when we have the next ranking exercise...from now on, I want to get ideas and strategies from others, I will try to take a leaf from those who have done well...'. Indeed, beyond the utility of the final ranking, it was often the discussion that proved particularly insightful. Four ranks were produced in each case – from relatively richer (rank 1) to relatively poorer (rank 4).

As we discuss below, in both studies, wealth ranking proved a powerful methodology, especially when used in combination with survey results and in-depth biographic interviews, with quantitative and qualitative information generating important insights into the causes and consequences of livelihood change, and the nature of livelihood transitions.

Understanding 'wealth': contrasting 1986-87 and 2006-07

How have perceptions of 'wealth' changed between the two periods? A number of criteria emerged in the 1986-87 workshops, including:

- a) Number of cattle owned
- b) Crop production
- c) Income from remittances
- d) Rural non-farm income
- e) Type of house
- f) Education of children
- g) Groceries (bread, tea, margarine)

Cattle ownership featured prominently in the 1986-87 discussion. As one participant from the men's group noted 'these days cattle are fewer, so there is less sharing. A rich man can own just a few cattle, or even donkeys'. Another man summed up his perception; 'wealth is being a successful farmer, having access to money, making good use of your assets, educating your children and building a fine home'. The generational dynamics were discussed in the women's group: 'in the past, the older people were richer... wealth was determined by your background and reliant on inheritance.. [but] younger people can be rich these days, because of work in town' (Scoones, 1995, p. 72). Yet it was also more intangible factors, such as status, conduct and social relations, that were important too. For example, a man with 25 cattle who never sent his children to school could not be regarded as 'rich' by the women's workshop (Scoones, 1995, p. 76).

In 2006-07, many of the criteria were the same, but there was a different ordering and some new criteria were mentioned. The main criteria were:

- a) Number of cattle owned
- b) Land size and crop outputs
- c) Good health
- d) Children's education
- e) Off-farm income (including remittances)
- f) Farm equipment owned (including cotton sprayers, dip spray)
- g) Ownership of 'modern gadgets' - mobile phone, solar panel, car
- h) Hiring of farm labour

While assets and outputs associated with the core livelihood activity of farming remain dominant, other aspects were also mentioned. Health, for example, although discussed in 1986-87, was a dominant theme as in 2006-07, reflecting in large part the impact of HIV/AIDS. '*Utano upfumi* (good health) is, by definition, an indicator of wealth', observed a participant in the women's workshop. Another commented: '... having a family where you live in peace and harmony and in good health in an era of 'the disease' [HIV/AIDS]. Such a life is even more important than a household which owns a lot of cattle...'. (Mushongah, 2009, p.59). In 2006-07, children's education was mentioned very much together with access to off-farm income and remittances. Education was most definitely seen as a route to 'stepping out' and, although remittance flows were less significant overall, those who had managed to educate their children that enabled them to get decently paid jobs were ranked consistently high. For example, Sarai, a widow and household head, was placed in rank 1 because she had educated her children. 'Despite being a widow, she managed to raise and educate her children ...she now has a good life...her children are now looking after her...', one participant commented (Mushongah, 2009, p.57). While the quality of the house, and notably its roofing material, was used as an indicator in 2007, other material items were also mentioned, notably cotton sprayers,

tick insecticide sprayers, mobile phones, solar panels and cars; none of which were part of the discussion 20 years before. In the men's workshop, one participant commented on the association between material items and perceptions of 'modernity':

...a 'good' home - that is a housing structure constructed with bricks, asbestos or iron sheet-roofed, it is well plastered, with a toilet and a homestead fenced with barbed wire. They obtain water for household consumption from protected sources such as wells and boreholes, they own equipment such as a plough, harrow and cart for farming activities, they have an orchard at homestead, and farm workers...[In addition] the person has other luxury assets and possessions acquired for 'pleasure', such as solar panels, TV, cell phone...the kind of possessions which, we, Africans [meaning black Zimbabweans] would regard as modern and normally associated with non-black people" [meaning Zimbabweans of European or Asian origin]. (Mushongah, 2009, p.58)

The 2006-07 men's workshop offered a definition of a 'wealthy' person (*mupfumi*), this was associated with land, livestock and educated children and the economic support these children provide their parents. 'A wealthy person/household is one with enough land and about 12 cattle and above, plus chickens, goats...he/she has educated children such as agricultural extension workers, teachers, managers, doctors, soldiers and policemen...' (Mushongah, 2009, p.53). In the women's workshop, a woman in her 60s again emphasised the importance of land-based livelihoods:

Wealth is all about the soil...the land...that is, working on the land, being passionate about farming. Farming generates wealth...connected to this is cattle ownership and adequate farm equipment such as ploughs, cultivators, etc...in addition, one will then need to pray and have faith in God for strength, good health and capacity to work on the land. A combination of these factors generates wealth. Wealth is synonymous with abundance of food in the household...when there is hunger or food scarcity in the household, there is no wealth to talk

about! (Mushongah, 2009, p.53)

Non-material and intangible factors were again important in the 2006-07 discussions. As in 1986-87, education was repeatedly mentioned, as was status and standing in the community. Even someone's social habits were sometimes brought into the equation. For instance, an individual's poor public image, notoriety and livelihood pursuits which yielded limited returns would attract a lower ranking. A discussion of one secondary household head went as follows: '...he has no reputation at all...the few who know him say he is just a hopeless drunkard...he has no time to work in the fields...he spends most of his time involved in gold panning in Runde river... Definitely group 4 material!' (Mushongah, 2009, pp.52-53). In 2006-7 there was less deference to those in power. As one participant in the woman's group argued, to the wild approval of other participants:

The focus must always be on the ranking criteria we outlined...a village head or sub-chief may find himself ranked in group 4 if, for instance, his home is known to be poorly built...relies on neighbours for a span of cattle to plough his field, and does not have any source of remittance. These criteria are more important than one's age or status...indeed we will show the respect, but we will still group them where he or she belongs! (Mushongah, 2009, p.60)

Although there was consensus between ranking groups on a number of core factors, different groups had different perceptions of what constituted 'wealth'. For both periods, we looked in detail at the discrepancies between ranks across groups, highlighting in particular any cases where all three groups ranked a household differently or where one group ranked a group two groups different to the others. In the 1986-87 study, this represented ten cases. Women, for example, emphasised cash income as an important indicator, particularly because of remittance income, but also because of off-farm local livelihood activities, such as building, trading and craft-making. Women also emphasised support through relatives and social networks as means by which people secured livelihoods. Not surprisingly, women also emphasised the intra-household patterns of income generation, and the

importance of women's own activities, such as trading, embroidery and small stock sales, as often highly significant to the overall 'wealth' of a household. The men's group, by contrast, while mentioning all these factors, focused more on local assets and farming, emphasising in particular cattle ownership, crop production and particularly sales. The image here was the traditional successful 'big man' farmer, the '*hurudza*', or the technically-trained 'Master Farmer'.

In 2000-07 there was much more consensus in ranking across the groups, and there were only three cases of difference (as defined above) each for primary and secondary households. Differences emerged on two cases where the household had moved to the new resettlements, with one group ranking them low, despite the fact that their wealth had substantially increased following relocation according to the other groups. The other divergence centred on how much a disability (increasing blindness) was affecting the wealth of a once highly productive farmer, and whether cross-border trading by other family members was sufficient to compensate. Divergences in ranks for the secondary households centred on debates about how much they were reliant on the primary households, and whether they were really food secure or simply vulnerable and dependant.

Over time, then, perceptions of wealth have shifted. By 2006-07 there was more of an emphasis on good health, as well as ownership of a range of material goods, and a reduced focus on cash income earning because of hyperinflation and economic collapse). At the time of the 2007 workshop, inflation was running at 2000 per cent, but a year later it had risen, in some estimates to a staggering 231 million percent^{vi}. Yet having core assets, notably land and cattle, remained essential and an important hedge against such rampant inflation, and thus indicators such as a 'good home' persist. This was highlighted in an exchange in the men's workshop between the local headmaster who argued: 'Bill Gates is the richest man in the world...so money definitely is important' (Mushongah, 2009, p. 54). This was countered by others, one saying:

There is enough proof in Zimbabwe that having money can be worthless as witnessed by our

currency which has lost value due to inflation...our currency is now a worthless piece of paper. This experience has really taught us a lesson. Having assets such as cattle and land enables us to embark on crop and livestock production, from where we will meet our basic needs. This is the most important thing to us. (Mushongah, 2009, p. 54)

Local assets, notably cattle, were seen to be a way of dealing with shocks, and so reducing vulnerability. For example, during the men's workshop, a widow was considered to have been resilient when faced with the death of her husband because, despite this loss, she held on: '...she did not dispose of most of the cattle because she remarkably survived through other means...she persevered and thus preserved the family wealth (cattle), many years after the death of her husband. The household deserves to be ranked in group 1' (Mushongah, 2009, pp.54-55).

Thanks to the remittances from their children, the capacity to hire labour, full-time or on a casual basis (*maricho*), was a key indicator in 2007. However, the ability to hire labour was much decreased in 2006-07, and most people relied on family labour only (Table 1). In 1986-87, there were many households across all the wealth groups who could afford to hire labour.

Table 1: Percentage of primary households hiring labour for various farming activities: 1986-87 and 2006-07

Farming activity	1986-87	2006-07
Weeding	32%	4.5%
Ploughing	23%	0%
Harvesting	23%	3%
Coppice cutting	18%	7.6%
Fencing	4%	4.5%
Herding cattle	14%	9.1%
Thatching	0%	1.5%

Source: Scoones (1990, p.352) and Mushongah (2009, p.195).

How, then, do the composite rankings relate to survey data collected from the same sample? Table 2 presents data on a number of criteria – all mentioned in the wealth ranking discussions – and relates these to the different wealth ranks, both over time and between primary and secondary households. The data shows a strong association between wealth rank and measures across a range of criteria focused on asset ownership and agricultural production, with some major changes occurring across the two periods and some stark contrasts between ‘primary’ and ‘secondary’ households^{vii}.

Table 2: Relating wealth ranks to survey data (averages, with standard deviations in brackets)

	1986-87				2006-07				2006-07			
	Primary households				Primary households				Secondary households			
<i>Ranks</i>	1	2	3	4	1	2	3	4	1	2	3	4
<i>N=</i>	17	15	20	14	17	17	19	13	4	13	20	25
Field area (ha)	7.8 (3.8)	4.2 (2.2)	4.7 (2.1)	4.4 (1.9)	4.0 (1.3)	4.0 (1.2)	3.5 (1.2)	2.9 (1.4)	3.3 (1.0)	3.1 (1.6)	3.0 (1.5)	2.1 (1.3)
Cereal production 1984-85 and 2005-06 (t)	11.2 (9.4)	3.8 (2.4)	3.7 (2.6)	3.0 (1.3)	2.5 (1.9)	2.1 (1.9)	0.8 (0.5)	0.5 (0.2)	0.2 (0.3)	0.2 (0.2)	0.2 (0.3)	0.1 (0.2)
Maize sales 1985 and 2006 (kg)	3379.1 (4079.9)	297.3 (665.6)	210.7 (834.6)	133.8 (346.7)	117.6 (485.1)	205.9 (587.9)	41.7 (176.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Cattle owned (N)	14.1 (14.3)	4.6 (3.2)	3.4 (4.4)	0.7 (2.1)	17.8 (11.5)	7.4 (4.5)	3.3 (2.7)	0.9 (1.6)	14.5 (12.0)	5.9 (4.1)	1.3 (1.4)	0.7 (1.0)
Goats owned (N)	31.5 (19.5)	17.6 (20.7)	14.0 (16.0)	7.9 (7.0)	9.2 (5.8)	4.6 (3.2)	3.6 (3.7)	2.8 (2.7)	14.8 (9.0)	3.8 (5.5)	2.4 (2.6)	1.2 (1.5)
Roofing	1.6 (0.49)	1.35 (0.49)	1.35 (0.48)	1.35 (6.49)	2 (0)	1.6 (0.5)	1.4 (0.5)	1.1 (0.3)	2.0 (0)	1.7 (0.5)	1.3 (0.5)	1.0 (0.4)
Equipment (N)	2.7 (0.47)	1.9 (0.66)	1.75 (0.72)	1.5 (0.5)	4.1 (1.7)	2.8 (1.0)	1.6 (1.2)	1.3 (0.8)	3.3 (1.3)	1.5 (1.1)	0.8 (1.2)	0.4 (0.6)

Note: Field area refers to the main outfield; cereal production is the sum of maize, sorghum and millet production; cattle ownership includes all animals owned, including those loaned out, but not those held but loaned in; roofing refers to tin/asbestos roof on the main dwelling and the response average of yes (=2) and no (=1); equipment relates to the average of the sum of numbers of ploughs, cultivators and harrows. Data sources: Wilson (1990), Scoones (1990) and Mushongah (2009).

Livelihood transitions

With ranking data from two points in time, we can look at transitions between ranks, as a reflection of a household's wealth and livelihood status. Although the overall distribution of ranks remained similar, a number of changes can be observed (Table 3):

- a) 40.9% (27 households) remained static (10 households remained in rank 1; 3 households remained in rank 2; 6 households remained in rank 3 and 8 households remained in rank 4).
- b) 27.1% (18 households) declined, with the household ranked in 2007 one or two ranks below the rank allocated in 1986-87.
- c) 31.8% (21 households) increased their rank, moving up one or two ranks over the period.

Table 3: 1986-87 and 2006-07 primary households' ranking compared (numbers)

	2006-07 Primary households					
		Rank 1	Rank 2	Group 3	Rank 4	Total
1986-87 Primary households	Rank 1	10	5	2	0	17 (25.8%)
	Rank 2	6	3	6	0	15 (22.7%)
	Rank 3	1	8	6	5	20 (30.3%)
	Rank 4	0	1	5	8	14 (21.2%)
	TOTAL	17 (25.8%)	17 (25.8%)	19 (28.8%)	13 (19.7%)	66 (100%)

Thus in a period of 20 years, nearly 60% of households had changed, representing a substantial dynamism in wealth status^{viii}. What were the causes of these transitions? We looked in detail at all 39 households that had moved up or down ranks, and explored the reasons. This involved both in-depth interviews with household members, as well as an examination of survey data from the two periods. The results were revealing. Transitions downwards involved a number of recurrent features.

A death or extended illness of one of the household heads (often presumed to be associated with HIV/AIDS) was sometimes a precipitating factor in decline or the household's dissolution. This was particularly so in five households where the household heads' spouses also fell ill and subsequently died. Across all individuals identified as members of the primary households in the 1986-87, 123 people had died by 2007, and of these 53% had reportedly died of HIV/AIDS-related illnesses, including eight primary household heads (Mushongah 2009, pp. 150-151). This pattern reflects both an ageing population, but also one exposed over the last two decades to HIV infection, even if incidence has been declining in the past decade (Halperin *et al.*, 2011). Long-term illness and the consequent medical expenses were often a significant burden on households, on many fronts. Equally deaths often required the further deployment of assets at funerals.

The primary households represented an ageing population. By 2006-07, 52.2 % of male household heads were over 60. This resulted in a combination of infirmity and ill health, resulting in less ability to work in the fields. In the past, older households would rely on the next generation to support them through either on-farm production, or more likely remittances. However, as discussed above, those secondary households resident in Mazvhiwa were often asset poor and not producing significantly, as so often unable to help out. In addition, those who had migrated to towns in Zimbabwe were often as vulnerable, if not more so than their rural relatives, given the economic crisis. It was only those in the diaspora, with access to high value currencies that were able to provide this sort of remittance-based social security.

Loss of critical assets, notably livestock, was also linked to declines in ranks. Those whose ranks declined over this period all had fewer cattle holdings than they did two decades before, declining from an average of 6.1 (SD: 9.8) in 1987 to 3.2 (SD: 2.4) in 2007, and the same pattern applied to goats and donkeys. Cattle in particular were hit hard by the 1991-92 droughts. In previous droughts, those unable to move animals to new grazing had the highest mortalities. This was usually the poorer households without labour or ability to pay for lease grazing (Scoones 1992). In the 2000s, cattle

populations were again affected by drought (notably in 2000-01 and 2004-05, although more modestly than the dramatic declines of 1991-92), and mortalities increased due to an increase in tick-borne disease caused by the lack of dipping, as veterinary facilities declined.

Other assets declined too for this group, including land area – often parcelled out to sons establishing new homes, with those whose ranks had declined having on average 6.5 ha (SD: 2.7) in 1986-87 and only 3.1 ha (SD: 1.1) in 2006-07. In some cases house quality and equipment ownership decreased, as people were unable to maintain these assets. And finally loss of external income was often important. This was particularly an issue during the 1990s as structural adjustment hit hard, and people lost jobs, and especially so post-1997 as the economy imploded.

Looking at those who moved up ranks over time, in fact more than those who declined overall, there were again a variety of causes. Again, demographic change was important. Many of these households were young, starting out and establishing their homes often with young, dependent children in 1986-87. By 2006-07, they had been farming for 20 years; some had returned from periods of work, sometimes with windfall packages from retrenchments, and children had often grown up, providing remittances and other forms of support. The secondary households linked to this upwardly mobile group of households were more likely to be non-resident, having moved away from Mazvhiwa and in gainful employment, sometimes abroad. These were the children who benefited from post-Independence education investments, and now in their 20s and 30s were able to manage the economic shocks of the period better than others.

Increases in rank were usually associated with accumulation of assets, again cattle being a key indicator. For this group, cattle holdings increased from 2.7 on average (SD: 3.4) in 1986-87 to 8.1 (SD: 7.4) by 2006-07. Land area did not increase significantly for those who remained in Mazvihwa, but 20 percent of those whose ranks increased had acquired new lands in the frontier lands, old resettlement areas and 'fast-track' resettlements. By 2006-07, the 11 households which had moved

out had more land for crop production: 4.0 ha (frontier lands, N=3), 5.0 ha (old resettlements, N=1) and 4.4 ha ('fast-track', N=7) compared to those who remained in Mazvihwa (3.6 ha). Of these households, only one had declined in rank (a household in the frontier lands), while four had increased in rank (two from the 'fast track' resettlements, one from the frontier lands and the one household who had been resettlement under the pre-2000 scheme). All others had maintained their earlier rank. Resettlement – formal and informal – has thus been an important opportunity for some, with the new land assets being the basis for increasing 'wealth'.

In these movements up and down the ranks, can any thresholds linked to asset ownership, for example, be identified? This is actually rather difficult to pinpoint. As the ranking workshop discussions highlighted, the threshold level is different for different people, and interacts with other variables. For example, having plenty of cattle may be significant, but becomes less of a wealth generator if there is no labour to herd it. Thus young households, without farm and herding labour, while asset-rich, may actually end up relatively income poor, and so are ranked low. Clearly there are key thresholds in asset ownership for farming activities. Having sufficient animals for a draft team (four cattle, or in combination with donkeys) is vital for timely ploughing and planting, which is in turn critical to agricultural success in a dryland area. Similarly, having enough basic farm equipment (especially ploughs and scotch carts) again offsets the need to borrow from others.

However, it is the combination of assets, linked to other features of people's lives and livelihoods, that is important. Very often temporal patterns are highly significant too. As emphasised above the sudden impact of a death, a retrenchment, a drought may have the biggest impact, moving a household from a trajectory of 'stepping up' to a more precarious 'hanging in' strategy, with some ultimately 'dropping out'. The ability to withstand shocks and stresses is substantially enhanced either through asset accumulation, notably of cattle ('stepping up'), but also by 'stepping out', particularly through the provision of remittances across generations. Indeed it is the holistic combination of material, social and other factors over time that the wealth ranking captures, making it such an insightful tool. This is

especially revealed when looking at the qualitative biographical data (see below), which emphasises how different factors combine over time, creating 'ratchet effects' influencing vulnerability (Chambers, 1989), and patterns of stepping up, stepping out, hanging in and dropping out.

The demographic cycle, as already discussed, also makes a big difference. Table 4 relates the primary households to their Mazvihwa-based secondary household offshoots with the rankings from 2006-07. If secondary households exactly reflected the rank of the primary household with which they are associated, all households would appear along the diagonal of the table. But this is not the case, as there are 34 such secondary households whose ranks are lower, while only eight are higher than their 'origin' primary households. This reflects of course the asset poverty of these new households, and even access to wealth rank 1 parents nearby, meant that 14 of secondary households associated with the best-off group of primary households were in ranks 3 and 4.

This suggests that the support formerly offered through 'household cluster' arrangements which in 1986-87 was the focus of asset sharing relationships and other forms of mutual aid are less prevalent, and that new secondary households are more individualised and reliant on their own, often very limited, resources. The eight secondary households who were ranked higher than their parents include: four who are engaged in successful entrepreneurial trade (ranging from the buying and selling of goats to the illegal sale of marijuana), two who had continued access to remittance flows, one who had recently received a retrenchment payout and one who gained new land under the 'fast-track' resettlement programme,.

Table 4: 2006-07 primary households and 2006-07 secondary households ranking compared (numbers)

	2006-07 Secondary households				
		Rank 1	Rank 2	Rank 3	Rank 4
2006-07 Primary households	Rank 1	3	4	6	8
	Rank 2	1	4	4	6
	Rank 3	0	3	8	6
	Rank 4	0	2	2	5

Given the generational shift over the last 20 years, one 'control' for this would be to compare the secondary households today with the primary households from 1988. Table 5 offers this comparison. 36 secondary households of 2007 are ranked lower than their 1988 primary household equivalents, while only 10 households were higher in rank. 16 households were categorised in the same rank. As indicated before, secondary households in 2007 were ranked lower overall, with 72.3% in the lowest two ranks.

Table 5: 1986-87 primary households and 2006-07 secondary households ranking compared (numbers)

	2006-07 Secondary households				
		Rank 1	Rank 2	Rank 3	Rank 4
1986-87 Primary households	Rank 1	3	6	10	9
	Rank 2	1	1	2	1
	Rank 3	0	5	5	8
	Rank 4	0	1	3	7

These comparisons suggest that the next generation, at least those resident around Mazvihwa, are not prospering. A lack of household assets, limited access to off-farm employment and a decline in

cluster-based support from others, all contribute. With a few exceptions, it seems that the next rural-based generation is slipping deeper into poverty, and the trajectories of positive change observed for those primary households who have increased their rank level over 20 years are no longer available for most. As we discuss in the conclusion this has major implications for rural development policy.

Dynamics of livelihood change: case studies

Wealth ranking allows us to pose questions about why such transitions occurred. Detailed case studies were undertaken to explore the dynamics of livelihood change across all households which increased and decreased wealth rank over time (21 increases and 18 decreases, see Table 3). These in-depth interviews took place with multiple members of the household with the aim of piecing together the story of what had happened over the intervening 20 years. This qualitative life history interviewing proved enormously valuable in situating the broader data on changes in ranks as well as the two time-point surveys, as well as exploring complex causal relationships. Below two cases are offered as illustrations.

Case study 1: A household which increased its ranking in the past 20 years: Chikwanda

Marwei Chikwanda's household was in wealth rank 3 in 1988. At that time his father, Tonono Chikwanda was a migrant worker at Zimasco mine, in neighbouring Shurugwi district but was estranged from his family. In 1992, Tonono was pensioned off due to old age. He returned to his family in Mazvihwa, almost a pauper. In the meantime, a relative had sponsored Marwei's education until he graduated as a teacher in 1993. From 1993 Marwei was effectively the household head. By then he was a married man. He was now looking after his parents. Access to remittance income earned from his teaching job enabled Marwei to improve his household's welfare. From his remittance income, Marwei built a modern, asbestos-roofed four-roomed house at the family homestead in 1994. In the same year he bought a cow. He also bought an ox-drawn cart (1996) and replaced the brushwood fencing of the family homestead with a steel fence (1998). He also bought furniture, a TV and a radio (1999). Meanwhile, in the early 1990s, he gave his wife, Winnet, start-up capital to embark on cross-border trading in South Africa and Botswana. These were the early years of structural adjustment. Winnet's cross-border business was quite lucrative. With some of the profits generated, she expanded their portfolio of

non-farm activities by opening up a chicken project venture. Marwei also used part of his remittances to expand the chicken project. There was a ready market for poultry and eggs at schools in the area. They also continued with its farming activities and Marwei financed crop inputs and wages for a farm employee. He was also able to pay school fees for his siblings. By 2000, Marwei was content with his household's progress:

Around 2000, I think I was comfortable because all one needs are possessions which allows one to have a decent living...that is livestock, capital [money], equipment such as a plough...even good health...remember being-able bodied these days is wealth per se...my household was also food secure. (Interview, Mazvihwa, April 2007)

Marwei stressed that his household made this progress in the 1990s, thanks to the lower cost of living and an enabling economic environment at the time. He regrets the post-2000 economic decline, the ill-health and subsequent death of his mother in 2002 and of late his wife's ill-health, as factors which have arrested his household's further development. Despite these setbacks, his household was clearly on the ascendancy and from wealth rank 3 in 1988; it was ranked in wealth rank 2 in 2007.

Case study 2: A household which declined in the past 20 years: Muza

Muza's household epitomises a household which descended significantly - from wealth rank 1 in 1988 to wealth Rank 3 in 2007. Muza was a successful farmer (*hurudza*) of great repute 20 years ago. Agricultural extension workers even used to hold 'Look and Learn' meetings at his farm, just to showcase his successful agricultural work. Taking advantage of the agro-ecology of his farm which had good, *dambo* (valley wetland) soils, he was able to grow crops all year round. His yields in crops such as groundnuts were exceptionally high and had a ready market for this crop in Zvishavane town.

The polygamous Muza considered his children's education unimportant and family (child) labour was a key factor of production in his agricultural-based livelihood. His marriage to a young wife, Chipiwa, who had previously been married to a cousin in the late 1980s created long-standing inter-household tensions. When the young wife later entered into an adulterous relationship, the conflict degenerated into a tragedy when he killed her in a fit of rage. After serving his prison term for this offence, he never managed to recover to his *hurudza* status. An uncle, Poshai confided:

Muza died mysteriously in 1996...his death was linked to the avenging spirit (*ngozi*) of his young wife, Chipiwa, whom he killed...it was also clear that two young women he later married never managed to bear any children because of the work of this avenging spirit. It is unfortunate that Muza persistently refused to repay the avenging spirit (*ngozi*) of this murdered woman. He thought he had paid his dues by going to prison...he died a miserable man...Later, as a family elder, I played a leading role in ensuring that Muza's household repaid this *ngozi* in line with our tradition...As settlement, the murdered wife's family demanded 23 cattle...the whole of Muza's herd of cattle went toward this payment or compensation. (Interview, Mazvihwa, April 2007)

Soon after his death, Muza's two younger wives returned to their parental homes. Maidei, his senior wife died in 2003. Two of his daughters returned home soon after they divorced and by 2006, they had both died of HIV/AIDS related illnesses, leaving their young children at Muza's home. Two of his sons established their secondary households in the same village and none of them has been keen to take over Muza's homestead, as is sometimes the customary practice. The other son, Thomas, is a border-jumper to South Africa where he spends most of his time. It is alleged that mysterious happenings occur at Muza's homestead and there are fears that it is haunted. Muza's youthful nephews, particularly Edmore, have been the custodians of the household for the greater part of the last few years. In early 2007, Edmore also joined the border-jumping activities to South Africa. Only young relatives (23 year old and 17 year old wives of Muza's South Africa-based son and nephew, respectively) lived at Muza's farm in 2007 and they could only manage to plant 2.2 hectares of crops compared to the 13 or more hectares planted in the 1980s. This resulted in a paltry 0.2 tonnes of cereal production, compared to the 33 tonnes, and 11 tonnes of sales recorded in 1984-85. In 1986-87, the household had a herd of 15 cattle, and the number had declined to one by 2006-07. Without a key asset (cattle), the household had little chance of recreating earlier success.

The first case illustrates the important link between off-farm income ('stepping out') and local accumulation ('stepping up'). In this period, Marwei was able to build his asset base, and invest in new economic activities (such as trading and chicken production) since he was in gainful employment during the early 1990s. A diversified livelihood strategy was pursued, with clear lines of gender

differentiation, but on the back of a strong household unit and much cooperation. Investment in this crucial period has stood them in good stead, particularly as a result of the chicken project which generated a good income stream, as well as employment for a worker. Despite the economic woes and ill-health of late, they have been able to weather the storm. The origins of this success, however, can be located in the investment in education during the 1980s; in this case by a relative who paid school fees. This meant that from humble beginnings, Marwei was able to accumulate and invest, and improve the household's 'wealth'.

The second case, by contrast, shows how decline can often be sudden, the result of catastrophic, highly contingent events, exacerbated by multiple, interacting factors. In the 1980s, Muza had been on a 'stepping up' trajectory, and was perhaps the most successful farmer in the area, able to hire labour, and invest in his farm enterprise and home. The dramatic family dispute which ended in tragedy and his subsequent imprisonment and later death meant farm production collapsed. Ill-health and continued family tensions resulted in rapid social and economic decline to a situation of only just 'hanging in'. These tragic events took place at a time when opportunities were declining on many fronts. Dependents had to seek alternative livelihoods and migrated. Instead of reliance on substantial local farm production and crop sales, derived from access to good soils and water availability as well as significant farming skill, Muza's family members were forced into fragile, vulnerable 'stepping out' livelihoods, such as illegal border jumping and temporary employment in South Africa, linked to limited farm production at home.

These are of course just two illustrative examples of 39 cases. But they do show some recurrent themes, represented across the case studies. First, accumulation is often reliant on a combination of both 'stepping up' and 'stepping out' livelihood strategies, and dependence on one, whether farming or off-farm employment, is always risky. Second, accumulation may take decades, with small gains made each year from crop sales or employment savings, and is dependent on stability in livelihood opportunity and intra-household cooperation, although, as we have seen, often with many ups and

downs over time. Third, declines to a position of 'hanging in' or even 'dropping out', can be very sudden: often the result of a combination of factors, precipitated by a chance or at least unexpected event, such as an illness, a retrenchment or a season of crop failure or high livestock mortality. Fourth, accumulation is highly dependent on wider contextual factors at a particular time. Stepping up or out may be possible in periods of wider economic prosperity, but may be high or impossible when the broader economy is in decline, such as in the 2000s. Equally, extended periods of drought, such as in the early 2000s, especially when combined with political crisis and economic collapse, provoke very difficult livelihood conditions. Whether stages of the demographic cycle which allow off-farm employment, or older children to provide labour for example, coincide with patterns of good or bad rainfall or economic boom or bust, make a huge difference to people's livelihood trajectories, with consequences that stretch across generations, as we have seen.

Conclusion: understanding complex and dynamic livelihood change

What insights for rural development policy and broader understandings of agrarian change in Zimbabwe are revealed by such studies? Can the wealth ranking methodology, linked to survey and life history approaches, help us understand these complex dynamics?

The 20-year study from Mazvihwa has shown a highly dynamic pattern. Clearly a differentiated view of rural livelihoods is needed. From the wealth ranking data and individual biographies, we have observed interacting and highly differentiated processes of stepping up, stepping out and hanging in and, indeed, dropping out. The survey data shows the asset base has decreased (although not for everyone and for all assets, see Table 2), and both farm production and off-farm income earning has declined (Mushongah 2009). There have been substantial exits from the rural home area, in search of opportunities in Zimbabwe's urban centres or in other countries. Successful farm-based production and accumulation, which characterised wealth rank 1 and some of rank 2 in 1986-87 is increasingly constrained. Those secondary households who have established a rural based are finding it

increasingly difficult to make a living, and the type of mutual aid cooperation within household clusters that allowed people to get going in the past appears to be on the decline.

Is this, then, a failing rural economy, where the prospects for development are minimal, and development efforts should be focused on seeking alternatives, probably in other areas? This dismal view is one that has been forwarded by others working in nearby areas (Frost *et al.*, 2007), and particularly in the context of the dire economic context of the mid-late 2000s, has some justification. But the patterns of decline are not universal. There are some who are doing well, even in such difficult circumstances, among both primary and secondary households. Can the key elements of this success be built on? A core element of local agrarian success ('stepping up') has been, as discussed above, linked to new access to land and so a shift back into farm-based production. This was only a small group in this sample, but it was striking that increased land area resulted in boosts in farm production and accumulation of assets, a pattern seen more widely in the neighbouring province of Masvingo and elsewhere (Moyo *et al.*, 2009; Scoones *et al.*, 2010; Moyo, 2011; Cliffe *et al.*, forthcoming). Remittance income, particularly from abroad, remains significant as a 'stepping out' strategy, and sustaining and facilitating links to allow remittance flows to reach rural settings such as Mazvihwa remain critical. Such remittances are often invested in farm-based assets, such as cattle and equipment, and these asset investments may result may help shift a household over a threshold and into an upward trajectory.

Lessons exist here for asset-based social protection measures that allows threshold transitions, from simply 'hanging in' (or with the prospect of 'dropping out') to a pathway of 'stepping up' (Dorward *et al.*, 2006). Another important lesson from the studies is the significance of health and education. Ill-health, as we have repeatedly seen, is a major factor in livelihood decline, and education of the next generation has been critical in providing a route out of poverty; and is very often key in the relative success of secondary households and, as case 1 showed above, a vital contributor to longer-term success. The decline in health and education provision in Zimbabwe over the last decade has been

dramatic, with the quality of rural service provision now very poor across the country resulting in a decrease in a range of human development indicators^{ix}.

In this context, the wealth ranking approach, combined with survey results and in-depth biographical interviews, has proved a powerful method, allowing for the interpretation of longitudinal studies. As a relatively cost- and time-efficient methodology it could be a useful complement to monitoring and evaluation tools, potentially as a way of tracking over time the impacts of different interventions in a qualified and sophisticated way which focuses on broad livelihood outcomes as defined by local people. The results from wealth ranking exercises are also an important reminder that any interventions must take account of the complex contexts and configurations of factors that influence livelihood outcomes over time, and that assessing impact is never easy or straightforward, as multiple shocks and stresses combine with local processes, external interventions and people's very particular and contingent livelihood trajectories.

Endnotes

ⁱ In this paper two periods of study are referred to – 1986-87 and 2006-07. This is when the field data referred to was collected. The actual ranking exercises were held in early 1988 and mid-2007.

ⁱⁱ Data from Mazvihwa suggest that adult mortality peaked in the period from 1996-2005, depending on age group, with female adult mortality peaking later (Ken Wilson, pers. comm., 7 March 2011). This suggests a later onset and tailing off of the epidemic compared to data from other regions of Zimbabwe (Halperin *et al.* 2011).

ⁱⁱⁱ While mostly easily recognisable as units, 'households' in Mazvihwa are often not the units of asset ownership (very often individuals), consumption (kitchens linked to particular women, particularly in polygamous households) or the loci for long-term decision making and asset transfer (usually shallow patrilineages, operating in clusters of households). As Wilson (1990) showed, data on individual women and their kitchens and the wider lineage relationships were the best predictors of child welfare outcomes. Thus the household unit used here for the wealth ranking and survey data must be qualified by insights from other scales of organisation.

^{iv} The 'household head' usually the eldest male associated with the rural home, even if absent. The definition thus recognises the patriarchal and patrilineal system of household organisation and inheritance in this setting. Where the male household head had died and a woman had taken over and was recognised as the household head, the data refers to this individual.

^v There were two outliers (aged 71 and 61) affecting the average/range who were living with their brothers in the 1980s, and subsequently set up separate homes. All other secondary households were from the next generation.

^{vi} <http://www.telegraph.co.uk/news/worldnews/africaandindianocean/zimbabwe/3167379/Zimbabwe-inflation-hits-231-million-per-cent.html> (accessed June 14 2011).

^{vii} Comparisons of agricultural production and crop sales over periods are difficult, as there are never any exactly comparable years. Here we compare the best rainfall seasons in the two periods of study – 1984-95 and 2005-06

^{viii} An unpublished study from 1993, five years after the original ranking showed that even by then 40% of households had changed ranks. Those who had improved their status were more often located in the 'sandveld' areas, while those who had declined were more likely to be in the 'clay' soil zone of the study area, reflecting in large part ability to respond to drought shocks (Ken Wilson, pers. comm., 7 March 2011). The ecological dimensions of these changes were not so evident over the 20 year period (Mushongah 2009).

^{ix} See: <http://hdrstats.undp.org/en/countries/profiles/ZWE.html> (accessed June 14 2011). Despite such declines, Zimbabwe continues to have a high literacy rate, with a disputed estimate of 92% (<http://allafrica.com/stories/201007150032.html>) (accessed June 14 2011).

References

Adams, A., Evans, T., Mohamed, R. and Farnsworth, J. (1997) Socioeconomic stratification by wealth ranking: is it valid? *World Development*, 25, pp. 1154-1172.

Addison, T., Hulme, D. and Kanbur, R. (eds.) (2009) *Poverty Dynamics: Measurement and Understanding from an Interdisciplinary Perspective* (Oxford: Oxford University Press).

Alderman, H., Behrman, J., Kohler, H.P., Maluccio, J. and Cotts Watkins, S. (2001) Attrition in longitudinal household survey data. *Demographic Research* 5(4), pp. 79-124.

Alwang, J., Mills, J, and Bradford, F. (2002) *Why has Poverty Increased in Zimbabwe?* (Washington DC: World Bank).

Baulch, B. and Hoddinott, J. (2000) Economic mobility and poverty dynamics in developing countries. *Journal of Development Studies*, 36(6), pp. 1-24.

Baulch, B. and Scott, L. (2006) *Report on CPRC Workshop on Panel Survey sand Life History Methods*. Held at the Overseas Development Institute, London 24-25th February 2006 (Manchester: Chronic Poverty Research Centre).

Bebbington, A. (1999). 'Capitals and capabilities: a framework for analysing peasant viability, rural livelihoods and poverty' *World Development*, 27(12): 2012-44.

Bond, P. and Manyanya, M. (2002) *Zimbabwe's Plunge: Exhausted Nationalism, Neoliberalism and the Search for Social Justice* (Pietermaritzburg: University of Natal Press).

Campbell, B. M., Jeffrey, S., Kozanayi, W., Luckert, M., Mutamba, M. and Zindi, C. (2002) *Household Livelihoods in Semi-Arid Regions: Options and Constraints*. (Bogor: Center for International Forestry Research).

Carter, M. and Barrett, C. (2006). Carter, M.R. and Barrett, C. B. (2006) The economics of poverty traps and persistent poverty: an asset-based approach. *Journal of Development Studies*, 42 (2), pp. 178-199.

Chambers, R. (1989) Vulnerability, coping and policy (editorial introduction). *IDS Bulletin*, 20

Chambers, R. and Conway, G. (1992). 'Sustainable Rural Livelihoods: Practical Concepts for the 21st century', *IDS Discussion Paper*, 296. Brighton: IDS.

Cliffe, L. Gaidzanwa, R., Alexander, J. and Cousins, B. (eds). (forthcoming). 'The Outcomes of post-2000 Fast Track Land Reform in Zimbabwe'. Special Issue. *Journal of Peasant Studies*

Cousins, B., Weiner, D. and Amin, N. (1992) Social differentiation in the communal lands of Zimbabwe. *Review of African Political Economy*, 53, pp. 5-24.

CSO (Central Statistical Office) (1998) *Poverty in Zimbabwe* (Harare: Government Printer).

Davis, P. and Baulch, B. (2009). Parallel realities: exploring poverty dynamics using mixed methods in rural Bangladesh. Paper presented at the CPRC/BASIS Conference on *Escaping Poverty Traps: Connecting the Chronically Poor to Economic Growth*, February 26-27, 2009 (Washington DC: CPRC/BASIS).

Dorward, A. (2009) Integrating contested aspirations, processes and policy: development as hanging in, stepping up and stepping out. *Development Policy Review*, 27(2), pp. 131-46.

Dorward, A., Sabates-Wheeler, R., MacAuslan, I., Penrose Buckley, C., Kydd, J., and Chirwa, E, (2006) Promoting agriculture for social protection or social protection for agriculture: strategic policy and research issues. *Future Agricultures Consortium Discussion Paper*, 4. (Brighton: Future Agricultures Consortium)

Drinkwater, M., 1993, *The Effects of HIV/AIDS on Agricultural Production Systems in Zambia*, (Rome: Food and Agriculture Organization)

Ellis, F. (2000). *Rural Livelihoods and Diversity in Developing Countries*. (Oxford University Press: Oxford)

Feeney, G. (2001). 'The impact of HIV/AIDS on adult mortality in Zimbabwe', *Population and Development Review*, 27(4), pp. 771–780.

Francis, E (2000). *Making a Living: Changing Livelihoods in Rural Africa* (London: Routledge).

Frost, P., Campbell, B., Luckert, M. and Mutamba, M. (2007) In search of improved rural livelihoods in semi-arid regions through local management of natural resources: lessons from case-studies in Zimbabwe. *World Development*, 35(11), pp. 1961-74.

Gough, I. and McGregor, J.A., 2007, *Wellbeing in Developing Countries: From Theory to Research*, (Cambridge: Cambridge University Press).

Grandin, B. (1983) The importance of wealth effects on pastoral production: a rapid method of wealth ranking, in ILCA *Pastoral Systems Research*, Proceedings of the workshop held at Addis Ababa (21-24 March 1983), pp. 237-54 (Addis Ababa: International Livestock Centre for Africa).

Grandin, B. (1988) *Wealth Ranking in Smallholder Communities: A Field Manual* (London: Intermediate Technology Books)

Guijit, I. (1992) The elusive poor: a wealth of ways to find them. Special issue on applications of wealth ranking. *RRA Notes*, 15, pp. 7-13.

Gunning, J., Hoddinott, J., Kinsey, B. and Owen, T. (2000) Revisiting forever gained: income dynamics in resettlement areas of Zimbabwe, 1983-1996. *Journal of Development Studies*, 36(6), pp. 131-54.

Guyer, J. and P. Peters (eds.) (1987) Conceptualizing the household: issues of theory and policy in Africa' (special theme issue), *Development and Change* 18(2).

Halperin DT, Mugurungi O, Hallett TB, Muchini B, Campbell B, Magure T, Benedikt C and Gregson S. (2011) 'A surprising prevention success: why did the HIV epidemic decline in Zimbabwe?' *PLoS Med* 8(2): e1000414

Hammar, A., Raftopoulos, B. and Jensen, S. (eds) (2003) *Zimbabwe's Unfinished Business: Rethinking Land, State, and Nation in the Context of Crisis* (Harare: Weaver Press).

Hargreaves J., Morison L., Gear J., Makhubele M., Porter J., Busza J., Watts C., Kim J., Pronyk P. (2007) "Hearing the voices of the poor": Assigning poverty lines on the basis of local perceptions of poverty; a quantitative analysis of qualitative data from participatory wealth ranking in rural South Africa. *World Development*, 35(2), pp. 212-229.

Hulme, D. and Toye, J. (2006) The case for cross-disciplinary social science research on poverty, inequality and well-being. *Journal of Development Studies*, 42(7), pp. 1085–1107.

Jackson, J. and Collier, P. (1988) Incomes, poverty and food security in the communal areas of Zimbabwe. *RUP Occasional Paper*, 11 (Harare: University of Zimbabwe)

Kanbur, R. and Shaffer, P. (2006) Epistemology, normative theory and poverty analysis: implications for Q-squared in practice. *World Development*. 35 (2), pp.183- 196.

Kanbur, R., (ed.) (2003) *Q-Squared: Combining Qualitative and Quantitative Methods in Poverty Appraisal* (Delhi: Permanent Black).

Marquette, C. (1997). 'Current poverty, structural adjustment, and drought in Zimbabwe', *World Development*, 25(7), pp. 1141-1149.

Mosse, D. (1994) Authority, gender and knowledge: theoretical reflections on the practice of Participatory Rural Appraisal. *Development and Change*, 25(3), pp.497–526..

Moyo, S. (1995) *The Land Question in Zimbabwe* (Harare: SAPES Books).

Moyo, S. (2011). Three decades of agrarian reform in Zimbabwe: how redistributive? *Journal of Peasant Studies*.

Moyo, S., Chambati, W. and Murisa, T. (2009) *Fast Track Land Reform: Trends and Tendencies, Report of the Baseline District Studies* (Harare: African Institute for Agrarian Studies).

Murray, C. (2002) Livelihoods research: transcending boundaries of time and space. *Journal of Southern African Studies*, Special Issue: Changing Livelihoods, 28(3), pp. 489-509.

Mushongah, J. (2009) Rethinking vulnerability: livelihood change in southern Zimbabwe, 1986-2006. (PhD dissertation, University of Sussex).

Narayan, D., Chambers R., Shah M. K., and Petesch, P. (2000), *Voices of the Poor: Crying Out for Change* (New York: Oxford University Press).

Nyambara, P. (2001) 'The closing frontier: agrarian change, immigrants and the 'squatter menace' in Gokwe, 1980–1990s', *Journal of Agrarian Change*, 1(4), pp. 534-49.

O'Laughlin, B. (1998) Missing men? The debate over rural poverty and women-headed households in southern Africa. *Journal of Peasant Studies*, 25(2), pp. 1-48.

Potts, D. (2000). 'Urban unemployment and migrants in Africa: evidence from Harare 1985-1994', *Development and Change*, 31, pp. 879-91.

Raftopoulos, B. (2009) 'The crisis in Zimbabwe, 1998-2008', in B. Raftopoulos and A. Mlambo (eds) *Becoming Zimbabwe: A History from the Pre-Colonial Period to 2008* (Harare: Weaver Press).

Rose, D (2000) *Researching Social and Economic Change: The Uses of Household Panel Studies*. (London: Routledge).

Scoones, I. (1990) *Livestock Populations and the Household Economy: A Case Study from Southern Zimbabwe*. PhD dissertation, University of London.

Scoones, I. (1992) Coping with drought: responses of herders and livestock in contrasting savanna environments in southern Africa. *Human Ecology*, 20(3), pp. 293-313.

Scoones, I. (1995) Investigating difference: applications of wealth ranking and household survey approaches among farming households in southern Africa. *Development and Change*, 26, pp. 67-88.

Scoones, I. (1998). 'Sustainable Rural Livelihoods: A Framework for Analysis'. *IDS Working Paper*, 72. IDS: Brighton.

Scoones, I. with Chibudu, C., Chikura, S., Jeranyama, P., Machanja, W., Mavedzenge, B., Mombeshora, B., Mudhara, M., Mudziwo, C., Murimbarimba, F., Zirereza, B. (1996) *Hazards and Opportunities. Farming Livelihoods in Dryland Africa: Lessons from Zimbabwe* (London: Zed Books).

Scoones, I., Marongwe, N., Mavedzenge, B., Mahenehene, J., Murimbarimba, F. and Sukume, C. (2010) *Zimbabwe's Land Reform: Myths and Realities* (Woodbridge: James Currey).

White, H. (2002). Combining quantitative and qualitative approaches in poverty analysis. *World Development*, 30(3), pp. 511–522.

Whitehead, A. (2002) Tracking livelihood change: theoretical, methodological and empirical perspectives from north-east Ghana. *Journal of Southern African Studies*, 28(3), pp. 575-598.

Wilson, K. (1990) *Ecological Dynamics and Human Welfare: A Case Study of Population, Health and Nutrition in Zimbabwe*. (PhD dissertation, University of London).