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An examination of the resources and relationships available to impoverished rural households to adapt and cope in response to HIV/AIDS: a survey of villages in the Sekhukhuneland region of South Africa's Limpopo Province.

Kautzky, Keegan

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AN EXAMINATION OF THE RESOURCES AND RELATIONSHIPS AVAILABLE TO IMPOVERISHED RURAL HOUSEHOLDS TO ADAPT AND COPE IN RESPONSE TO HIV/AIDS: A SURVEY OF VILLAGES IN THE SEKHUKHUNELAND REGION OF SOUTH AFRICA'S LIMPOPO PROVINCE

Keegan Kautzky

A research report submitted to the Faculty of Humanities, University of the Witwatersrand, Johannesburg, in partial fulfillment of the requirements for the degree of Master of Arts in Development Studies

Johannesburg, 2008

DECLARATION

I, Keegan Kautzky, declare that this research report is my own work. It is being submitted for the degree of Master of Arts in Development Studies in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

…… 6th day of March, 2008

In memory of my protector, my childhood hero and my big brother

Brahm Kautzky

ABSTRACT

This study utilises secondary analysis of data derived from the IMAGE study to examine the resources and relationships available to impoverished rural households in South Africa to adapt and cope with idiosyncratic and covariant crises. Set in the Sekhukhuneland region of Limpopo Province, the study encompasses eight villages and 9,500 households. HIV/AIDS is used as a proxy for chronic illness in the study, providing a unique context of vulnerability in which to frame the analysis of household means of adaptation and coping. The study employs the capital asset model of the sustainable livelihoods framework to provide a conceptual basis for detailing the diversity of resources and relationships available to households, both in isolation and in the broader context of the social network within which they exist. The study aims to augment the limited existing contextual research on the resources and coping mechanisms available to the rural poor of South and Southern Africa, specifically in the context of the HIV/AIDS epidemic.

A significant proportion of the study population is reliant on debt for basic consumption, a majority of households lack access to banking or credit facilities and four-fifths of households have limited or no capacity to acquire even R50 to cover emergency expenses. Financial capital, the most readily convertible of asset types, thus, constitutes a reliable resource for only a few households and is inaccessible to the majority of the population.

Natural capital is similarly unavailable to most households as three-quarters of the population do not own their land. Lacking ownership and control, most households are, unable to alter land-use or sell land and property as a coping strategy in times of crisis.

The population is also characterised by low levels of physical capital ownership across all modern and livestock asset types. The scarcity of cash-convertible or readily-exchangeable physical assets, thus, further limits the coping strategies available to most households.

Given the magnitude and severity of financial, physical and natural asset scarcity at the household level, the instrumental value of social capital is significantly diminished. Regardless of the strength of social cohesion and the willingness of individuals in a population to assist others in times of crisis, a lack of necessary financial, physical or natural capital within the network undermines and effectively nullifies the value of relational resources as a means of responding and adapting to crises.

Beyond the scarcity of available capital within the social network, there is significant inter-household variation in perceived ability to access social capital, and a marked disparity between the perceived availability of assistance and the willingness of households to assist others, with two-thirds of households believing they would be able to access financial and in-kind assistance in a time of crisis, but only one-third of households in the population acknowledging their own willingness to assist others. Social capital is, thus, not a significant or available means of adaptation and coping for the majority of households.

In theory, affected households have a diversity of available coping strategies to respond and adapt to crises. However, given the severity of physical, natural and financial resource scarcity among the low-income rural population, the nature of relational resources and available social capital, as well as the high prevalence of HIV/AIDS and the clustered incidence of the epidemic in South Africa, most low-income rural households have few available options beyond reducing consumption and dispersing household members.

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NOMENCLATURE

DFID	Department for International Development
DOH	Department of Health
FAO	Food and Agriculture Organization
IDASA	Institute for Democracy in South Africa
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IMAGE	Intervention with Microfinance for AIDS and Gender Equity
OECD	Organization for Economic Cooperation and Development
PWR	Participatory Wealth Ranking
RADAR	Rural Aids and Development Action Research Programme
RSA	Republic of South Africa
UNAIDS	Joint United Nations Program on AIDS
UNCRD	United Nations Centre for Regional Development
UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
UNICEF	United Nations Children's Fund

CHAPTER 1

1.0 INTRODUCTION

The introduction has three objectives: to provides background to the research, to outline the aims of the study and define the central research question, and to establish the rationale and justification for the research.

The background to the study is established through explanation of the nature of the HIV/AIDS epidemic globally, regionally and in the local context of the research, as well as analysis of the generalised impact of the epidemic at the household level. In seeking to contextualise the means of adaptation available to impoverished rural households to respond and adapt to crises, the study utilises the HIV/AIDS epidemic as a proxy for chronic illness and does not explicitly analyse afflicted households *per se*.

Discussion of the study's aim – to examine the physical, financial, natural and social resources available to low-income households in rural South Africa that facilitate adaptation in response to HIV/AIDS – is subsequently couched in an explanation of the methodological and conceptual frameworks the research utilises.

Lastly, the rationale for this study is detailed, specifically highlighting the paucity of existing contextual research and established theory on the means of adaptation and coping available to the rural poor in South and Southern Africa. Beyond advancing existing theory and analyses, the originality of the conceptual approach – in attempting to account for the heterogeneity of individual households and differentiation in resource availability – as well as its likely implications for policy and programming highlight the unique significance of the study and provide further justification for its undertaking.

1.1 Background

Globally, it is estimated that more than forty million people live infected with HIV/AIDS, of whom approximately thirty eight million are adults. In 2005 alone, an estimated 3.1 million people died as a result of AIDS and another 4.9 million were newly infected with

HIV.[1] HIV/AIDS is unique and particularly devastating in that it overwhelmingly afflicts the most productive segment of society – the population aged 15 to 45 years old. As a result, those primarily afflicted are the parents, teachers, civil servants, engineers, government officials, health workers, businessmen and women, and labourers who drive the economy and maintain the civil society and social structure.[2] The plight of children, however, should not be overlooked. By 2003, an estimated 15 million children had already been orphaned as a result of HIV/AIDS globally. By 2010, it is estimated that number will climb to 25 million.[3] In the wake of the epidemic, millions of children will face diminished living standards, malnutrition, psychological impairment, limited cognitive development, acute vulnerability and escalating rates of prostitution and high-risk behaviour, exploitation and abuse, illness, and even death.[4] The severe impact and growing threat of HIV/AIDS to national productivity, economic growth, political stability, social welfare, household cohesion and individual livelihoods can, thus, not be overstated.[5]

In no region of the world has the impact of AIDS been more devastating than in sub-Saharan Africa. With an estimated 24.5 million people infected with HIV, the region suffers from a disproportionate 64% share of the global disease burden despite accounting

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[1] UNAIDS. *AIDS Epidemic Update – 2005*. Joint United Nations Program on HIV/AIDS: Geneva, Switzerland. 2005. <www.unaids.org/epi/2005/doc/EPIupdate2005_pdf_en/epi-update2005_en.pdf>. Accessed 8 July 2006. p. 1.

[2] Coulibaly, Ibrahima. *The Impact of HIV/AIDS on the Labour Force in Sub-Saharan Africa: A Preliminary Assessment*. Program on HIV/AIDS & the World of Work. International Labour Organization: Geneva, Switzerland. 2005. <www.ilo.org/public/english/protection/trav/aids/publ/rpa3.pdf >. Accessed 6 July 2006. p. 1.; and Cohen, Desmond. *The Economic Impact of the HIV Epidemic*. Issues Paper No. 2. HIV and Development Program. United Nations Development Program: New York, NY. 1992. <www.undp.org/hiv/publications/issues/english/issue02e.htm>. Accessed 12 July 2006.; and Over, Mead. *The Macroeconomic Impact of AIDS in Sub-Saharan Africa*. Technical Working Paper No. 3. Population and Human Resources Department. World Bank: Washington, DC. 1992. <www.worldbank.org/aids-econ/macro.htm>. Accessed 8 July 2006. p. 1, 3.

[3] UNICEF. *Children On The Brink 2004: A Joint Report of New Orphan Estimates and a Framework for Action.* United Nations Children's Fund: New York, USA. 2004. <www.unicef.org/publications/index_22212.html>. Accessed 4 July 2006. p. 7.; and Ruland, Claudia, William Finger, Nancy Williamson, Sharifah Tahir, Stephanie Savariaud, Ana-Maria Schweitzer and Kathlene Shears. *Adolescents: Orphaned and Vulnerable in the Time of HIV/AIDS*. Youth Issues Paper No. 6. Family Health International: Arlington, VA. 2005. p. 6.; and UNICEF. *Children Orphaned By AIDS – Fact Sheet*. United Nations Children's Fund: New York, NY. 2005. <www.unicef.org/media/media_16313.html>. Accessed 8 July 2006.

[4] UNICEF. *The Framework for the Protection, Care and Support of Orphans and Vulnerable Children Living in a World with HIV and AIDS*. United Nations Children's Fund: New York, NY. 2004. p. 9.; and Coetzee, Erika and Judith Streak. *Monitoring Child Socio-Economic Rights in South Africa: Achievements and Challenges*. Institute for Democracy in South Africa (IDASA): Pretoria, SA. 2004. p. 18, 22.; and Ruland et al. 2005. p. 4-5.

[5] World Bank. *Intensifying Action Against HIV/AIDS in Africa: Responding to a Development Crisis.* Africa Region. World Bank: Washington, DC. 2000. <http://siteresources.worldbank.org/AFRICAEXT/Resources/aidstrat.pdf>. Accessed 9 July 2006. p. 12-16.; and Coulibaly 2005. p. 13, 15-18

for only 10% of the world population.[6] The global epicenter of AIDS, southern Africa exhibits HIV prevalence rates among pregnant women at 20% or higher in Botswana, Lesotho, Namibia, South Africa, Swaziland and Zimbabwe, with the spread of infection steadily increasing within the region.[7]

In South Africa, HIV is a generalised epidemic affecting all geographic regions, age cohorts and race groups.[8] Antenatal rates have markedly risen every year from 0.7% in 1990 to 30.2% in 2005. Ranging from 27% to 33% in the North West, Eastern Cape, Free State, Mpumalanga and Gauteng provinces, antenatal prevalence rates reach as high as 40.7% in Kwazulu-Natal.[9] With estimates ranging from 4.6 to 5.6 million individuals infected with HIV in South Africa, the country maintains a national prevalence rate of approximately 11.4%.[10] Highlighting the overwhelming burden on South Africa's productive population, an estimated 15.6% of 15-49 year old South Africans, male and female, are believed to be HIV-positive. Of this, women constitute a disproportionate share of those infected, with female prevalence estimated at 17.7%.[11] From prevalence rates below 1% in 1990, the rapid spread of HIV infection in the past fifteen years is particularly devastating.[12]

While the strain of the epidemic is significant on a national and regional scale, the impact and burden of HIV/AIDS is most severe at the individual and household level.[13]

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[6] UNAIDS. *2006 Report on the Global AIDS Epidemic*. Joint United Nations Program on HIV/AIDS: Geneva, Switzerland. 2006. <www.unaids.org/en/HIV_data/2006GlobalReport/default.asp>. Accessed 13 July 2006. p. 15.

[7] Setel, Philip, Milton Lewis and Maryinez Lyons. *Histories of Sexually Transmitted Diseases and HIV/AIDS in Sub-Saharan Africa*. Greenwood Press: Westport, CT. 1999. p. 4.; and UNAIDS 2005. p. 4, 17, 20.

[8] RSA. *2004 National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa*. Department of Health. Republic of South Africa: Pretoria, SA. <www.doh.gov.za/aids/index.html>. Accessed 10 July 2006. p. 7, 8, 11.; and Shisana, Olive and Leickness Simbayi. *Nelson Mandela/HSRC Study of HIV/AIDS - South African National HIV Prevalence, Behavioral Risks and Mass Media Household Survey 2002*. Human Sciences Research Council: Cape Town, SA. 2002. p. 46-48.

[9] RSA. *2005 National HIV and Syphilis Prevalence Survey*. Department of Health. Republic of South Africa: Pretoria, SA. 2006. <www.doh.gov.za/docs/hiv-syphilis-f.html>. Accessed 17 August 2006.; and RSA. *2003 National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa*. Department of Health. Republic of South Africa: Pretoria, SA. <www.doh.gov.za/docs/ reports-f.html>. Accessed 10 July 2006. p. 6.; and RSA 2004. p. 6-8.

[10] Shisana and Simbayi 2002. p. 45.; and Dorrington, Rob, Debbie Bradshaw, Leigh Johnson and Debbie Budlender. *The Demographic Impact of HIV/AIDS in South Africa – National Indicators for 2004*. South African Medical Research Council, Centre for Actuarial Research and Actuarial Society of South Africa: Cape Town, SA. 2004. <www.mrc.ac.za/bod/demographic.pdf>. Accessed 11 July2006. p. 20.

[11] Shisana and Simbayi 2002. p. 49.

[12] RSA 2004. p. 7; and UNAIDS 2005. p. 21.

[13] Veenstra, Neena and Alan Whiteside. "Economic Impact of HIV". *Best Practice & Research Clinical Obstetrics & Gynaecology*. Vol. 19. No. 2. 2005. p. 198, 201.

Impoverished households bear the greatest burden of disease and illness, suffer the greatest negative impacts and are least-equipped to cope with the disease.[14] Illness reshapes the family structure, altering internal household dynamics and external interaction with the community. For tens of millions of adults infected with HIV, the ability to work, either in subsistence agriculture or remunerative wage labour, provide for the domestic needs of the household and maintain care of dependants is diminished due to illness. In households reliant upon subsistence agriculture, diminished labour capacity reduces household food production, aggravating consumption and reducing the household's ability to supplement income with the sale of surplus crops and produce. Concomitantly, the dietary, health and physical care needs and expenses of the infected increase as the individual's capacity decreases, further increasing the financial and labour burden on the household. As the dependency of the ill and associated health costs rise, food production, income generation and the quality and quantity of household consumption decreases, resulting in diminished livelihoods (as illustrated in Figure 1.1).[15]

[14] Steinberg, Malcolm, Anthony Kinghorn, Neil Soderlund, Gill Schierhout and Shaun Conway. *HIV/AIDS – Facts, Figures and the Future*. SA Health Review. Health Systems Trust: Durban, SA. 2000. <www.hst.org.za/uploads/files/ chapter15 _00.pdf>. Acccessed 10 July 2006. p. 307.; and UNECA. *HIV/AIDS and Economic Development In Sub-Saharan Africa*. African Development Forum 2000. United Nations Economic Commission for Africa: Addis Ababa, Ethiopia. 2000. <www.uneca.org/ADF2000/theme 1.htm>. Accessed 10 July 2006.

[15] Baier, Erich. *The Impact of HIV/AIDS on Rural Households/Communities and the Need for Multisectoral Prevention and Mitigation Strategies to Combat the Epidemic in Rural Areas*. Food and Agriculture Organization: Rome, Italy. 1997. <www.fao.org/documents/show_cdr.asp?url_file=/docrep/x0259e/ x0259e00.htm>. Accessed 6 July 2006.; and Barnett, Tony. *HIV/AIDS Has Changed the World: Development Work Cannot Be the Same Again*. The Courier ACP-EU. No. 197. 2003. <www.lse.ac.uk/collections/ DESTIN/publink/barnett/courier197.pdf >. Accessed 20 July 2006. p. 51.; and Bechu, Nathalie. "The Impact of AIDS on the Economy of Families in Cote d'Ivoire: Changes in Consumption Among AIDS-Affected Households". In Ainsworth, Martha, Lieve Fransen and Mead Over (eds.) *Confronting AIDS: Evidence from the Developing World*. The European Commission: Brussels, Belgium. 1998. <www.iaen.org/limelette /pdfs/confront_aids_chapter_16.pdf>. Accessed 12 July 2006. p. 342-343, 346.; and White, Joanna and Elizabeth Robinson. *HIV/AIDS and Rural Livelihoods in Sub-Saharan Africa*. Policy Series 6. Natural Resources Institute: Chatham, England. 2000. <www.nri.org/publications/policyseries/PolicySeriesNo06. pdf>. Accessed 18 July 2006. p. 13-15.; and Egal, Florence and Arine Valstar. *HIV/AIDS and Nutrition: Helping Families and Communities to Cope*. Food and Agriculture Organization (FAO): Rome, Italy. 1999. <www.fao.org/docrep/X4390t/x4390t04.htm>. Accessed 12 July 2006. p. 21.; and UNECA 2000.; and Mather, David, Cynthia Donovan, T.S. Jayne, Michael Weber, Anthony Chapoto, Edward Mazhangara, Linda Bailey, Kyeongwon Yoo, Takashi Yamano and Elliot Mghenyi. *A Cross-Country Analysis of Household Responses to Adult Mortality in Rural Sub-Saharan Africa: Implications for HIV/AIDS Mitigation and Rural Development Policies*. International Development Working Paper No. 82. Department of Agricultural Economics. Michigan State University: East Lansing, MI. 2004. <http://aec.msu.edu/fs2/papers /IDWP82.pdf>. Accessed 12 July 2006. p. 36-39, 43.

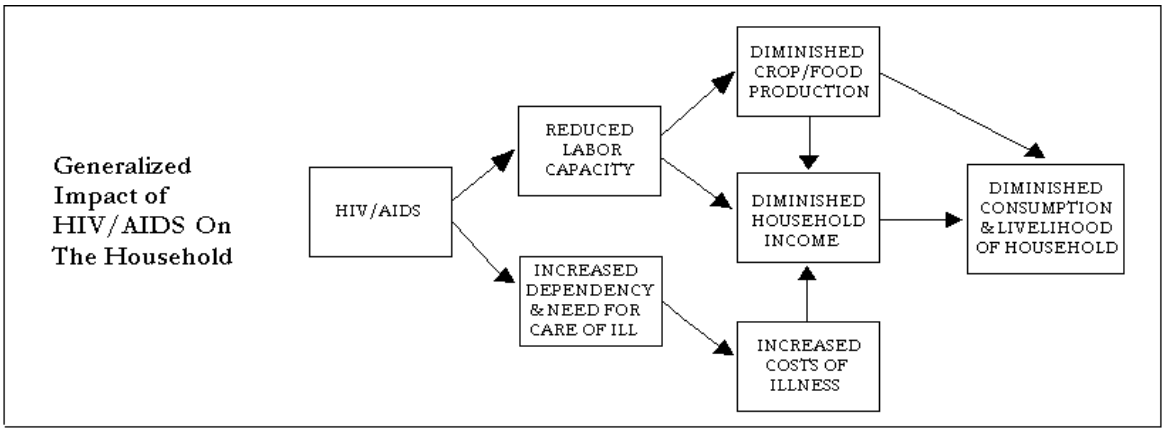


Figure 1.1 Household Impact of HIV/AIDS[16]

It is important to note that the aforementioned dynamics, specifically ascribed to HIV/AIDS, can be generally understood to characterise the impact and influence of severe chronic illness on a household. HIV/AIDS, in this context, is arguably interchangeable with Tuberculosis or Malaria or other forms of disease and illness that directly reduce labour capacity and increase dependency over a protracted period of time. While the research could alternately focus on chronic illnesses and disease broadly, it is useful to utilise HIV/AIDS as a proxy for chronic illness in the South African context given the epidemic's predominance as a pervasive and escalating public health threat. Furthermore, HIV/AIDS provides a unique context of vulnerability – entailing both the prolonged influence of chronic illness, as well as the acute impact of subsequent death – in which to frame analysis of household means of adaptation and coping. It should, thus, be understood that this study does not seek to analyse HIV/AIDS afflicted households *per se*, but rather utilises HIV/AIDS as a proxy for chronic illness, providing a conceptual context of vulnerability within which to frame the examination of available household resources.

1.2 Aim of Research

The ability of a household to respond and adapt to chronic and acute crises – from short-term consumption-smoothing to long-term survival – is primarily determined by the nature and amount of resources under its control. Given the scope and setting of the research, it is particularly appropriate to contextualise the means and measures available to households to adapt in response to crises by framing the analysis in the context of South Africa's HIV/AIDS epidemic. The aim of this study is, thus, to examine the physical, financial, natural and social resources available to low-income households in rural South Africa that

[16] Figure 1.1 developed by author based on general literature on household impacts of HIV/AIDS

facilitate adaptation in response to HIV/AIDS. The central question of this research is as follows: What are the resources and relationships available to impoverished rural households in South Africa to adapt and cope in response to HIV/AIDS?

Utilising the existing access and research framework of the Rural AIDS and Development Action Research Programme (RADAR), this study utilises a secondary analysis methodology to examine data derived from the IMAGE study. Conceptually, it relies on the capital asset model of the sustainable livelihoods framework to define, delineate and analyse household capital asset portfolios – financial, physical, natural and social capital – in eight villages of the Sekhukhuneland region of South Africa's Limpopo Province.

Population characteristics of the study site reflect high HIV prevalence and low life expectancy with nearly 50% of the population of the Sekhukhuneland region under the age of 15 and HIV infection rates at 13.2%. The study site encompasses approximately 9,500 households and a population of approximately 50,000.[17]

1.3 Rationale for Research

While there exists a generally-assumed understanding of the interrelation of illness progression, death, household adaptation and response, there remains limited contextual research explicitly unpacking the comprehensive array of available resources necessary to facilitate coping and adaptation at the household level. The primary rationale for this research is, thus, to advance the existing body of knowledge and develop a more meaningful sociological understanding of the physical, financial, natural and relational resources available to low-income rural households to respond to chronic and acute crises, such as the onset of illness and subsequent mortality resulting from HIV/AIDS.

The paucity of existing research applies not only to the rural poor of South Africa, but among impoverished households throughout southern Africa and Sub-Saharan Africa generally. Given the magnitude of the global health crisis and the tens of millions of households that are already or will become affected by AIDS-related illness and death in coming decades, it is critical that empirical studies and analysis fill this theoretical void

[17] Hargreaves, James, Tesmerelna Atsbeha, John Gear, Julia Kim, Benjamin Makhubele, Kalipe Mashaba, Linda Morison, Mmatshilo Motsei, Chris Peters, John Porter, Paul Pronyk and Charlotte Watts. *Social Interventions for HIV/AIDS*. Image Study Evaluation Monograph No. 1. Rural AIDS & Development Action Research Program: Acornhoek, South Africa. 2002 p. 28, 30-31.

and develop a more detailed baseline understanding of the relationships and resources that serve to foster or inhibit intra-household adaptation and response.

The conceptual approach and content of the study provide additional rationale for this research. Most studies focus on the economic impact of death without regard to the pertinent and substantial effects of protracted illness.[18] Furthermore, literature and popular discourse on the subject often mistakenly rely on a homogenous conceptualisation of *affected households*, asserting generalised and uniform assumptions of labour constraint, impoverishment and behaviour change without empirical evidence to support their claims.[19] As they do not take unique household traits and endowments into account, they are often unable to fully explain variation in the impact and effect of illness and disease on the household. Existing literature and research, thus, generally lack an appreciation for distinctions in household composition and characteristics.[20] A more thorough examination of household-specific means – taking particular account of the heterogeneity of households and differentiation in resource availability – is, thus, of significant practical and academic value as it invalidates the assumed homogeneity of household asset portfolios, augments our understanding of intra-household variation, and clarifies the actual coping and adaptation strategies available to low-income rural households.

A more thorough understanding of household asset portfolios also has extensive policy and programming implications. By more fully understanding the nature and extent of the household's ability to cope with crises and the measures available that allow it to adapt to provide for short and long-term survival, we will be able to design programmes and policies that more effectively account for and build on the actual resources available to the population. In this way, a more thorough, contextualised understanding of household response to disease affliction can inform and benefit policymaking and programme development across a wide range of fields and focus areas, including: child protection and welfare; nutrition; healthcare; refugee, internally displaced and stateless population protection; state service delivery; education; maternal health and welfare; legal rights and agency; humanitarian relief; social welfare schemes and development programming.

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[18] Barnett, Tony and Alan Whiteside. "Poverty and HIV/AIDS: Impact, Coping and Mitigation Policy." Chapter 11. In Giovanni Cornia (ed.) *AIDS, Public Policy and Child Well-Being*. Innocenti Research Centre. United Nations Children's Fund (UNICEF): Florence, Italy. 2002. <www.unicef-icdc.org/research/ESP/aids/chapter11.pdf>. Accessed 10 July 2006. p. 10.

[19] Mather et al. 2004. p. v-vi.

[20] Mather et al. 2004. p. 3, 17-18, 29, 49.

CHAPTER 2

2.0 LITERATURE REVIEW

The literature review provides detailed analysis and discussion of three distinct themes – HIV/AIDS as a unique household crisis, the conceptual development of methods for analysing and understanding poverty and human livelihoods and the divergent conceptualisations of social capital. Analysis of the literature on the HIV/AIDS epidemic provides the background information and discussion necessary to understand the unique context of vulnerability in which the research is framed. A review of the development of conceptualisations and methods for analysing impoverishment – including the contextualisation of assets, vulnerability and risk, discussion of varying methods for classifying asset endowments and analysis of the sustainable livelihoods framework – provides a conceptual background to, and explanation of, the research framework and model of analysis utilised in this study. Lastly, the discussion of varying conceptualisations of social capital, serves to provide a critical analysis and background discussion of a critical and complex component of the livelihoods framework analysed in this study. Although distinct, all three themes are inter-related and critically relevant to this study, requiring detailed discussion.

2.1 HIV/AIDS as a Unique Household Crisis and Context of Vulnerability

At the dawn of the 21st Century, HIV/AIDS arguably constitutes the most serious health and development crisis, impacting on South Africa to a far greater extent than any other disease.[21] It is unique and particularly devastating in that it targets the most productive age cohort in society and tends to afflict more than one member of a household. The clustered incidence of HIV infection thereby exacerbates the social and economic impact of illness.[22] The protracted and debilitating infirmity associated with HIV is exceedingly time-consuming and costly for the household and, unlike other forms of disease, the broad prevalence of the AIDS epidemic weakens the ability of the community to effectively support those directly affected.[23]

[21] Steinberg et al. 2000. p. 307.; and Gilbert, Leah and Liz Walker. "Treading the Path of Least Resistance: HIV/AIDS and Social Inequalities – A South African Case Study." In Leah Gilbert, Terry-Ann Selikow and liz Walker (eds.) *Society, Health and Disease: An Introductory Reader for Health Professionals*. Ravan Press: Johannesburg, SA. 2002. p. 149.
[22] Shisana and Simbayi 2002. p. 47, 49.; and Steinberg et al. 2000. p. 307.
[23] Barnett and Whiteside 2002. p. 14.

Particularly devastating is the unique stigma attached to HIV/AIDS and those affected by it. Beyond the physical, psychological and economic costs associated with all forms of disease and illness, HIV infection entails significant social barriers and victimisation in the form of prejudicial beliefs and discriminatory action. Rooted in fear, ignorance and perceptions of deviance, individuals affected by HIV/AIDS are unfairly associated with stigmatised sex and immoral social practices.[24] Discrimination often takes the form of rejection and ostracism from family and friends, the community and the workplace, rejection of membership among groups and generalised social exclusion, refused employment, and emotional and even direct physical violence.[25] Beyond the debilitating effects of the disease and associated illness, HIV-positive South Africans and those associated with them unfairly struggle to access proper medical treatment, education, employment, housing and other basic necessities as a result of the unique stigmatisation of the disease.[26]

Beyond the aforementioned magnitude of the pandemic and associated illness, its disproportionate impact on the productive age cohort, and the clustered incidence of infection, HIV/AIDS further constitutes a unique, and particularly devastating, crisis as the epidemic entails both covariant and idiosyncratic elements and impacts the individual household as both a chronic stress and an acute shock.

While there is a tendency to strictly differentiate crises as either idiosyncratic – affecting an individual or household in isolation – or covariant – affecting a population, group or cluster of individuals and households – the complexity and inter-relation of population, household and individual-level shocks and stresses necessitates seeing beyond these two

[24] Jennings, Ross, Jowie Mulaudzi, David Everatt, Marlise Richter and Mark Heywood. *Discrimination and HIV/AIDS*. Report for the Department of Health. Department of Health: Pretoria, SA. 2002. <http://dedi20a .your-server.co.za/ alp/images/upload/HIV.AIDSstigma.pdf>. Accessed 12 July 2006. p. 9-11.; and Woodward, Katherine. *Identity and Difference*. Sage Publications: London, UK. 1997. p. 153-154.; and Allen, Peter. *The Wages of Sin: Sex and Disease, Past and Present*. University of Chicago Press: Chicago, IL. 2000. p. xv.

[25] Jennings et al. 2002. p. 15.; and Mills, Elizabeth. *Beyond the Disease of Discrimination: A Critical Analysis of HIV-Related Stigma in KTC, Cape Town*. CSSR Working Paper No. 100. Centre for Social Science Research. University of Cape Town: Cape Town, SA. 2004. <www.sarpn.org.za/documents/d000 1187/P1317-wp_100_Cape_Town_Mills_ Dec2004.pdf>. Accessed 10 July 2006. p. 2, 13, 21, 23.; and Parker, Richard and Peter Aggleton. *HIV/AIDS-Related Stigma and Discrimination: A Conceptual Framework and an Agenda for Action*. The Population Council: New York, NY. 2002. <www.popcouncil. org/pdfs/horizons/sdcncptlfrmwrk.pdf>. Accessed 13 July 2006. p. 7-8.

[26] Jennings et al. 2002. p. 1.; and Parker and Aggleton 2002. p. 5-6.

archetypes.[27] A storm or fire may destroy only one household's crop, or it may destroy the crops of every household in the community. In such circumstances, classification is straightforward. But what if it destroys the crops of only four percent or twenty-five percent or sixty percent of households in the community? At what point is the magnitude or distribution of the impact large enough to consider it an aggregate shock? No specific criteria or critical value exists to classify shocks and stresses merely on the basis of differential impact, so it becomes a relatively subjective determination. Disease and infectious illness provides a further complication as it is often household or individual-specific, proffering an idiosyncratic classification. But at what prevalence does disease, illness or death constitute a covariant crisis? It would be difficult to argue that a disease affecting twenty or thirty percent of the population is not both idiosyncratic and covariant in nature.

This is particularly true of HIV/AIDS in the African context. In South Africa, HIV is predominantly transmitted through sexual intercourse and mother-to-child transmission, resulting in the clustering of cases within households and the tendency of more than one member of a household to be infected.[28] The impact and burden of HIV/AIDS is, thus, most severe at the individual and household level.[29] Owing to the fact that transmission is predominantly the result of the behaviour and actions of individuals within the household, and that the household is largely affected in isolation of the broader population in this sense, HIV/AIDS can be characterised as an idiosyncratic crisis. Due to the sheer magnitude of the epidemic, however, HIV/AIDS simultaneously constitutes a covariant crisis. With antenatal prevalence rates ranging from 27% to 40.7% across South Africa's provinces and estimates of more than 10% of the country's population currently infected – an estimated 4.6 to 5.6 million individuals in total – the epidemic effectively impacts the aggregate population beyond households specifically infected.[30]

Beyond the dual idiosyncratic and covariant nature of HIV/AIDS as a crisis affecting the household and the population, it is critical to recognise that HIV/AIDS is also uniquely

[27] Carter, Michael and John Malluccio. *Social Capital and Coping with Economic Loss: An Analysis of Stunting of South African Children*. Paper prepared for the "Crises and Disasters: Management and Mitigation of the Human Cost" Conference. Inter-American Development Bank: Washington, DC. 2001. p. 15.
[28] Shisana and Simbayi 2002. p. 47, 49.; and Steinberg et al. 2000. p. 307.
[29] Veenstra and Whiteside, 2005. p. 198, 201.
[30] RSA 2005.; and RSA 2004.; and RSA 2003.; and Shisana and Simbayi 2002. p. 45.; and Dorrington, et al. 2004. p. 20.; and Barnett and Whiteside 2002. p. 14.

complex as a crisis in that it entails both prolonged stress and acute shock, unlike most crises which function exclusively as either a stress (such as famine, drought, illness) or a shock (loss of job/income source, death). AIDS-related mortality and the premature death of the infected individual is an acute shock to the household. Prior to this shock, however, is an extended period of increasing stress on the household owing to the concomitant deteriorating health and morbidity of the infected, the associated loss of productive capacity, increased labour burden on other household members, diminished income generation, as well as increased health expenses and nutritional needs of the infected.[31]

The unique threat of HIV/AIDS to households and communities in South Africa is, thus, largely the result of its unique nature as a crisis. Beyond the eventual shock to the household of losing the infected member, the protracted stress and debilitating infirmity associated with HIV/AIDS preceding death is exceedingly time-consuming and costly for the household to cope with. And unlike other diseases and forms of illness of an idiosyncratic nature, the sheer magnitude of the epidemic has undermined the ability of extended families, the community and even the government to effectively support those infected and directly affected.[32]

2.2 Household Impoverishment and Livelihoods

In its earliest conceptions, analysis of individual and household wellbeing was based on a money-metric measure. It was assumed that individual and household welfare was effectively defined by the material standard of living. The early work of Adam Smith, David Ricardo and Benjamin Rowntree in the late 18th and early 19th centuries developed the concept of impoverishment as a socially-relative measure of deprivation of *basic necessities* – the level of resources required "to obtain the minimum necessaries for the maintenance of merely physical efficiency." Poverty was, thus, understood as the material standard of living below a defined level of income or consumption.[33]

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[31] Linnemayr, Sebastian. *Consumption Smoothing and HIV/AIDS: The Case of Two Communities in South Africa*. Paris-Jourdan Sciences Economiques: Paris, France. 2005. p. 2,20.; and Baier 1997.; and Bechu 1998. p. 342-342, 346.; and White and Robinson 2000. p. 13-15.

[32] Barnett and Whiteside 2002. p. 14.

[33] Kanbur, Ravi and Lyn Squire. "The Evolution of Thinking about Poverty: Exploring the Interactions". In Gerald Meier and Joseph Stiglitz (eds.) *Frontiers of Development Economics: The Future in Perspective*. World Bank: Washington, DC. 2001. p 3.; and Rowntree, Benjamin. *Poverty: A Study of Town Life*. Macmillan: London, UK. 1910. p. 86.; and Falkingham, Jane and Ceema Namazie. *Measuring Health and Poverty: A Review of Approaches to Identifying the Poor*. Department for International Development (DFID): London, UK. 2002. p. 7, 14.

As a broader contextualised understanding of the complex determinants, characteristics and outcomes of poverty developed, so to the conceptual definition of poverty broadened. Acknowledging the inability of measures of income and consumption to account for the diverse factors of individual wellbeing, Amartya Sen, in his pioneering work *Poverty and Famines: An Essay on Entitlement and Deprivation*, argued poverty could be more fully understood as the absence of basic capabilities and entitlements, limiting one's ability to function.[34] Building on the progressive inclusion of social outcome measures of the 1980s, the United Nations Development Program articulated an analytical departure from the conventional reliance on *income poverty* in 1997 with the introduction of the concept of *human poverty*, based on Sen's view of capability deprivation.[35]

As the conceptualisation of poverty became progressively multidimensional, impoverishment came to be understood as a process, rather than a static characteristic. In this way, the poor, previously viewed as passive victims of circumstance, were more aptly understood to be active participants, struggling to cope in the face of hardship. Rather than emphasising what the poor lack, the focus of analysis shifted to the relationships and resources the poor can access and command. It was determined that, even in times of acute crises, the poor are active and resourceful managers of extensive asset arrays, and that this resource base serves as the primary basis of recovery.[36] Aggregate household asset indices were developed as an alternative proxy for household welfare, and individual asset portfolios became a fundamental component of poverty literature.[37] The popularity and growing influence of participatory research similarly influenced the methodologies of analysis, incorporating people's own perceptions of poverty as they experience it.[38] Participatory Wealth Ranking (PWR), in which the community itself defines and identifies who is poor, has subsequently become a standard, and well-respected, method for

[34] Todaro, Michael and Stephen Smith. *Economic Development - Ninth Edition.* Pearson Press: London, UK. 2006. p. 17-20.; and Sen, Amartya. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Clarendon Press: Oxford, UK. 1981. p. 1-270.
[35] Cagatay, Nilufer. *Gender and Poverty.* Social Development and Poverty Elimination Division. United Nations Development Program (UNDP): New York, NY. 1998. p. 6-7.; and Kanbur and Squire 2001. p. 10.
[36] Moser 1998. p. 21.; and Cagatay 1998. p. 6.; and Longhurst, Richard. "Conceptual Frameworks for Linking Relief and Development". *Institute of Development Studies Bulletin*. Vol. 25. No. 4. 1994. p. 19.
[37] Cagatay 1998. p. 6.; Filmer, Deon and Lant Pritchett. "Estimating Wealth Effects Without Expenditure Data – or Tears: An Application to Educational Enrollments in States of India". *Demography*. Vol. 38. No. 1. 2001. p. 115-132.; and Montgomery, Mark, Michele Gragnolati, Kathleen Burke and Edmundo Paredes. "Measuring Living Standards with Proxy Variables". *Demography*. Vol. 37. No. 2. 2000. p. 155-174.; and Sahn, David and David Stifel. "Poverty Comparisons over Time and Across Countries in Africa". *World Development*. Vol. 28. No. 12. 2000. p. 2123-2155.
[38] Chambers, Robert. "Editorial Introduction: Vulnerability, Coping and Policy". *Institute of Development Studies Bulletin.* Vol. 20. No. 2. 1989. p. 1.

classifying and analysing impoverishment and wellbeing at the household and community level.[39]

2.2.1 The Relationship of Assets, Vulnerability and Risk

By introducing and developing the analytic relevance of *vulnerability* and *risk* to measures of wellbeing, the collective work of Sen, Swift, Maxwell and Smith, Davies, Corbett, Dasgupta, Devereux and others, made a singularly critical contribution to the conceptual debate.[40] Although closely related, vulnerability and risk are distinct variables. Risk signifies the likelihood and potential severity of damaging events occurring, whereas vulnerability is the sensitivity of the individual, household or population to adverse stress and shocks, as well as their ability to cope with such crises.[41] More simply, vulnerability entails two components: the impact of external stresses and shocks and the internal ability to cope.

Stresses are traditionally predictable, continuous and cumulative, depressing the well-being of the individual, household or population for an extended period of time. Shocks, on the other hand, are typically unpredictable, sudden and acutely traumatic.[42] Beyond the critical distinction of crises as either chronic stresses or acute shocks, it is important to further distinguish between idiosyncratic and covariant crises. Idiosyncratic crises are shocks and stresses that affect an individual household, in relative isolation. Idiosyncratic crises commonly include: serious illness, injury or death of household member(s); job loss, unemployment or loss of income; dissolution of a marriage/union; loss of remittance inflow; loss of government grant or aid; theft, fire or destruction of property; and migration/loss of productive household member, among others. Covariant crises, on the other hand, are shocks and stresses that affect an aggregate population. Covariant crises are

[39] Falkingham and Namazie 2002. p. 10.
[40] Sen 1981. p. 1-270.; and Swift, Jeremy. "Why Are Rural People Vulnerable to Famine*?". Institute of Development Studies Bulletin*. Vol. 20. No. 2. 1989. p. 8-15.; and Maxwell, Simon and Marisol Smith. "Household Food Security: A Conceptual Review". In Simon Maxwell and Timothy Frankenberger (eds.) *Household Food Security: Concepts, Indicators, Measurements*. International Fund for Agricultural Development (IFAD): Rome, Italy. 1992. p. 1-72.; and Davies, Susanna. "Are Coping Strategies a Cop Out?". *Institute of Development Studies Bulletin*. Vol. 24. No. 4. 1993. p. 60-72.; and Devereux, Stephen. "Goats Before Ploughs: Dilemmas of Household Response Sequencing During Food Shortage". *Institute of Development Studies Bulletin*. Vol. 24. No. 4. 1993. p. 52-59.; and Corbett, Jane. "Famine and Household Coping Strategies". *World Development*. Vol. 16. No. 9. 1988. p. 1099-1112.; and Dasgupta, Partha. *An Inquiry Into Well-being and Destitution*. Clarendon Press: Oxford, UK. 1993. p. 1-661.
[41] Moser 1998. p. 23.; and World Bank. "Helping Poor People Manage Risk – Chapter 8". In *World Development Report 2000-2001: Attacking Poverty*. World Bank: Washington, DC. 2001. p. 130.
[42] Chambers, Robert and Gordon Conway. *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*. IDS Discussion Paper No. 296. Institute of Development Studies: Brighton, UK. 1991. p. 10.

often exogenous phenomena that impact a significant proportion, or all, households in a community, region, country or other specified area. Covariant crises commonly include, but are not limited to, famine, drought, epidemics, natural disasters, pestilence, armed conflict and insecurity, and macro-economic instability/recession, among others.[43]

As poverty entails far more than insufficient consumption and the lack of knowledge capital and health, the inclusion of vulnerability is extremely useful.[44] As Caroline Moser explains,

> Analyzing vulnerability involves identifying not only the threat, but also the resilience, or responsiveness, in exploiting opportunities, and in resisting, or recovering from, the negative effects of a changing environment. The means of resistance are the assets and entitlements that individuals, households, or communities can mobilize and manage in the face of hardship. Vulnerability is therefore closely linked to asset ownership. The more assets people have, the less vulnerable they are, and the greater the erosion of people's assets, the greater their insecurity.[45]

The inclusion of vulnerability builds on the multidimensional conceptualisation of impoverishment and wellbeing as it incorporates asset-related measures of response and adaptation.[46] The capacity of the individual, household or population to cope and adapt to acute shocks and heightened stress is, thus, effectively determined by the availability of assets, in the form of either tangible or intangible resources.[47]

2.2.2 Classifying Asset Endowments

This progressive inclusion and classification of assets as proximate measures of wellbeing is a direct result of the confluence, and considerable influence, of famine and food security literature in the late 20th Century.[48] As conceptualisations developed through the 1980s and 1990s, divergent attempts to categorise and classify the proximate measures resulted in a

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[43] Hoddinott, John and Agnes Quisumbing. *Methods for Microeconometric Risk and Vulnerability Assessment*. Social Paper Discussion Series - No. 0324. World Bank: Washington, DC. 2003. p. 26-27.; and Hicks, Norman and Quentin Wodon. *Economic Shocks, Safety Nets and Fiscal Constraints: Social Protection for the Poor in Latin America*. World Bank, Washington, DC. 2000. p. 1,5.; and Mogues, Tewodaj. *Shocks, Livestock Asset Dynamics and Social Capital in Ethiopia*. International Food Policy Research Institute (IFPRI): Washington, DC. 2005. p. 6.
[44] World Bank 2001. p. 135.
[45] Moser 1998. p. 24.
[46] Longhurst 1994. p. 18.
[47] Mani, Devyani. *Vulnerability Analysis and Asset Management*. United Nations Centre for Regional Development (UNCRD): Nagoya, Japan. 2002. p. 5.
[48] Moser 1998. p. 21.

sub-set of literature, marked by overlapping categories of classification and indistinct terminology.[49] Jeremy Swift, in 1989, developed a tripartite, asset-based model to analyse human vulnerability in response to famine. Swift conceptualised three distinct types of assets: *investments* (human capital investments in education and health, as well as physical investments in land, equipment and housing), *stores* (money, food and valuables, such as jewelry) and *claims* (assistance available from kinship, friendships, community members or associations, government sources and the international community).[50] In contrast, Amartya Sen had earlier proffered a simplified dichotomy of *ownership endowments* and *exchange entitlements* in 1981, whereas Simon Maxwell and Marisol Smith averred five categories of entitlement: *human capital*, *productive capital*, *non-productive capital*, *income* and *claims* in 1992.[51]

While most variations focused on the resource portfolios of the rural poor, Caroline Moser developed the Asset Vulnerability Framework (AVF) based on the particular circumstances and endowments of the urban poor. The AVF model classified household and individual assets into five categories: *labour*, *human capital* (entailing skills and education, which determine the return to labour, and health, which determines the capacity to work), *household relations* (specifically intra-household mechanisms of consumption smoothing), and *social capital* (reciprocal mechanisms of support between households and within communities) and *productive assets*.[52]

2.2.3 The Sustainable Livelihoods Framework

While these competing approaches offer equipollent benefits and drawbacks in analysing the condition of individuals, households and populations, the *sustainable livelihoods framework* became the benchmark of poverty research, building on Sen's conceptualisation of human capabilities and Swift's classification of assets. For Sen, *capabilities* entail the capacity of the individual to perform basic functions of doing and being: to be adequately nourished, to be clothed, to have shelter, to not suffer from unnecessary illness or die prematurely and of preventable cause, to choose one's path and activities, and to lead a life

[49] Moser 1998. p. 24.
[50] Swift 1989. p. 8-15.; and Moser 1989. p. 24.; and Chambers and Conway 1991. p. 7.
[51] Sen 1981. p. 1-270.; and Maxwell and Smith 1992. p. 1-72.; and Moser 1998. p. 24.
[52] Moser 1998. p. 25.

without shame.[53] Using Sen's broad conceptualisation of capabilities, Robert Chambers and Gordon Conway believed *livelihood capabilities* were those specifically determining the ability to cope with stress and shocks and to make use of livelihood opportunities. Not merely reactive, they believed such capabilities were dynamic, adaptable and proactive in responding to changing and adverse conditions.[54] Redefining the conventional discourse and means of understanding and analysing human and population wellbeing, Chambers and Conway proffered the concept of sustainable livelihoods:

> A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.[55]

The simplified definition of a livelihood is thus *a means of securing a living*. In this way, Chambers and Conway built upon Jeremy Swift's analysis of human vulnerability and response to famine by broadening his focus on asset-availability in times of crisis to include asset-availability in normal everyday living. For simplification, the livelihoods framework further reclassified Swift's division of assets – investments, stores and claims – into *tangible* and *intangible assets* (Figure 2.1).[56]

While tangible assets constitute the *stores* and *resources* at the command of the individual, household or population, available *claims* and *access* are the intangible assets. Whereas s*tores* constitute food provisions, valuables such as gold or jewelry, and cash savings; *resources* consist of livestock, land, water, trees, farm equipment, tools and other property. It is important to note that tangible assets often serve as both stores and resources. *Claims*, are the available appeals or demands that can be made to acquire support or access. They may be made on individuals or groups, relatives, associations, community groups, companies, non-governmental organisations, the government or the international community; and the support obtained may be material or moral, including: food, loans, assets, work or gifts. *Access*, on the other hand, is the opportunity to use a resource, service

[53] Sen, Amartya. *The Standard of Living*. The Tanner Lectures, Clare Hall - 1985. Cambridge University Press: Cambridge, UK. 1987. p. 18.; and Dreze, J. and Amartya Sen. *Public Action for Social Security: Foundations and Strategy*. DEP No. 20. Development Economics Research Program. London School of Economics: London, UK. 1990. p. 11.; and Chambers and Conway 1991. p. 4.
[54] Chambers and Conway 1991. p. 4.
[55] Chambers and Conway 1991. p. 6.
[56] Chambers and Conway 1991. p. 7.

or store. It is the available means by which to obtain food or income, employment, technology or information; and commonly includes everything from transport, education and health to markets, extension services, media sources, and rights to common property.[57]

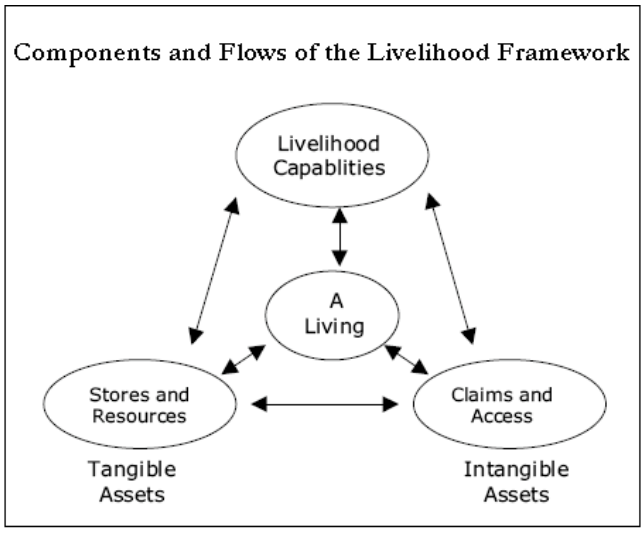


Figure 2.1 Diagram of the Components and Flows of the Livelihoods Framework (Source: Chambers and Conway 1991, p. 7)

Within the sustainable livelihoods literature and research, the primary unit of analysis is the household, and analysis focuses on the unit's stock of available assets. Assets, while generally classified as tangible or intangible within the livelihoods framework, are further ordered into five categories: human capital, financial holdings, natural resources, physical assets and social bonds. Viewed as varying forms of available capital, these asset categories are often redefined within this context as *human capital*, *financial capital*, *natural capital*, *physical capital* and *social capital* (Figure 2.2).[58] For the sake of uniformity, subsequent discussion utilises this capital-asset method of categorisation.

[57] Chambers and Conway 1991. p. 7-8.
[58] Mahoney, Timothy. *The Identification of Three Rural Worlds in Pro-Poor Policy Development.* DAC Network on Poverty Reduction. Organization for Economic Cooperation and Development (OECD): Paris, France. 2004. p. 2-3.; Chambers and Conway 1991. p. 6.

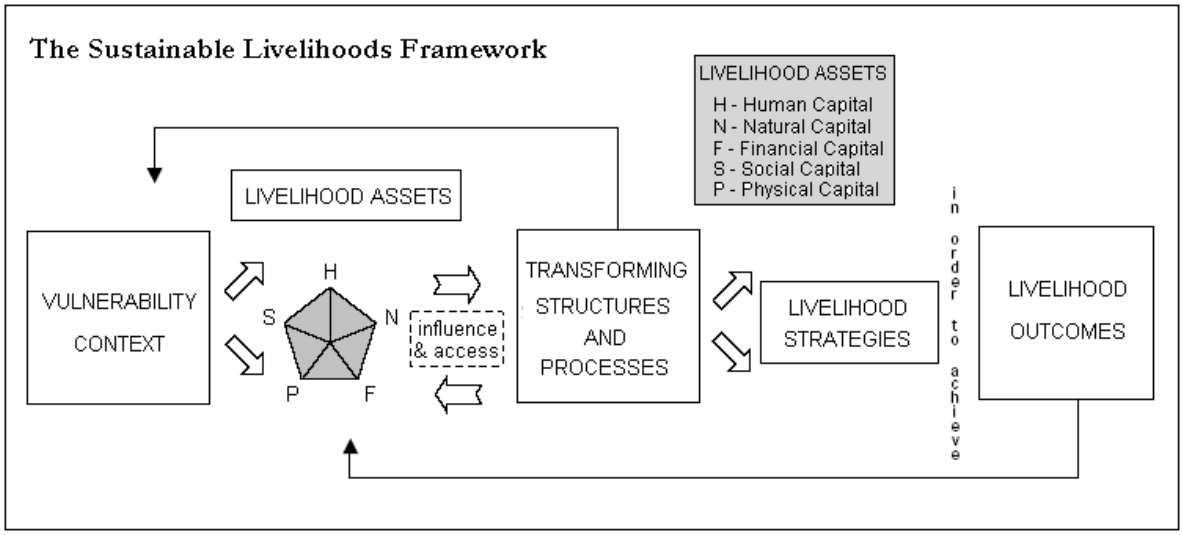


Figure 2.2 Diagram of the Sustainable Livelihoods Framework
(Adapted from: Ashley and Carney 1999, p. 47)

As aforementioned, available assets constitute the primary focus of the livelihoods framework. Based on the theory of capital-substitution, livelihood assets are conceptually diagrammed as an *asset pentagon*. The theory of substitutability argues that, in times of shock or stress, a household is able to compensate with or interchange types of capital in order to smooth consumption and protect the aggregate livelihood. An acute decline in the quality or quantity of household financial capital could, thus, be compensated for or overcome by increasing reliance on physical, social or natural capital in the short-term. While some argue differing capital types are not readily substitutable, the feasibility of interchanging capital assets depends entirely on the type of assets, nature and magnitude of the shock or stress, and the context within which it takes place.[59]

While assets lie at the heart of livelihoods research, the *vulnerability context* or external environment in which households pursue their livelihood objectives is of equal importance. The vulnerability context provides a more thorough understanding of the acute susceptibility and weakness of resource-poor households and the factors limiting their responsiveness and ability to cope with stress and shocks. [60] As Timothy Mahoney explains,

> Illness or injury can suddenly place an entire family in economic jeopardy. Harvest failure, fluctuations in the prices of basic commodities and job loss can each

[59] DFID. *Sustainable Livelihoods Guidance Sheet.* Department for International Development: London, UK. 1999. p. 8.
[60] Mahoney 1991. p. 3.

> destroy a family's efforts to expand its asset stocks and improve the life chances of its children. Conflicts and pandemics, such as HIV/AIDS, can rapidly erode the familial networks and other relationships the poor depend upon to withstand shocks. With extremely limited access to formal mechanisms such as insurance to help cope with these crises, poor households have little choice but to pursue livelihood strategies that limit their exposure to risk.[61]

While such livelihood strategies are often rational given the resources and relationships available to the poor household, they are frequently unsustainable, depleting the asset base and thereby perpetuating the impoverishment of the household.[62]

A number of key characteristics that substantially determine the ability of the household to adapt in response to illness and death have been identified through household surveys. As it relates to HIV/AIDS, Barnett and Whiteside conclude the determinant characteristics entail the incidence of illness and disease within the household – single burden versus multiple infected individuals; characteristics of the infirm and deceased – age, gender, position in household, income-earning potential, labour-providing capacity, duration of illness; household composition, resources and asset array; the availability of community resources and assistance; and the availability of external assistance from the state and non-governmental organisations (NGOs).[63] The ability of the household to cope with HIV/AIDS and other crises is, thus, directly dependent not only on the resources and relationships available to the individual household, but also directly on the resources, attitudes, livelihood and relationships of the population, associations and communal networks within which it exists.[64]

As livelihoods research has expanded, so too an extensive body of literature has developed detailing household and individual strategies for coping with such stresses and shocks. Although varying by case and context, seven primary coping strategies are utilised in varying combinations: *stint* (to reduce the quality and quantity of current consumption), *deplete* (to draw on and diminish existing stores or sell available resources), *hoard* (to accumulate and store food and other assets), *diversify* (to seek new sources of food, asset acquisition or income), *claim* (to call in debts, appeal for reciprocity or charity, or beg),

[61] Mahoney 1991. p. 3-4.
[62] Mahoney 1991. p. 4.
[63] Barnett and Whiteside 2002. p. 8.
[64] Rugalema, Gabriel. *Adult Mortality as Entitlement Failure: AIDS and the Crisis of Rural Livelihoods in a Tanzanian Village*. Ph.D. Thesis. Institute of Social Studies: The Hague, The Netherlands. 1999. p. 73.; and Barnett and Whiteside 2002. p. 13-14.

move (to scatter family members, livestock or other assets), and *protect* (to preserve the asset base in the present in order to recover and restore livelihood in the future).[65]

2.3 Understanding Social Capital in Context

The concept of social capital has rapidly developed since the mid-1990s and has been widely utilised and popularised within public health, community development and sociological literature and research.[66] There is, however, no general agreement on its definition and it remains a highly contested and arguably under-theorised and under-researched concept.[67] Although a multitude of operational definitions exist, Robert Putnam and Pierre Bourdieu elaborate its predominant conceptualisations. Putnam proffers multiple definitions of social capital, explaining it as "features of social organization, such as networks, norms, and social trust, that facilitate coordination and cooperation for mutual benefit" in one setting, elsewhere defining it as "norms and networks of civil society that lubricate cooperative action among both citizens and their institutions…[including] civic engagement, healthy community institutions, norms of mutual reciprocity, and trust" and further arguing it consists of "connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them".[68] The broad focus of his conceptualisation of social capital, thus, specifically centres on the element of *social cohesion* – the patterns and degree of interaction within a population and the associated values attached to – or arising from – the interactions, including trust, reciprocity and

[65] Chambers and Conway 1991. p. 11.; and Devereux 1993. p. 52-59.; and Rahmato, Dessalegn. "Peasant Survival Strategies in Ethiopia". *Disasters*. Vol. 12. No. 4. 1988. p. 326-344.; and Corbett 1988. p. 1099-1112.; and Taal, Housainou. "How Farmers Cope with Risk and Stress in Rural Gambia". *Institute of Development Studies Bulletin*. Vol. 20. No. 2. 1989. p. 16-22.; and De Waal, Alex. *Famine that Kills: Darfur, Sudan 1983-1985*. Oxford University Press: Oxford, UK. 2005. p. 1-288.; and Beck, Tony. "Survival Strategies and Power Amongst the Poorest in a West Bengal Village". *Institute of Development Studies Bulletin*. Vol. 20. No. 2. 1989. p. 23-32.; and Agarwal, Bina. "Social Security and the Family in Rural India: Coping with Seasonality and Calamity". *Journal of Peasant Studies*. Vol. 17. No. 3. 1990. p. 341-412.; and Heyer, Judith. "Landless Agricultural Labourers' Asset Strategies". *Institute of Development Studies Bulletin*. Vol. 20. No. 2. 1989. p. 33-40.; and Gill, Gerard. *Seasonality and Agriculture in the Developing World: A Problem of the Poor and the Powerless*. Cambridge University Press: Cambridge, UK. 1991. p. 1-361.; and Chen, Martha. *Coping with Seasonality and Drought*. Sage Publications: London, UK. 1991. p. 1-254.

[66] Carpiano, Richard. "Toward a Neighborhood Resource-Based Theory of Social Capital for Health: Can Bourdieu and Sociology Help?". *Social Science & Medicine*. Vol. 62. 2006. p. 165-166.

[67] Wakefield, Sarah and Blake Poland. "Family, Friend or Foe? Critical Reflections on the Relevance and Role of Social Capital in Health Promotion and Community Development". *Social Science & Medicine*. Vol. 60. 2005. p. 2819-2820.; and Lindstrom, Martin. "Psychosocial Work Conditions, Social Participation and Social Capital: A Causal Pathway Investigated in a Longitudinal Study". *Social Science & Medicine*. Vol. 62. 2006. p. 281.

[68] Putnam, Robert. "Bowling Alone: America's Declining Social Capital". *Journal of Democracy*. Vol. 6. 1995 p. 67.; and Putnam, Robert. *Foreward*. Housing Policy Debate. Vol. 9. 1998 p. v.; and Putnam, Robert. *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster: New York, NY. 2000. p. 19.

familiarity. In contrast, Bourdieu's conceptualisation is a more robust understanding of social capital, as it not only accounts for the interconnectedness and cohesion of the social network, but more broadly focuses on the resources possessed by individuals within the network and the likely differentiation between the potential and actual availability of these resources to specific individuals within the network. According to Bourdieu, the amount of social capital that an individual or household is able to access depends not only on the quality and multiplicity of connections they are able to effectively mobilise, but also on the nature and amount of capital under the control of each of those connections.[69]

While these divergent conceptualisations of social capital have been refined and developed by several authors, Richard Carpiano, in particular, provides an elaboration that is useful for the purposes of this research as he further disaggregates the elements which, in their totality, constitute social capital. Primarily building on Bourdieu's conceptualisation, Carpiano incorporates a focus on the potential and realised outcomes social capital can provide and generally outlines a more complete conceptualisation, associating the following elements into a framework for understanding social capital: *structural antecedents*, or characteristics of the population and environment that influence the strength and nature of social connections and the resources available within the population; *social cohesion*, the patterns and nature of social interaction and association within the population, including associated values of familiarity, trust and reciprocity; *social capital*, the actual resources owing to individuals and households and groups within the population that could potentially be accessed; and *outcomes of social capital*, the potential and realised benefits that social capital can provide for network members or the population as a whole.[70]

Much of the existing research narrowly focuses on aspects of social cohesion and utilises specific measures of network cohesion as indicators of social capital, in line with Putnam's conceptualisation.[71] This study, however, utilises a more robust and nuanced approach to analysing social capital by not only assessing social cohesion within the population, but more broadly analysing the nature and amount of actual social capital available within the network (i.e. the previous analysis of physical, financial and natural capital assets owing to

[69] Carpiano 2006. p. 166-167.
[70] Carpiano 2006. p. 168.
[71] Carpiano 2006. p. 170.

households within the population) and analysis of the variation in potential and actual availability of social capital as perceived by individual households. Building upon Bourdieu and Carpiano's conceptualisations, social capital in the context of this study can, thus, be understood to broadly entail the social cohesion and interconnectedness of the population; the existence and strength of shared social values of trust, reciprocity and a commitment to assist others; the nature and amount of actual resources owned and controlled by individuals and households in the population and factors of differentiation within the social network that result in household and group-specific variation in access to the resources controlled by the population.

2.4 Summary of Literature

Although discussed as distinct themes and areas of research, this literature is critically inter-related and, in its entirety, largely details the underlying conceptual and methodological underpinnings of this study. The discussion on the HIV/AIDS epidemic details the unique conceptual context of vulnerability in which the research is framed. The review of conceptualisations and methods for analysing impoverishment – the contextualisation of assets, vulnerability and risk, discussion of varying methods for classifying asset endowments and analysis of the sustainable livelihoods framework – further provides a conceptual background and explanation of the research framework and specific model of analysis utilised in this research. Lastly, analysis of the conceptualisations of social capital provides a critical analysis of a complex component of the livelihoods framework at the core of understanding and explanation in this study. Thus, although distinct, these three broad areas of literature provide the conceptual and methodological framework of this study.

CHAPTER 3

3.0 METHODOLOGY

3.1 Conceptual Approach

This study utilises the capital asset model of the livelihoods framework to explicitly unpack and analyse the resources and relationships available to impoverished rural households. Although human capital is a critical component of livelihoods research generally, the specific focus of this research is on the availability of physical and relational resources and, thus, exclusively analyses financial, physical, natural and social capital.

Conceptually, the research seeks to delineate and detail the availability of each asset type in isolation and in relation to the other capital asset types, This household-level analysis is further contextualised both in terms of the social network within which it exists, as well as in relation to the perceived and actual vulnerability context of HIV/AIDS in the population. By analysing the magnitude and nature of available household assets in relation to both the social context within they exist and the nature of HIV/AIDS as a household crisis, the research will further assess the feasibility of known coping strategies for consumption smoothing and household adaptation.

As aforementioned, impoverished households are the primary focus of this particular study for two primary reasons. First, the study seeks to begin addressing the overwhelming paucity of empirical research and existing analyses on the rural poor of South and Southern Africa. There is, at present, scarce contextual research explicitly unpacking and disaggregating the comprehensive array of available resources necessary to facilitate coping and adaptation at the household level. As a result, there remains limited theoretical or practical understanding of the means of adaptation and coping available to households within this sizable sub-group of the population. Secondly, the acute vulnerability of the poor and the disproportionate impact of the HIV/AIDS epidemic on this particular sub-population – as previously discussed – warrants focused analysis of their specific circumstances. With fewer capital-assets and less diversified sources of income, the poor are least-equipped to respond and adapt to external shocks and protracted stress.[72] As

[72] World Bank. "Helping Poor People Manage Risk". *World Development Report 2000/01 – Attacking Poverty*. World Bank: Washington, DC. 2001. p. 135, 138.

livelihood security entails a household's ability to cope with crises, and is linked directly to the household's asset array, poor households are, by their very nature, less able to respond and adapt. Illness and death from HIV/AIDS, thus, constitutes a greater threat to poor households than their non-poor counterparts.[73] Thus, in order to augment and advance theoretical understanding of an under-analysed and particularly important sub-population, the focus of this study is on impoverished households in rural South Africa.

3.2 Methodological Framework

The research utilises quantitative data derived from survey questionnaires as well as qualitative data derived from analysis of secondary literature. Cross-sectional data was drawn from the baseline survey of the IMAGE (Intervention with Microfinance for AIDS & Gender Equity) study conducted by the Rural AIDS and Development Action Research Programme (RADAR) in 2001. The IMAGE study is an integrated, prospective, randomised, controlled, community-matched intervention trial analysing both the household and social environment in which sexual behaviours, gender-based violence and HIV infections occur, as well as the impact of introducing poverty-targeted microfinance programming and a gender-based participatory learning and action curriculum.

The decision to utilise secondary analysis of an existing data-set as the primary research methodology was made as a practical solution to the logistical and ethical constraints of the research. Quantitative and qualitative inquiry into factors affecting decision-making and behavioural responses to disease, illness and death – particularly relating to HIV/AIDS as it entails distinct constraints of sexuality and stigmatisation – are exceedingly sensitive in nature. Beyond the primary limitations of logistical accessibility, time and funding affecting most Masters-level projects, the researcher is an English-speaking, white, male American. Thus, the research was further constrained by significant barriers of race, gender, class and language. Ethical constraints were an additional and substantial consideration given the reliance of the research on the surveying and interviewing of human subjects.

The School of Public Health of the University of the Witwatersrand has coordinated the RADAR programme – a joint collaboration with the London School of Hygiene and

[73] Moser, Caroline. "Reassessing Urban Poverty Reduction Strategies: The Asset Vulnerability Framework". *World Development*. Vol. 26. No. 1. 1998. p. 23.; and World Bank 2001. p. 139.

Tropical Medicine and the Small Enterprise Foundation – within the region since 2001. Detailed longitudinal and cross-sectional data on household composition and characteristics are available through the programme's ongoing multi-level data collection efforts. The hierarchical design of the household surveys allows for a unique macro-level examination of the communities, as well as micro-level analysis of individual households of the Sekhukhuneland area and further analysis of individual as embedded units of a household.

While the data analysed in this study was derived from questionnaires administered through the IMAGE study, the aims and central research question of the secondary analysis is unique to this study. As such, all calculations and research findings discussed hereafter are original to this study and relate solely to the work of Keegan Kautzky. No findings subsequently presented or discussed were drawn from other analyses made by members of the RADAR research team.

All calculations were performed by this study's researcher – Keegan Kautzky – on the original, raw dataset provided by the RADAR unit. The researcher used Excel and Epi-Info statistical software programmes to perform all tabulations and counts of the original data and to calculate all proportions used in this research. Proportional representations (as percentages) of survey response counts provide the basis for this descriptive analysis. Thus, while this research draws on an existing data set that has been analysed extensively, all findings and analysis in this study (relating to the household data) are original to the author.

This work deviates from previous analyses of this dataset – and similar research in this field – in its primary focus on the differentiation and heterogeneity of livelihood asset portfolios available to individual households. It is also an original approach to analysing and presenting the data as it seeks to unpack and explicitly detail the availability of individual household assets and resources, rather than using the data to establish aggregate socioeconomic status indicators as is the basis of its use in the overwhelming majority of existing research. Thus, both the conceptual approach to, and methodological process of, analysis utilised in this study constitute innovative and original uses of the existing survey data. Furthermore, as aforementioned, the central research question of this study and specific aims of the research are novel to this study and the conceptual approach of

contextualising a livelihoods analysis of rural poor households within the crisis profile of the HIV/AIDS epidemic is highly original and innovative.

3.2.1 Setting and Logistics

The IMAGE study is set in eight villages of the Sekhukhuneland region, encompassing an estimated 9,500 households and a total population of more than 50,000. A district of the former homeland region of Lebowa, the region lies on the northern side of the Limpopo/Mpumalanga border on the crest of the Drakensburg escarpment in northeastern South Africa.[74]

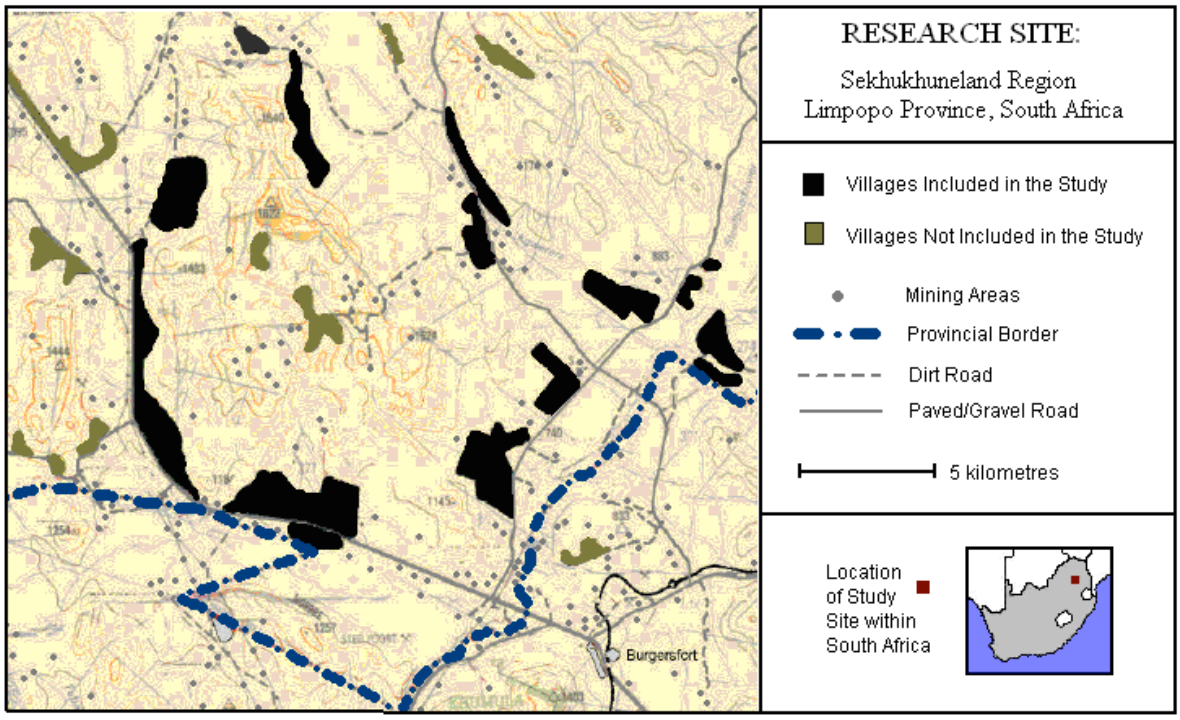


Figure 3.1 Map of the Research Site (Source: Hargreaves et al. 2002. p. 29)

In the 125 years following the overthrow of the BaPedi kingdom in 1879, the Sekhukhuneland region has reflected many of the same social, economic and political patterns as other regions of rural South Africa. Despite early reliance on subsistence agriculture, the influence of the precolonial and colonial migrant labour system, rural development initiatives, and the imposition of Apartheid-era labour reserves eroded the agriculture-based system and reshaped the livelihoods of the region's predominantly rural population. As was common throughout rural South Africa, labour migration became the primary means of economic survival for most households and women increasingly fled to

[74] Hargreaves et al. 2002. p. 28.

urban centers in search of employment, fundamentally reshaping regional and rural-urban demographics, economic structures and financial flows, household and familial relations, traditional cultural constructs, and South African society in the broadest sense.[75] The Sekhukhuneland region remains characterised by high levels of labour migration and unemployment. While subsistence agriculture persists as a survival strategy for many households, few have the necessary land, livestock and resources at their disposal to fully provide for their basic needs from farming alone. The inability of subsistence agriculture to provide for the consumptive needs of most families has perpetuated high levels of urbanisation and labour migration to Burgersfort – the primary center of economic activity for the local population - and other cities within South Africa.[76]

Population characteristics of the Sekhukhuneland region mirror conditions throughout rural South Africa, as well as other rural regions of southern and sub-Saharan Africa. The population structure of the region is characterised by high HIV prevalence and low life expectancy. Nearly 50% of the population is under the age of 15. Access to healthcare and education are consistent with other regions of South Africa, and HIV prevalence stands at approximately 13.2%.[77] The conditions of the study site are, thus, consistent with those in other regions of the country.

While the primary focus of research is to develop a more meaningful understanding of the unique array of resources and relationships available to rural poor households to respond and adapt to crises, an explicit aim is to be able to infer population characteristics and parameters from the study sample. In order to be able to generalise the study's findings, it is critical that sample cases are representative of the larger population. This, in turn, improves the external validity of the descriptive findings and contributes to literal and theoretical replication. Given the dearth of existing descriptive analysis on the resources and relationships available to poor rural households to respond to HIV/AIDS in Southern Africa, it is important that the research findings be generalisable to the broader population and provide a legitimate basis for subsequent theory generation and testing.

[75] Delius, Peter. *A Lion Amongst the Cattle: Reconstruction and Resistance in the Northern Transvaal*. Heinemann: Portsmouth, NH. 1996.
[76] Hargreaves et al. 2002. p. 29-31.
[77] Hargreaves et al. 2002. p. 30-31.

3.2.2 Cross-Sectional Design

Cross-sectional design is particularly well-suited for descriptive analysis, especially when used to measure and categorise population traits.[78] As the primary purpose of the study is to delineate and define household characteristics and endowments, a cross-sectional research design is ideal.

Before explanatory or interpretive theory can be developed, research must first describe and define the contextual features and characteristics of the unit of analysis. From that point, generalised characteristics and trends may be discerned, allowing for subsequent theory generation and verification. This study, thus, utilises a descriptive research design.

Extensive efforts were made by the IMAGE researchers and field personnel to limit manipulation and impact on the research environment prior to or during the data-collection process. While any external presence is inherently an intrusion, the research team attempted to minimise this influence. As this study attempts to categorise and define household asset portfolios as a proxy for the household's ability to adapt and cope, the integrity of the study requires analysis of the households in a natural, unmanipulated context. External intervention threatens the reliability of the data, potentially skews our understanding of available means and coping mechanisms of the household, and ultimately undermines the validity of the research findings if the influence is significant.

3.2.3 Unit and Level of Analysis

Within social research literature, it is generally understood that there is no definite conceptualisation of what constitutes a *household*.[79] As Beatrice Rogers argues, "given the varied and complex nature of human society, no definition of the household, however

[78] De Vaus, David. *Research Design in Social Research*. Sage Publications: London, UK. 2001. p. 176.
[79] Rogers, Beatrice. *The Internal Dynamics of Households: A Critical Factor in Development Policy*. United Nations University Press: Tokyo, Japan. 1983. <www.unu.edu/unupress/unupbooks/80733e/80733E01.htm>. Accessed 5 August 2006.; and Messer, Ellen. "The Household Focus in Nutritional Anthropology: An Overview". *Food and Nutrition Bulletin*. Vol. 5. No. 2. 1983. p. 2-12.; and Bender, Deborah. "A Refinement of the Concept of the Household: Families, Co-residence and Domestic Functions". *American Anthropolgist*. Vol. 69. 1967. p. 493-504.; and Dorjahn, Vernon. "Temne Household Size and Composition: Rural Changes Over Time and Rural-Urban Differences". *Ethnology*. Vol. 16. No. 2. 1977. p. 105-127.; and Gurney, J. Michael. and Ade Omalalu. "A Nutritional Survey in Southwestern Nigeria: The Anthropometric and Clinical Findings". *Journal of Tropical Pediatrics*. Vol. 17. No. 2. 1971. p. 50-61.; and Nieves, Isabel. "Household Arrangements and Multiple Jobs in San Salvador". *Signs*. Vol. 5. No. 1. 1979. p. 134-142.

general, completely fits all circumstances."[80] Despite this constraint, the household remains a standard, and frequently utilised, level of measure.

Within the sustainable livelihoods, famine/food security, and adaptation/coping literature and research, the primary unit of analysis is traditionally the household. While there exists significant intra-household variation in asset distribution, resource access and livelihoods, it is generally accepted that focusing analysis at the household level is easier, given the practical constraints of research, and more effective, given the diversity of social relationships and groupings, than analysing either individuals or broader population units.[81] The IMAGE Study defines a household as "a group of people who are permanently resident on the same property or dwelling and who eat from the same pot of food when staying at home."[82] It should be noted that this is not necessarily the same as conventional Western or African notions of the *family*. The questionnaires and data collection methods of the IMAGE study rest upon household-level analysis. Given this practical limitation, as well as its theoretical and analytic value of the household concept, the unit of analysis in this research report is the household.

While the questionnaires utilised to gather information for this research focus analysis at the level of embedded units, the research is designed to develop a broad understanding of the household as a holistic case. The perspectives of individual household members – one form of constituent element – are assessed through the survey questionnaires in order to augment our understanding of the household as a whole. The means and mechanisms available to the household to adapt and respond to acute and chronic crises, such as HIV/AIDS, are also assessed through analysis of individual and household asset arrays – another constituent element. The research analyses the tangible and intangible livelihood assets at the command of the household (i.e. the nature and diversity of capital sources and assets, and access to credit and savings), the ability of the household to access external assistance in times of crisis (from extended family, neighbors and the local community, and the state), the ability of the household to smooth consumption through unexpected acute crises, and perceptions of the household members (pertaining to decision-making and the division of labour, perceptions of wealth and insulation from financial shocks, the

[80] Rogers 1983.
[81] Mahoney 2004. p. 2-3.; and Chambers and Conway 1991. p. 6, 11.; and Barnett and Whiteside 2002. p. 14-15.
[82] Hargreaves et al. 2002. p. 28.

household's ability to respond to previous crises, and expectations of the household's future ability to cope).[83] Thus, while the design is focused on the household as a holistic case, the research derives data from analysis of its embedded units.

3.2.4 Sample Selection

As it is prohibitively expensive to collect information on every case in the population, a sample of cases must be selected that accurately reflect the broader population. If the sample is representative of the larger population, probability theory maintains that the sample's characteristics can be extrapolated and applied to the population as a whole. As such, this allows us to research an entire population by analysing a representative sub-set of the total. As an important aim of the original IMAGE study, as well as this secondary analysis, is to be able to make reliable inferences about the whole population, probability sampling – a sampling strategy in which each case in the population has an equal or known chance of being selected for inclusion – was necessary.[84]

A form of two-phase survey sampling – based on initial stratification of the population and subsequent randomised selection of sampling units from a specific stratum – was designed to generate a representative sample for inclusion and analysis. The initial study population, thus, consisted of all households (and embedded individuals) residing in eight adjacent villages in the Sekhukhuneland region of Limpopo Province. The IMAGE study utilised Participatory Wealth Ranking (PWR) – allowing members of a village to classify the wealth status of each household in their own village based on their own subjective determination – in order to categorise each of the 9,500 households in the eight villages into distinct wealth strata. Households classified as *poor* through this process then made up the study's sampling frame. From this sampling frame, two hundred households from each of the eight study villages were then randomly selected for inclusion in the study, providing a total sample of 1600 households.

As aforementioned, while the primary aim of the research is to establish a meaningful understanding of the sample population and the need to explicitly provide statistical generalisation is secondary, it is still important to utilise representative cases of the

[83] See Appendix A for a breakdown of the survey questions to be examined.
[84] Czaja, Ronald and Johnny Blair. *Designing Surveys: A Guide to Decisions and Procedures*. Pine Forge Press: Thousand Oaks, CA. 1996. p. 4, 6.

population in order to maintain the external validity of the findings, to minimise selection bias, to guarantee the sample measurement allows for statistical inference, and to provide a legitimate basis for the development of generalisable theory. To this end, reliance on this form of probability sampling – in which each unit in the population has a known nonzero probability of being selected – is critical.[85]

3.2.5 Data Collection and Questionnaires

Within surveyed households, individuals classified as a permanent household member – including those staying away from the household at the time of the survey – between the ages of 14 and 35 were eligible for inclusion in the study.[86] Trained fieldworkers administered the questionnaires in face-to-face interviews, obtaining households data from 2488 individuals with the Household Questionnaire (73% response rate) and from 825 adult women with the Senior Female Questionnaire (98% response rate).[87] Data derived from these two separate questionnaires incorporated in the original IMAGE baseline study – the Household Questionnaire and the Senior Female Questionnaire – provide the basis of this study's secondary analysis.

In order to provide a thorough contextual analysis and adequate measures of household asset portfolios and the availability and nature of coping mechanisms for poor rural households, data derived from the following questions in the aforementioned questionnaires are utilised in this research (see Appendix A for full questionnaires, exact wording and layout of questions):

Contextual Analysis
F704 – Measure of AIDS-related dependency (inclusion of orphans in household)
F701 – Extent of known HIV infection in extended family and local population
F702 – Extent of known HIV infection in household
F703 – Measure of intra-household communication on HIV/AIDS (prioritisation of threat)

Physical Capital
H301 – Measure of Household Dwelling Size (Number of Rooms)
H305 – Measure of Household Dwelling Quality (Structure)
H306 – Measure of Household Dwelling Quality (Water Access)

[85] Kish, Leslie. *Survey Sampling*. John Wiley & Sons, Inc.: New York, NY. 1965. p. 20, 27-28.; and Kalton, Graham. *Introduction to Survey Sampling*. Sage Publications: Beverly Hills, CA. 1985. p. 7.
[86] Hargreaves et al. 2002. p. 54.
[87] Pronyk, Paul, Linda Morison, Rico Euripidou, Godfrey Phetla, James Hargreaves, Julia Kim, Charlotte Watts and John Porter. *The Role of Structural Factors in Explaining Wide Variations in Community HIV Prevalence: A Study In Rural South Africa.* IMAGE Study Working Paper No. 1. Rural AIDS and Development Action Research Program: Acornhoek, SA. 2002. p. 5.

H307 – Measure of Household Dwelling Quality (Toilets/Sanitation)
H308 – Measure of Household Dwelling Quality (Electricity)
H402 to H410 – Measure of Physical Asset Ownership

Social Capital
F201 to F221 – Measure of Social Association (Extent & Nature of Group Membership)
F301 – Measure of Social Cohesion/Independence
F302 – Measure of Community Participation/Social Investment (Commitment of Time)
F303 – Measure of Community Participation/Social Investment (Commitment of Money)
F501 – Measure of Available Social Assistance (Financial)
F502 – Measure of Available Social Assistance (In-Kind)
F304 – Measure of Social Cohesion/Responsibility (Communal/Macro Shock)

Natural Capital
H401 – Measure of Land Ownership & Access

Financial Capital
H501 – Measure of Access to Financial Institutions
H502 – Measure of Household Debt
H503 – Measure of the Nature of Household Debt
H304 – Measure of Property Rent Expenditure
H504 – Measure of Financial Security
H309 – Measure of Financial Security (Household Investment/Improvement as Proxy)

As the Household and Senior Female Questionnaires utilise a livelihoods framework, the aforementioned questions provide the substantive information to understand the vulnerability context and household-specific capital-asset array of the rural poor of the Sekhukhuneland region.

3.2.6 Methodological Issues

The limitations and benefits relating to the selection of specific research methodologies and designs must be fully accounted for throughout study preparation and planning, implementation, data cleaning and management, analysis and write-up. In this regard, it is not only critical to justify the selection of specific methodologies for a given study, but to properly acknowledge and account for the impact and implications of the methodology on the study findings.

3.2.6.1 Sampling

Although intentional, it must still be explicitly recognised that the stratification of the study population on the basis of wealth status and the selection of the *poor* stratum of households for inclusion in the IMAGE study significantly biases any study findings. As only the subjectively classified *poor* are included in the study, and all other strata are excluded in the analysis, the study findings have limited generalisability and can only be understood to

approximate the reality of rural poor households in South Africa, not non-poor rural households or urban households and possibly not even rural poor households outside of the rural northeast of the country.

A further methodological limitation of sample selection relates to the IMAGE study's reliance on Participatory Wealth Ranking to classify poor households. While such an approach is advantageous in providing a more meaningful sociological classification of household wealth based on participatory, community-based and relative measures – as opposed to the standard top-down application of inflexible economic measures that are neither context-specific nor sociologically meaningful – subjective measures of classification are also problematic. Subjective selection and personal judgment – influenced by inadequate and differential information, differing value systems and bases for decision-making, as well as conscious and subconscious biases – are likely to incorporate classification error.[88] As the selection of the sampling frame in the IMAGE study was based on subjective determination of household wealth status, it is critical to remain cognisant of the potential introduction of error in the study sample when analysing all findings. That being said, subjective estimation of relative wealth may not differ markedly from actual relative wealth as the categories of classification for this study were not overly complex and, although subjective, Participatory Wealth Ranking is a well-established methodological means of determining relative impoverishment in small communities and social networks.

3.2.6.2 Secondary Analysis of Existing Data

The reliance of this study on a secondary analysis methodology poses unique limitations and benefits. Secondary analysis can be understood as "any further analysis of an existing dataset which presents interpretations, conclusions or knowledge additional to, or different from, those presented in the first report on the inquiry as a whole and its main results."[89]

An important methodological limitation of secondary data analysis is that the use of data derived for a different purpose likely biases subsequent analysis and findings and often introduces artifact into the secondary study. The original researcher or team established an analytic framework for the primary study that is reflected in the specification of the

[88] Kish. 1965. p. 29.
[89] Hakim, Catherine. *Secondary Analysis in Social Research*. Allen and Unwin: London, UK. 1982. p. 1.

problem, the form and wording of the questions, the conceptualisation of variables and the interpretation of the responses. Although a researcher undertaking secondary analysis may be able to develop a completely different analytic framework, it must be acknowledged that the original framework will always substantially limit and influence the alternatives available for secondary analysis.[90]

In secondary analysis of survey-based research, subjective elements of the research (i.e. implicit assumptions behind the questions, definitions used, potential framing of questionnaire format and design to elicit evidence for a specific viewpoint, etc.) are often not readily apparent and easily overlooked. As such, data derived from surveys must be recognised by the secondary analyst as being socially produced by the original researcher and not merely collected. [91]

Inherent in this methodology is also a common inability to fully account for residual errors in measurement or subjective artifact and manipulation in primary study design, data collection and findings. In extreme cases, this may wholly or significantly undermine the validity of secondary analysis findings.[92]

In relation to this study, however, these potential threats do not constitute substantial limitations as this secondary analysis of the IMAGE study data utilises a theoretical framework complementary to that of the original study, it relies on identical conceptualisations of the defining variables, concepts and events as elaborated in the original study, and it simply seeks to utilise the existing dataset to answer related theoretical questions unasked in the original research. Furthermore, the resource variables and data elements derived from the original IMAGE study – providing the primary basis of this secondary analysis of the resources and relationships available to impoverished rural households in South Africa – are standard to asset surveys and livelihood analyses.

It should be noted that in seeking to guarantee the validity of findings derived from secondary analysis, the conceptual similarity of the intent and design of the original RADAR research and the secondary researcher's study interest was an important

[90] Dale, Angela, Sara Arber and Michael Procter. *Doing Secondary Analysis*. Unwin Hyman: London, UK. 1988. p. 9.
[91] Dale et al. 1988. p. 17.
[92] Hyman. 1972. p. 27-29.

motivation in the decision to utilise the IMAGE study data. Thus, while it is important to appropriately acknowledge and account for these potential limitations of secondary analysis of survey data, in the context of this study it does not significantly undermine the validity of the findings or nullify the value of generating new theoretical understandings from the existing IMAGE survey data.

While the aforementioned issues constitute significant methodological limitations and disadvantages of secondary analysis, this methodology also has several important benefits of particular relevance to this study. Beyond providing significant financial and time-saving advantages to the researcher, a key practical benefit of secondary analysis is that it affords researchers and students access to large, high-quality datasets for analysis. This is a unique and important benefit of the methodology, particularly given the significant financial, time and personnel constraints to primary data collection.[93] A critical theoretical advantage of secondary analysis is that it allows for re-analysing existing data from an original or differing viewpoint and the generation of new findings from existing data using varied theoretical frameworks.[94] As Hyman avers, it "expands the types and number of observations to cover more adequately a wider array of social conditions, measurement procedures, and variables than can usually be studied by primary surveys…produc[ing] a more comprehensive and definitive empirical study of the problems the investigator formulated."[95]

3.2.6.3 Quantitative Surveys

While survey research can be effectively used to study causation of specific phenomena – by allowing for analysis of systematic variation in variables across cases – a more basic function of survey analysis – and the purpose for which it was selected for use in this study – is to describe the characteristics of a set of cases.[96] Although survey research does not have a specific technique *per se* and could utilise in-depth or structured interviews, content analysis or observation, it is most commonly associated with the use of questionnaires for data collection.[97]

[93] Dale et al. 1988. p. 45.
[94] Dale et al. 1988. p. 54.
[95] Hyman, Herbert. *Secondary Analysis of Sample Surveys: Principles, Procedures and Potentialities*. John Wiley & Sons, Inc.: New York, NY. 1972. p. 11.
[96] De Vaus, David. *Surveys in Social Research*. Allen and Unwin: London, UK. 1991. p. 5.
[97] De Vaus. 1991. p. 3.

As a distinct methodology, surveys are generally criticised on a range of ideological and technique-based issues, including: they are unable to determine causality as they are often unable to establish temporal order, they can only analyse specific aspects of social phenomena in isolation and lack appreciation of context and complexity, they are based on a deterministic assumption that human action is caused by external forces, they are inherently restrictive and unable to measure or provide understanding of meaningful aspects of social action, they are sterile and convert meaningful social factors into aggregate data, and they are inherently manipulative.[98] While these constitute legitimate criticisms of survey methodologies in general, not all of these are relevant to this particular study and, as in all studies, must be analysed and weighed against the unique benefits and advantages of the specific methodology. The methodological criticisms of quantitative surveys and reliance on questionnaires for data collection – relevant to both the original IMAGE research and this study in particular – are discussed below and subsequent justification is provided for the methodology's use in regard to the specific criticism.

A fundamental critique of survey research – and all methodologies that attempt to quantify social phenomena – is that such approaches fragment and codify inherently complex and multifaceted social forces and factors into discrete, unitary variables. From this sociological perspective, attempts to disaggregate the constituent elements of social phenomena and to extract social forces from the context in which they are rooted, mediated and experienced are viewed as fundamentally inappropriate. In other words, necessarily complex phenomena cannot be disaggregated and simplified into simple variables without sacrificing meaningful understanding of the social phenomena and potentially introducing bias and misrepresentation into the research findings. As this study's methodology is based on the analysis of variable-centred survey data to understand social behaviour, this critique is particularly relevant.

Questionnaire surveys utilising close-ended questions are particularly problematic in this regard as they rely on specific, standardised wordings to frame questions – thereby restricting and influencing the respondents interpretation and understanding of the issues being analysed – and allow only select responses chosen by the questionnaire's designer - limiting the respondents answers to only those options deemed relevant by the original

[98] De Vaus. 1991. p. 7-9, 330-335.

researcher. As such, the use of close-ended questionnaire surveys in sociological analysis inherently limits and influences respondent interpretation and answers, likely introducing error into the study and potentially biasing subsequent findings.

However, it must also be acknowledged that quantitative methodologies are able to substantially expand the analytic capabilities of social research in important and innovative ways. By more stringently relying on probability sampling and theory to provide representative cases for inclusion and analysis, quantitative methodologies are able to incorporate an element of generalisability into sociological research. In moving sociological research beyond meaningful understanding of a specific sample's characteristics to generalisability of population parameters, quantitative methodologies, thus, significantly expand the capacity and usefulness of sociological research. As Dale et al. argue, "if research is to achieve the maximum in terms of explanation and understanding it is unlikely to depend solely upon any one method…if used appropriately, there is no reason why…the variables used in a survey cannot reflect accurately the [social] experience of life."[99] Thus, while it is important to acknowledge the inherent limitations of quantitative methodologies of sociological analysis, their value in providing alternative and innovative ways of understanding and analysing social phenomena – as well as their critical ability to allow for extrapolation of findings to the broader population – must also be recognised. Although the questions and variables utilised in this study necessarily attempt to simplify human action and behaviour into basic codifiable elements to allow for comparative analysis and generalisability, thereby restricting their meaningful value and inherent complexity, the findings of the study should still be recognised as substantively valid and reliable, and particularly useful in providing an alternative means of analysing social behaviour that can be generalised to the broader population of rural poor in South Africa.

Another relevant criticism of survey-based data collection is that it often simplifies human behaviour and assumes individuals can be treated as autonomous, equal units. This is particularly problematic given the fact that individuals do not act in isolation and behaviour is highly influenced by interaction – both within the household and the broader environment – as well as by a range of unique and complex social inequalities and

[99] Dale et al. 1988. p. 37.

constructs impacting on the individual. While this study may be seem to bypass this criticism as it focuses on the household as the unit of analysis, rather than on individuals, a plausible methodological critique of this study is that any effort to focus on the household in its entirety creates an assumption of internal homogeneity. Survey research utilising the household as the unit of analysis is, thus, unlikely to adequately distinguish internal inequalities in individual power, position and autonomy, as well as in resource access and control.[100] As Graham explains, "In obscuring the relationships which mould…lives, the survey method masks the nature and patterns of power which derive from these social relationships."[101] As this study seeks to disaggregate and contextualise the resources and relationships available to impoverished households in rural South Africa to respond and adapt crises, the inherent assumption of internal homogeneity and power equality within households and the fundamental inability of the study to disaggregate resource access and control among individual household members is a significant limitation.

3.2.6.4 Cross-Sectional Design

Methodologically, cross-sectional research designs do not face many of the traditional threats to internal validity that longitudinal and experimental designs are concerned with. Since cross-sectional studies collect data at only one point in time, there is no threat of *maturation*, *history*, *instrument decay*, *mortality*, *conditioning or testing effects*. Nor is the design concerned with external validity problems of *panel attrition* or *inmigration and outmigration* as time is not an issue in cross-sectional research design. In analysing the external validity of varying research designs, it is also apparent that cross-sectional designs are more successful than other designs in achieving representativeness and generalisability. Given the aims of this research – specifically the focus on representativeness and generalisability – and the practical and methodological limitations associated with other study types, a cross-sectional study design is, thus, particularly well-suited for this type of study.

[100] Dale et al. 1988. p. 38.
[101] Graham, Hilary. "Do her answers fit his questions? Women and the survey method". In: Gamarnakow, Eva, David Morgan, June Purvis and Daphne Taylorson (eds). *The Public and the Private*. Heinemann Educational: London, UK. 1983. p. 140.

3.2.6 Ethical Issues

The IMAGE Study which provides the raw data for this research has been approved by the ethical committees of the University of the Witwatersrand (Protocol No. M991108 – 31 January 2000) and the London School of Hygiene and Tropical Medicine (Reference No. 586 – 6 September 2000). Participants in the research were fully informed of the nature of the study, as well as how and why they were chosen to participate. Informed consent was freely given by all participants before they were allowed to voluntarily participate in the baseline study. All information and observations were confidentially recorded and participant anonymity maintained.[102]

[102] Hargreaves et al. 2002. p. 72-73.

CHAPTER 4

4.0 ANALYSIS OF RESEARCH FINDINGS

Analysis of the research findings is divided into four sections. It begins with a contextual analysis of HIV/AIDS as it is perceived and understood by the population, specifically examining perceived prevalence of the epidemic, perceived HIV/AIDS-related dependency and the prioritisation of HIV/AIDS as a distinct household threat. It then provides an analysis of household quality and characteristics and examines physical and natural capital ownership. Financial capital is then analysed, focusing specifically on measures of household debt, access to credit, levels of investment, perceptions of relative wealth and measures of financial insecurity. Lastly, social capital is examined, with specific analyses of relational assets and available inter-household assistance, community response to covariant crises, available short-term assistance in response to idiosyncratic shocks, willingness to assist other households and measures of community association and cohesion.

In analysing and interpreting the study findings, we must remain cognisant of the aforementioned methodological limitations and how each may potentially introduce error into the study. While some areas of the research – specifically questions investigating financial, physical and natural capital ownership – are based on standard measures that are well-established in the literature as reliable indicators of the issue under analysis, others – particularly measures of individual perception and questions attempting to deconstruct complex social factors – are potentially less reliable. This is not to say that the findings derived from such questions are not accurate, reliable and exceedingly valuable – particularly in offering a unique understanding of a complex social phenomenon from an original viewpoint – it merely necessitates that the findings are approached carefully and couched within a firm understanding of the existing literature and appreciation of the study's sociological and methodological limitations, and not simply accepted at face value.

4.1 Contextual Analysis of HIV/AIDS as a Perceived Household Crisis

Before analysing the means of adaptation and coping available to households and the broad implications of the research findings, it is necessary to contextualise HIV/AIDS as it is perceived within the study population. Previous sections have examined the unique nature

of HIV/AIDS as a household crisis and outlined a taxonomy of known coping mechanisms and means of adaptation commonly utilised. The impact of HIV/AIDS, however, is not as straightforward as it would seem, and the breadth and complexity of its influence is rarely fully-acknowledged or appreciated. In order to understand how households respond to HIV/AIDS, it is critical to appreciate how HIV/AIDS is perceived by the population.

4.1.1 Perceived Prevalence

Of the estimated 9,500 households within the rural South African study site, encompassing a population of approximately 50,000, HIV prevalence is estimated at 13.2%.[103] The survey, thus, highlights a substantial disparity between the perceived and actual prevalence of HIV/AIDS in the population and a marked difference between the perceived and actual impact of the epidemic within households. When asked if anyone in their household was living with AIDS to their knowledge, less than half of one percent of those surveyed – 0.4% – responded affirmatively. A mere 2.6% of respondents were unsure of the HIV status of household members, and an overwhelming 97% claimed no one in their household was living with AIDS.

Beyond the extent of known or acknowledged HIV infection among members of the household, the survey assessed the extent of known HIV infection among extended family members, friends and the local population. Again, the perceived/acknowledged extent of HIV infection in the community differs markedly with the known prevalence of HIV/AIDS. 7% of respondents acknowledge knowing someone in the village – that is neither related to them nor a friend – that is either infected with or has died from AIDS. A further 3% acknowledge knowing a friend or relative that is either infected with or has died from AIDS. An overwhelming 90% of the population, however, claims to not know of anyone who is either infected with or has died from AIDS, sharply contradicting what is known of the prevalence of HIV/AIDS in the sample population.

Given the high HIV prevalence rate within the population and the high degree of public awareness and discussion of sexuality and HIV/AIDS (subsequently discussed), the most likely explanation for these findings is that survey respondents significantly under-reported their knowledge of HIV infection among members of the household, extended family

[103] Hargreaves et al. 2002. p. 28, 30-31.

members, friends and the local population. As aforementioned, this bias in reporting is likely the result of AIDS-related stigma and denial.

4.1.2 Perceived AIDS-Related Dependency

Given the protracted illness and eventual death associated HIV infection, AIDS-related dependency is a widespread phenomenon impacting a large proportion of households throughout South Africa. Yet, when asked if there are any orphans living in the household whose parents could have died of AIDS, 99% of households answered no. Only 1% of households acknowledged that an orphan living in their household could have been orphaned as a result of AIDS. That almost every household rejected even the possibility of AIDS being the cause of orphaning underscores the overwhelming extent to which the perceived impact of HIV/AIDS in individual households, as well as among neighbors and within the village, is denied.

Although stigma has been discussed generally, the denial of AIDS-related dependency by survey respondents potentially highlights the relevance of a unique form of stigma within the study setting. Stigma by association, is a common feature of the HIV/AIDS epidemic and may help to explain these findings. That even the presence of a child, potentially orphaned as a result of AIDS, in the household evokes denial on this scale, provides strong evidence of the presence and relevance of secondary stigma within the population.

4.1.3 Prioritisation of HIV/AIDS as a Threat

As an alternative measure of impact, the survey analysed intra-household communication on sexuality and HIV/AIDS. Given the sensitive nature of the subject matter and the stigma and silence associated with HIV/AIDS, respondent bias and denial are significant threats to the validity of the survey responses. The use of an alternative measure to assess the perceived impact of HIV/AIDS, thus, attempts to circumvent this subjective barrier. Analysing the extent of household discussion on issues of sexuality and HIV/AIDS, thus, provides an effective proximate measure of the prioritisation of HIV/AIDS as a perceived threat to the individual household. Although 57% of all household respondents report having discussed issues of sexuality or HIV/AIDS with their children in the past year, 19% of households surveyed did not have children in the household of appropriate age for such discussion. Thus, the effective prevalence of intra-household discussion on sexuality and

HIV/AIDS among households with children of an appropriate age is 71%, indicating a relatively high awareness and prioritisation of HIV/AIDS as a threat.

These findings necessitate further research to more fully differentiate the role of stigma, a genuine lack of awareness on the HIV status of family and community members, and denial of survey respondents in explaining the observed disparity between the acknowledged and actual prevalence and impact of HIV/AIDS in the population. It also provides evidence of the likely bias present in other South and southern Africa studies attempting to assess the prevalence, impact or threat of HIV/AIDS with population surveys, and the need to critically analyse the validity and reliability of all data derived from such studies.

While the perceived/acknowledged impact of HIV/AIDS is minimal according to the survey respondents – i.e. limited acknowledgement of HIV infection among household members, extended family, friends and other members of the community, as well as the adamant denial of AIDS as the cause of orphaning within the village – the magnitude of dialogue on issues of sexuality and HIV/AIDS in the same households appears contradictory. That nearly three-quarters of households discussed sexuality and HIV/AIDS with their children in the previous year arguably highlights the actual extent to which HIV/AIDS is perceived as a threat.

These findings highlight the marked disparity between what is explicitly acknowledged and what is implicitly understood to be the threat of HIV/AIDS. Although survey responses downplay HIV/AIDS as a threat to the household and community, the actions of the respondents indicate a high prioritisation and awareness of HIV/AIDS as a significant threat. These findings help to clarify the perceived context of vulnerability within which these households exist and serves to further contextualise the subsequent analysis of specific means available to households to respond and adapt in response to HIV/AIDS.

As aforementioned, the focus of this study is not to understand the actual ability of HIV/AIDS-affected households to respond and adapt *per se*, but rather to use the HIV/AIDS epidemic as a conceptual framework within which to couch an examination of the means of adaptation and coping available to rural poor households. Utilising HIV/AIDS as a proxy for chronic illness in the South African context, the intent of the

study is, thus, to better understand the probable ability of households to cope within this crisis context. By analysing how HIV/AIDS is perceived and acknowledged within the population we are better able to contextualise it as a household threat. In particular, the striking disparity between the known and acknowledged threat HIV/AIDS poses to the individual household highlights the complexity and confusion of household perception and necessitates reassessing basic assumptions of household response to HIV/AIDS-related crises.

4.2 Analysis of Household Characteristics and Physical and Natural Capital

In order to understand a household's ability to respond and adapt to HIV/AIDS and other crises, it is critical to account for the physical means owned and accessible to the household. Physical, natural and financial capital constitutes the primary resource base of the household in this context. Intangible relational resources, claims and other forms of social capital function as a secondary resource base as they provide access to other physical resources. Subsequent analysis investigates financial capital – through measures of debt and financial security – and social capital – through measures of association, social investment and responsibility and available assistance. This section of the report begins, however, with analysis of physical and natural capital – the household dwelling, the land available to the household and the household's physical assets.

4.2.1 Household Dwelling Size

The size of the household dwelling, measured by number of rooms, is a good initial indicator of property value and socioeconomic status. The size of the household is measured by the number of individual rooms making up the household dwelling, without regard to the size of individual rooms. Within the survey villages, the average household consists of four to five rooms that are used for cooking, eating, sleeping and general living purposes. It should be noted, however, that there exists significant variation in household dwelling size. Nearly 4% of household dwellings consist of one communal room used for all cooking, eating, sleeping and general living purposes. 16% are two-room households and a further 16% consist of three rooms. Nearly 31% of households have either four or five rooms, and 25% of those surveyed have between six and seven rooms. In sharp contrast to the 20% of households that consist of only one or two rooms, nearly 8% of

households surveyed have between eight and thirteen rooms used for cooking, eating, sleeping and general living.

4.2.2 Household Dwelling Type

Beyond the size of the household dwelling, the quality of the structure is another effective indicator of the physical capital value of the property. The materials used to make the walls of the main dwelling are constitute an effective proximate indicator of dwelling quality. Within the survey area, the majority of dwellings (44%) are constructed with block bricks without cement. Nearly 8% are made of mud bricks without cement. 6.5% of the households are cement-covered mud brick structures and 30% are cement-covered block brick structures. Less than 1% of household dwellings are made with high-priced face bricks. Conversely, nearly 2% of household dwellings in the survey area are made of mud and sticks, and nearly 10% of households are made from *other* materials – most often scrap tin, boards, sheeting and other low-quality materials.

The overwhelming majority – nearly 75% – of the households surveyed are of a similar housing standard to government RDP housing. Housing quality is thus, generally adequate, but not of a high quality or high monetary value. Highlighting the existing disparities in housing quality, nearly 10% of dwelling structures are made of mud or basic mud bricks and a further 10% of households are made with other low-quality materials. Analysis of dwelling quality, in addition to household size, thus more clearly highlights the magnitude of inter-household variation in household quality and property value within the villages.

4.2.3 Household Electrification

Individual household electrification is common within the survey area as nearly 80% of households are supplied with electricity. It should be noted, however, that the survey does not specify the extent to which the household electrification supply in the survey area is consistent, legally-obtained and/or affordable. Given that only a minority of respondents are unable to access electricity, the extent of household electrification serves to highlight relative impoverishment within the villages more than a demarcation in property value.

4.2.4 Household Sanitation

Access to sanitation offers a more effective indicator of household dwelling quality and property value. Of the households surveyed, slightly more than 1% benefit from a modern flushing toilet. An overwhelming 74% utilise an external pit latrine and nearly 25% do not have a toilet, pit latrine or any other individual household sanitation available. One-quarter of the population, thus, lacks even rudimentary household sanitation facilities and nearly three-quarters rely on an outdoor pit, highlighting the low relative quality and monetary value of household dwellings as a form of physical capital. That improved sanitation is inaccessible to a larger population than electricity in the survey area highlights another aspect of relative impoverishment within the population.

4.2.5 Household Water Access

Access to water is another indicator of household quality and property value, although in relation to the aforementioned indicators it is more effectively an indicator of communal living standards and the level of generalised infrastructural development. Less than 4% of households have access to a tap on their individual plot, while more than 60% use a communal tap in the village. Slightly more than 7% utilise a shared borehole, and nearly 30% transport water from a nearby river or stream or collect rainwater. Again, the level of relative impoverishment is slightly broadened when assessed on the basis of access to water. Although, as aforementioned, the infrastructural development that largely determines household water access and household electrification must be understood as primarily an issue of the level of communal development and secondarily a matter of household individual means.

4.2.6 Land Ownership

Beyond the quality and value of the household dwelling, the land under the household's control – whether owned, rented or merely occupied – contributes to the value of the property as physical capital. An overwhelming majority – more than 75% of households – do not own (i.e. hold private title to) any land. Of the less than 25% of households that own land, plot size was nearly evenly split with 34% of those owned being small plots, 27% medium plots and 28% large plots. A scarce 0.3% of households owned multiple plots of land within the survey area. It should be noted that the survey questionnaire did not quantify or standardise the designations of small, medium and large in relation to plot size,

but rather relied on the subjective determinations of the land owners. There is, thus, no way to calculate or measure the value or usefulness of the land, or even to determine whether a specific plot type is large enough to provide basic subsistence.

While less than one-quarter of households in the study area own land, a mere 1.7% of households surveyed pay rent for the land on which they live. Thus, while most households do not own the land on which they live, neither are they required to pay for its use. Land is commonly allotted through traditional authorities and, while utilised by individual households, remains communally-owned or owned by the traditional authorities themselves. As the communal land is not individually owned, but merely occupied by the household, neither is the household dwelling in which the individuals reside their own personal property.

This is critical to our understanding of adaptation and response in times of crisis. Lacking outright ownership of the land and property (whether occupying communal land or renting from the owner) substantially reduces the coping mechanisms and options available to a household as the use and/or sale of the land in times of crisis is not entirely under the control of the household. With 75% of households in the survey area lacking ownership of their land, the overwhelming majority of the population is without one of the most basic and important means of adaptation in times of crisis – the ability to alter land-use and/or sell their land and property.

4.2.7 Physical Assets

Beyond property (land and household dwelling) value and type, the quantity and type of assets available to the household is critical in determining the means of adaptation and response available in times of crisis. Given that three-quarters of the population do not own or control the property on which they live, and are thus unable to use it as leverage in responding to crises, physical assets are all the more critical as a means and resource of adaptation and response.

Physical assets can be classified as essential or non-essential, productive or non-productive. Essential assets are those necessary to daily functioning. If an individual's employment requires they have their own transportation, a car may function as an essential

asset. If employment and regular daily functioning is not dependent on owning a vehicle, the vehicle would be considered a non-essential asset. Productive assets, on the other hand, are those that generate income or other means of subsistence. In this regard, a cow is a productive asset if it produces milk for sale or use by the household, if it can be used to plow fields or provide physical labour benefiting the household, or if it produces a calf which can be sold, raised for its labour capacity or eaten. The same applies to chickens, goats or any other type of animal.

A few examples serve to clarify the asset types. A vehicle (car, motorcycle, bicycle, truck, etc.) can be considered a productive asset if, by renting it out or charging for its use, the owner is able to generate income. A refrigerator or cell phone can function in the same manner, although it is rare for either to be considered productive assets. If a household or individual uses a refrigerator for personal convenience, the asset is likely neither productive nor essential. Conversely, if a refrigerator is used to generate income – i.e. through the sale of cold drinks or refrigerated goods – it is likely both essential and productive. An asset that is essential, however, is not always productive and a productive asset is not always essential to the functioning of the household or an individual's daily life. If an individual's employment requires they have personal transportation and the ability to communicate while on the road, a vehicle and cell phone may not be productive assets – in that they do not directly generate income – but are essential assets as the employment, and subsequent remuneration and income-generation, is dependent on their use. It should be noted that televisions and radios, physical assets common to a large proportion of households, are rarely essential or productive assets as they function primarily as modes of entertainment and neither generate income nor are necessary to the day-to-day functioning of the household.

4.2.7.1 Vehicle

A vehicle is most commonly a non-essential, non-productive asset. The exception, of course, being when it is a necessary requisite of employment or critical to income-generation for the individual or household.

An overwhelming 87% of households in the study site do not own either a car or a motorcycle. Slightly more than 8% of those surveyed own a used car or motorcycle more

than six years old, while 2% own a vehicle between two and six years old. Only 1% of households own a car or motorcycle that is relatively new – less than 2 years old. Slightly more than 1% of households surveyed acknowledged owning multiple vehicles. Vehicle ownership is, thus, exceptionally rare, and cars and motorcycles are an exclusive commodity of the relatively wealthy within the population. Although obviously an imprecise measure, the age of the vehicle is used as a proximate measure of the vehicle's quality and potential monetary value as a physical asset.

4.2.7.2 Bicycle

Bicycle ownership is even less common within the study site than car or motorcycle ownership, despite the significant cost variation between these transportation asset types. Less than 7% of the population owns a bicycle, as compared with 13% of the population that owns a car or motorcycle. More than 6% owns one bicycle and 0.3% (three households out of eight hundred and twenty eight surveyed) own two or more.

4.2.7.3 Refrigerator

Similar to a vehicle, a refrigerator is often neither essential to the functioning of everyday life nor a productive asset. It should be noted, however, that a refrigerator aids in the storing of food for extended periods of time and is, in this regard, more productive and more essential than other ideal-type non-essential/non-productive assets. It is, thus, less likely to be sold in times of crisis than other pure non-essential, non-productive assets. Facing dire constraints, however, a refrigerator, like a vehicle or bicycle, will be sold to provide for more immediate and pressing material and financial needs.

Almost 55% of households in the study site do not own a refrigerator. Nearly 42% own one refrigerator and 4% own two or three. While still few in number, it could be arguably assumed that the higher proportion of households owning multiple refrigerators highlights a greater level of asset abundance within these households and, thus, a larger asset buffer in times of crisis. Two issues must be noted, however.

The first issue relates to asset convertibility. The demand for a used refrigerator is likely lower than the demand for a used car or motorcycle, a television or a stereo. As a result, the liquidity or convertibility of a refrigerator as an asset is likely lower and there is far

greater potential for its sale or exchange to be undervalued on the market. Its value as a means of buffering against crises is, thus, diminished due to lower convertibility to cash equivalence. Beyond low convertibility, it should also be noted that physical assets are often undervalued on the market in both idiosyncratic and covariant crises.

Secondly, the higher proportion of multiple refrigerator ownership by individual households could be explained by a higher proportion of household-based entrepreneurship, as opposed to formal companies and business entities in this rural setting. The informal business sector is highly active within the South African economy, and individuals and families selling food, drinks and other goods often operate unlicensed from public stalls, temporary stands and private households. It is arguable that the higher proportion of multiple refrigerator ownership highlights this economic phenomenon, rather than indicating a higher level of convertible assets and a broader asset buffer in times of crisis. If the refrigerator is a productive asset, allowing for the sale of cool drinks and preserved food, it is not an expendable commodity as its sale or exchange would directly diminish income generation. As such, the ownership of multiple refrigerators does not, as would be assumed, indicate a higher degree of asset buffering as they are likely productive assets for the household, constituting an essential component of household income-generation.

4.2.7.4 Cell Phone

Similar to vehicles and refrigerators, cell phones are predominantly a non-essential, non-productive asset that can, depending on their use, facilitate income-generation and function effectively as an essential, productive asset. In such circumstances, as with a vehicle or refrigerator, the cell phone is not as readily expendable as other assets and its sale or exchange to provide for immediate needs would preclude subsequent income-generation, effectively disadvantaging the household.

In the study site, 77% of households do not own a cell phone. Slightly more than 19% of households own one cell phone and nearly 4% own two or three. These findings are somewhat surprising given the broad popularity, convenience and utilisation of cell phones. The fact that less than 23% of surveyed households own a cell phone – a common

and relatively inexpensive asset in the South African context – highlights the low level of asset ownership in this population found across all asset indicators.

4.2.7.5 Television

Televisions are a common form of non-essential, non-productive assets. They neither generate income nor are necessary for household or individual functioning in everyday life. As such, they – as all non-essential, non-productive assets – are the most expendable and often are the first to be sold or exchanged in times of crisis.

Within the study site, 63% of households do not own a television and, thus, lack this basic and highly-cash convertible resource. Nearly 36%, a substantial proportion of the population does own a television, however, and would be able to use it as a buffer in a time of crisis. Slightly more than 1% of households own multiple televisions, further documenting the physical resource abundance of the extreme minority of relatively wealthy households in the population.

4.2.7.6 Radio/Stereo

Like a television, a radio or stereo is another non-essential, non-productive asset common to many households which, in a time of crisis, is readily exchanged or sold to provide for the immediate financial or material means. Radio ownership is less common than television ownership within the population, as more than 70% of households do not own a radio or stereo, but the more than 28% of households that own one radio/stereo and the 1% of households that own two or more have the ability to use this basic asset as a resource.

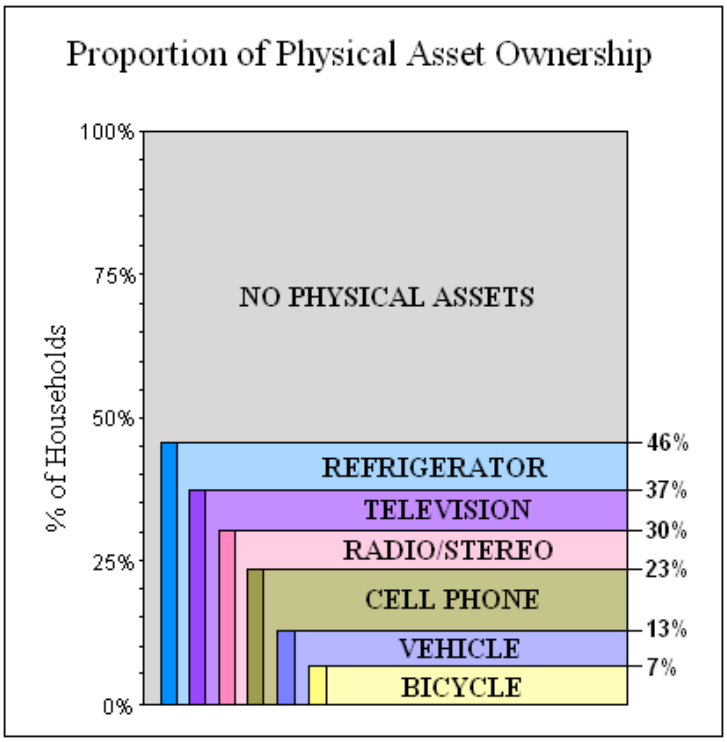


Figure 4.1 Graph of the Proportion of Physical Asset Ownership[104]

While asset ownership is complex and differentiated across households, and a simplified graphical analysis (Figure 4.1) masks variation in ownership, it serves to effectively highlight the overwhelming dearth of modern physical assets and cash-convertible resources owned by individual households in the population. Less than half of households own any one distinct physical asset type. Furthermore, a mere one-third to one-quarter of the population own a television, radio or cell phone – the most common and readily-convertible non-essential physical asset types – underscoring the high level of abject poverty and severely limited physical capital available to most households for conversion or exchange in response to crises. The fact that only 7% of households own a bicycle, a readily convertible low-to-medium value asset, and only 13% own a vehicle, a readily-convertible medium-to-high value asset, further accentuates the profound and generalised lack of physical resources available for use in response to household shocks and stresses.

4.2.7.7 Livestock

In the rural setting of the study site, livestock ownership is relatively extensive and animals function as an important physical asset type (Figure 4.2). More than half of the households own chickens, one-quarter own goats and one-tenth own cattle. As aforementioned, while

[104] Figure 4.1 developed by author based on the survey data

livestock are a productive asset and important to income-generation, they are often non-essential and, in relation to other assets, are relatively expendable. As such, they are often one of the first assets to be sold or exchanged to provide for the immediate needs of the household in a time of crisis.

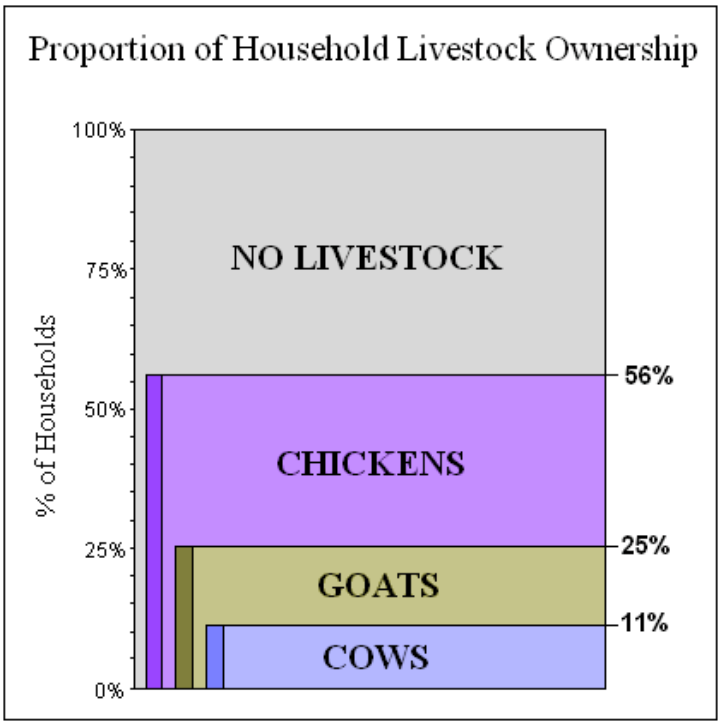


Figure 4.2 Graph of the Proportion of Livestock Ownership[105]

56% of households in the study site own at least one chicken. 8.5% own one or two chickens and almost 28% of households own between three and nine chickens. Slightly more than 18% own between ten and twenty chickens, and less than 2% own between twenty-five and fifty chickens.

25% of households surveyed own at least one goat. Approximately 7% of the population owns one or two goats and 11% own between three and six. More than 4% own between six and nine goats, and a mere 1.4% of households own between ten and twenty-five goats.

Only 11% of households surveyed own cattle in the study site. 3.4% own one or two cows and slightly more than 4% own between three and five. 2.4% of own between six and eight cows, and less than 1% of households own between ten and fifty cows.

[105] Figure 4.2 developed by author based on the survey data

4.3 Analysis of Financial Capital and Household Insecurity

Of all sources of available capital, financial capital is the most readily convertible of asset types. As such, financial capital functions as the standard measure by which the values of all other forms of capital are evaluated. In order to analyse a household's available means of adaptation and coping, for example, it is crucial to account for the market, or relative monetary, value of the household's physical and natural capital. Beyond physical and natural capital, however, the availability of financial capital – in the form of cash and credit – is critical in determining a household's ability to respond and adapt to crises. It is a direct, although only partial, measure of the physical means owned and/or accessible to the household.

Absent detailed information on the exact nature and magnitude of household income, savings and debt, alternative proximate measures can be substituted to analyse financial capital and household security within the population. Given the limitations of the RADAR survey questionnaire and the dearth of detailed household financial data, we must, thus, rely on measures of access to financial institutions, the nature and prevalence of household debt, the prevalence of property investment, the ability of households to meet unexpected financial demands and participatory wealth rankings.

4.3.1 Access to Financial Institutions

Access to financial institutions – primarily savings and lending or credit facilities – is a key indicator, and often a requisite component, of financial security. Without access to credit organisations or lending facilities, a household is often unable to withstand acute economic crises and buffer against risk with credit. Without access to savings institutions, a household is often similarly unable to buffer against risk and withstand crises using their own financial excess. Involvement with formal banking – i.e. the use of a bank account – is, thus, an effective indicator of access to financial institutions.

Within the survey population, only 31% of households – the household head or the household head's partner – have a bank account. While slightly more than 1% of respondents were unsure of whether their partner has a bank account, an overwhelming two-thirds of respondents acknowledged their household has no bank account. While neither necessary nor wholly adequate in itself, access to savings and lending institutions is

an important factor facilitating economic shock absorption and, thereby, facilitating the financial security of a household through crises.

4.3.2 Household Debt

Analysis of the nature and magnitude of household debt provides further evidence of financial security. While a majority of the households have no debt, a substantial 43% of those surveyed acknowledged owing money. In nearly 30% of households, the household head owes money; in 9% of households, the partner of the household head owes money; and in 4% of households both the household head and their partner owe money.

Beyond its prevalence, the nature of household debt highlights the state of financial security within the study site. A mere 0.1% of households owe money to a bank, while 1.2% owe local money lenders and 6.3% owe an NGO or credit organisation. These findings serve to highlight the limited utilisation of formal banking institutions and the higher prevalence of informal lending facilities and micro-credit schemes. It should be further noted that 6% of households owe money to friends and relatives with 4.2% of those surveyed owing friends and a lesser 1.8% owing family members. The overwhelming majority, however, owes money to a local shop or store.

That the debt of nearly one-third of households is owed to a shop or store highlights the high levels of financial insecurity and the magnitude of endemic impoverishment within the survey population. The inability of these households to pay for food, clothing and other basic household items necessitates their purchase from local stores on credit. An unproductive form of debt, it serves only to provide for basic subsistence in the short-term.

4.3.3 Household Investment

While an indirect measure of the state of household financial security, the prevalence of property investment within the study site serves as an effective indicator of household surplus and savings. A household in debt, struggling to subsist or simply breaking even financially is unlikely to make substantial investments in their property as household renovation, building and improvement is rarely feasible without a financial surplus or savings.

In the previous year, less than 6% of households acknowledged having done any work to renovate, build on or improve their house in any way. That nearly 95% of households have been unable to undertake property investment or household improvement is a strong indication of the overwhelming scarcity of savings or financial capital surplus within the population.

4.3.4 Financial Insecurity

While measures of access to savings and credit facilities, measures of debt and measures of investment serve to define and clarify the financial context of households in the survey population, they are unable to specifically delineate the availability of financial capital or to characterise the financial coping ability of the households in a crisis. In this regard, a measure of household financial security is necessary.

Survey respondents were asked how difficult it would be if the household head desperately needed to get R50 (approximately US$8) to pay an official body back by the end of the month. The survey question, thus, serves to determine household ability to financially cope with unexpected costs and thereby assess the availability of financial capital in times of crisis. Only 8% of households responded that it would be no problem to organise R50 to meet an unexpected payment by the end of the month. For 10% of households, it would be possible, but inconvenient. For 51% of households it would be possible with real difficulty, and for 31% of households it would not be possible.

That it would be difficult to impossible for 82% of households in the survey population to arrange R50 by the end of the month to meet an unexpected payment highlights the severe scarcity of financial capital within the population and the inability of an overwhelming majority of households in the survey site to be able to cope with unexpected financial crises and shocks. Beyond highlighting the severe financial vulnerability the overwhelming majority of households face, it underscores the particularly damaging threat HIV/AIDS poses to the population, owing to the chronic and debilitating nature of the disease and its high associated costs.

4.3.5 Perceived Household Wealth

Beyond the aforementioned indicators of financial capital, a subjective measure of perceptions of relative wealth provides a deeper understanding of financial livelihood from the perspective of the household itself. A participatory wealth ranking of households was undertaken, allowing survey respondents to describe their household's relative wealth within the village.

Nearly 20% of respondents perceived their household wealth as equivalent to most people in the village. 14% acknowledged that their household was better off than most people in their village. A 66% majority of respondents, however, perceive that their household is worse off than most people in their village.

The perception of a significant majority – that they are poorer than most in their village – underscores a generalised perception of relative impoverishment within the population. Perceived relative impoverishment at such substantial proportions potentially highlights the extent to which households sense, and are concerned with, their own financial insecurity. In this way, perceived scarcity and financial vulnerability of a household likely causes it to undervalue its relative position in the community.

4.4 Analysis of Social Capital

Beyond natural endowments and physical and financial assets, the nature and availability of social capital and relational resources broadly determine a household's ability to respond and adapt in times of crisis. Within the sustainable livelihoods framework and literature, social capital pertains to the intangible assets owing to the household. The concept specifically focuses on available *claims* – appeals or demands that can be made on individuals, groups, relatives, associations, the community and others to acquire support or access, including, but not limited to, food, loans, assets, work or gifts.[106] In order to understand the nature and complexity of social capital in this context, the research seeks to assess social capital through its constituent elements: the social cohesion and interconnectedness of the population, the strength of shared social values of reciprocity and commitment to assist others, and factors of differentiation within the social network in relation to the actual amount and nature of physical, financial and natural assets owned and

[106] Chambers and Conway 1991. p. 7-8.

controlled by individuals and households in the population (previously analysed in sections 4.2 and 4.3).

4.4.1 Relational Assets and Available Inter-Household Assistance

In order to analyse the nature and availability of inter-household assistance and community-based coping mechanisms, the survey utilises hypothetical scenarios of unambiguous covariant and idiosyncratic crises. Crop disease and floods – as hypothetical scenarios – provide an effective standard for covariant crises as they are intrinsically problems that affect the entire village or neighborhood as an aggregate population. The hypothetical scenario of household destruction by fire, on the other hand, is ideal for idiosyncratic crises as the individual household is the only unit in the village or neighborhood directly impacted.

It should be noted that the diction used in the survey questions, and the scenario types themselves, are designed solely to determine the availability of short-term assistance in response to acute and chronic crises. One might argue this inevitably limits our theoretical *prima facie* understanding of the means of adaptation and coping available to households – specifically our understanding of the availability of repeated or ongoing long-term assistance or assistance available in response to chronic crises. This seeming limitation of the survey tool, however, does not substantially diminish the ability to theorise household adaptation and response to such crises as we can reasonably conclude that if short-term assistance is not available to a household in a time of acute crisis, neither repeated nor ongoing long-term assistance would be available to the same household in a comparable chronic crisis. Simply put, if a household would be unable to attain assistance from extended family members, friends, neighbors or other households in the village in the case of their house burning down or if their crops were lost due to pestilence or flooding, we can reasonably assume that the household would be similarly unable to attain assistance in the case of a protracted illness.

As aforementioned, HIV/AIDS does not wholly function as either a chronic or an acute crisis as it entails characteristics of each. The impact of illness and physical debilitation associated with HIV/AIDS is characteristic of a chronic stress, while the impact of the consequent death of the infected individual is characteristic of an acute shock. The needs

of a household impacted by HIV/AIDS, thus, evolve with the progression of illness and eventual death of the infected. As such, the availability of community-based or inter-household assistance must be understood in relation to the unique and evolving needs of the HIV-impacted household. Even if assistance is available to the household in the initial phases of illness progression and labour loss, there can be no assumption of continued availability. Assistance through inter-household transfer – be it time dedicated to caregiving, the provision of physical labour or financial support – depletes the resources of the assisting household(s) and is, by its very nature, unsustainable in the long-term. The exceptions are households of relative wealth that have the physical and financial means to repeatedly or continuously transfer resources to other households. Existing research from other contexts corroborates this point: inter-household arrangements are rare as they require not only substantial means, but also the inclination and commitment of a household to sacrifice a substantial proportion of its financial and/or physical welfare, without benefit, to uplift another.[107] In the context of the survey site, households are predominantly of moderate-to-scarce means, and the capacity of one household to assist another is limited by its own acute vulnerability and significant physical and financial constraints.

4.4.2 Community Response to Covariant Crises

The survey analyses the nature of community response to covariant crises by asking, "If there were a problem that affected the entire village/neighborhood, for instance crop disease or floods, which scenario do you think would best describe who would work together to deal with the situation?" Only 12% responded that "each person or household would deal with the problem individually." The overwhelming majority – nearly 88% – contend the problem would be addressed through cooperation and a communal response of some form. Nearly 46% believe that either the "local government/municipal leaders would take the lead" or that "all community leaders acting together" would address the problem. 15% believe "the entire village/neighborhood" would work together to deal with the situation and nearly 27% expect "neighbors amongst themselves" would act to address the problem. Thus, of the 88% of households that would expect to see cooperation and a communal response to a covariant crisis, half place their expectation on the citizens themselves to organise and work together to address the problem and the other half would expect the leaders of the community to work together and take the lead in responding.

[107]Sauerborn, Rainer., Alayne Adams and Maurice Hien. "Household Strategies to Cope with the Economic Costs of Illness". *Social Science Medicine*. Vol. 43., No. 3. 1996. p. 298.

These findings highlight a fairly high level of perceived communal responsibility and expected cooperation in responding to covariant crises. This common expectation of communal involvement in responding to a covariant crisis, however, warrants further interrogation as it seems to contradict existing evidence and theory on perceptions of communal assistance and responsibility relating to illness.

Based on their work in Burkina Faso on illness-related coping strategies, Sauerborn et al. argues, "study findings indicate that coping with the costs of illness largely occur[s] at the level of the household itself, and that inter-household transfers of financial or time resources played a smaller role…ultimately it [is] up to the household itself to deal with the financial and time costs of illness."[108] In this regard, the overwhelming response recorded in this study is of note. A mere 12% of respondents specified that they expected individual households to deal with the problem. 27% expected neighbors among themselves to address the covariant crisis, nearly 46% perceive the onus of responsibility for action would fall on the shoulders of local government/municipality or community leaders and 15% expect the entire community to work together to deal with the situation. These findings are, thus, contradictory to the evidence espoused by Sauerborn et al. and others, unless HIV/AIDS is not perceived as a covariant crisis.

In South Africa, HIV/AIDS constitutes a generalised epidemic with an infected population estimated at four to six million and an affected population including millions more. In the context of the study site, it is estimated that 13.2% of the population is infected with HIV with a much larger proportion of the population indirectly affected by the disease. If 10% to 20% of households in a village lost their crops due to pestilence or a flood, there can be little doubt that it would be perceived as a covariant crisis – a problem affecting the village. Yet, the same perception does not seem to hold when it is illness that threatens a substantial proportion of the community.

One possible explanation is that, despite the magnitude of the epidemic, the unique stigma, social and moral implications, and silence and denial surrounding HIV and AIDS cause it to be effectively characterised not as covariant, but as idiosyncratic. Despite the acknowledged threat AIDS – at epidemic proportions – poses to the entire community, it is

[108] Sauerborn 1996. p. 297-298.

perhaps practically understood and perceived not as a communal threat, but rather a problem facing – and to be addressed by – individual households. This would help to explain the disparity between the findings of this research, which argue the majority expect a communal response to address covariant crises, and the theory proffered in existing research that clearly argues the household, not the neighborhood or village, is generally perceived to be primarily responsible for, and central in, responding to and coping with similar illness-related crises. It should be noted that while only a preliminary theory, clear evidence exists to support this hypothesis. Sauerborn et al. align their own findings in rural Burkina Faso with that of existing research, concluding "inter-household transfers are more acceptable in the context of food shortage than in the context of health care."[109] Illness-related crises and the impact of epidemic disease should perhaps, thus, be acknowledged – if not formally reclassified – as idiosyncratic in perception, whether or not they are technically covariant in nature.

4.4.3 Available Short-Term Assistance in Response to Idiosyncratic Shocks

Beyond perceptions of expected response to covariant crises, the survey assesses the availability of external and community-based assistance in times of idiosyncratic shock. Utilising a scenario of the respondent's household being destroyed by a fire, an ideal type idiosyncratic crisis, the survey analyses the level of available assistance – in the form of both financial support and in-kind assistance – from family and relatives, neighbors, people from the village the household does not know well (acquaintances) and people from the village the household does not know at all (strangers).

The survey first assesses who the household could turn to for two weeks of shelter while other long-term arrangements are made (Table 4.1). More than 8% of households perceive effective isolation and social abandonment in a time of crisis, unable to access even short-term in-kind assistance (in the form of shelter) from any source – family and relatives, neighbors, or known or unknown community members. Nearly 22% of households feel they could turn to family and relatives for shelter, but would be unable to attain assistance from neighbors or any other members of the village. Slightly more than 19% of households feel they could turn to both extended family and neighbors for short-term shelter, but could not expect the same from other members of the village. 7% of households believe they

[109] Sauerborn et al. 1996. p. 298.

could turn to family, neighbors and acquaintances in the village for in-kind assistance and more than 18% feel they could expect assistance from all sources – both acquaintances and strangers in the village, neighbors and their family and relatives.

Table 4.1 Availability of Short-Term In-Kind Assistance to an Idiosyncratic Shock[110]

	Family & Relatives	Neighbors	People from the Village I Don't Know Well	People from the Village I Don't Know At All
18.4%	YES	YES	YES	YES
7.3%	YES	YES	YES	NO
19.4%	YES	YES	NO	NO
21.7%	YES	NO	NO	NO
8.4%	NO	NO	NO	NO

Note: Some information has been redacted from the table for the purpose of clarification

While the perceived availability of assistance for 92% of the households seems extensive, the fact that nearly one in ten households in the survey site would be unable to find even short-term shelter for their family if their house burnt down highlights the overwhelming severity of abject vulnerability threatening a sizable proportion of the population. In the case of an acute shock, an idiosyncratic crisis that would literally leave a family homeless, nearly 10% of the population believes there is no one they could turn to for even the most basic of short-term assistance, and a further 20% believe they could only seek or expect to receive help from family members and relatives. The implications of these findings are devastating and can not be overstated.

Utilising the same crisis scenario, the survey further assesses who the household could rely on to borrow R50 to help them buy clothes after the fire (Table 4.2). Again, 8% of households responded that they would expect to be effectively isolated and socially abandoned in a time of crisis, unable to borrow even a small amount of money from any source, be it relatives, neighbors, or other community members. 20% of households believe they could turn to family and relatives, but would be unable to attain financial assistance

[110] Table 4.1 developed by author based on the survey data

from neighbors or any other members of the village. Interestingly, a full 25% of households feel they could turn to both family and neighbors for minor financial support, but could not expect the same from other members of the village. 7% expect they could turn to family, neighbors and acquaintances in the village for such assistance, and 17% feel they could expect they would be able to borrow R50 from all sources – relatives, neighbors and both strangers and acquaintances in the village.

Table 4.2 Availability of Financial Assistance to an Idiosyncratic Shock[111]

	Family & Relatives	Neighbors	People from the Village I Don't Know Well	People from the Village I Don't Know At All
17.3%	YES	YES	YES	YES
6.9%	YES	YES	YES	NO
25.2%	YES	YES	NO	NO
20.3%	YES	NO	NO	NO
7.9%	NO	NO	NO	NO

Note: Some information has been redacted from the table for the purpose of clarification

The consistency in response to these two questions of the survey highlights a surprising similarity in assistance availability. Financial support and in-kind assistance appear to be equally available to households in response to idiosyncratic shocks. Given the general impoverishment of the population and the scarcity of financial resources and physical assets within the social network, this belief is somewhat surprising. We could arguably expect in-kind assistance – i.e. the provision of short-term shelter – to be more readily offered and available than financial support as in-kind assistance does not deplete the financial resources of assisting households in a resource-poor setting, it is merely a temporary inconvenience to the assisting household. Further qualitative research is, thus, necessary to elucidate a meaningful explanation of this phenomenon as it seems to counter expected assistance availability.

[111] Table 4.2 developed by author based on the survey data

Another important characteristic is the marked heterogeneity of assistance availability between individual households in the population. No perceived arrangement of available assistance predominates, and inter-household variation, rather than relative uniformity, characterises assistance availability. This finding directly contradicts the homogenous conceptualisations of social cohesion and uniform availability of social capital commonly asserted in academic research and literature. In providing clear evidence of the existence of inter-household disparities in social capital availability and access, these findings, thus, support the use of Bourdieu and Carpiano's broader conceptualisation of social capital and cohesion. Furthermore, these findings support eliminating the use of measures of social cohesion as sole indicators of social capital, as the interconnectedness and social cohesion of a population as a whole does not constitute an effective or appropriate measure of the actual availability of social capital to individual households. Beyond its inability to account for the actual resources and capital owned and controlled by individuals and groups within the network, sole measures of the interconnectedness and cohesion of the social network are inadequate indicators of social capital as they assume uniform access across all households and are inherently unable to measure individual or household-specific variation in capital availability.[112]

These findings reconfirm the widespread vulnerability that underlies the day-to-day functioning of a large proportion of these households. If 8% of households in the survey site would be unable to borrow even R50 to buy clothing if their possessions were destroyed in a fire, then the devastating reality is that nearly one in ten households faces outright destitution if an idiosyncratic shock would occur. While more than 90% of the households perceive available assistance, the ability to find shelter for two weeks and to borrow R50 are short-term, and essentially inadequate, means of coping that fail to address a range of other critical household needs in a time of crisis. As such, the analysis of available assistance should be understood as a measure of minimum available support, rather than a measure of available comprehensive support. This is critically important given the great difficulty many households would face attempting to access even minimal short-term assistance. The obvious implication of the research is that the majority of households would be largely unable to obtain comprehensive support and long-term assistance in a time of in a time of crisis.

[112] Carpiano 2006. p. 172.

4.4.4 Willingness to Assist Other Households

Beyond the perceived availability of minimal short-term assistance in a time of crisis, the survey further measures a critical antecedent variable – the willingness of community members to invest time, energy and money for the benefit of others in the village or neighborhood with no direct benefit to themselves. The willingness of an individual to invest even a small amount of time and money for the benefit of others is a strong indicator of perceived communal responsibility and helps to characterise the availability of social capital. The research, thus, attempts to measure the level of social capital and available assistance in the community by assessing both its perceived availability and the extent to which it is offered – i.e. the willingness of inter-household transfer.

It should be noted that the questions are specifically phrased to assess the willingness of the household's neighbor – as opposed to the respondents themselves – to contribute time or money for the betterment of others in the community as this proves an effective proximate measure of the respondent's own willingness. This technique is used to minimise respondent subjectivity and a false-positive response which would skew the research findings.

The responses to the previous questions on perceived availability of assistance and these questions on perceived willingness to assist markedly differ, further refining our understanding of assistance availability within the population. Only 36.9% of households acknowledged willingness to contribute time and a mere 28.2% would be willing to contribute money to support others in the village or neighborhood without directly benefiting. 69% of households believe they could access in-kind assistance from non-family neighbors and others in the community, yet only 37% of households would be willing to offer their time to support others in the community. Furthermore, 72% of households believe they could access financial assistance (i.e. borrow R50) from members of their community, yet when asked if they would contribute R10 to support other members of the community, only 28% of households acknowledged willingness to contribute their money.

While it is exceedingly difficult to measure potential generosity through hypothetical circumstances and the use of an indirect scenario does not provide for a perfect measure, these findings clearly highlight a glaring disparity in the availability of assistance in a time of crisis. The overwhelming majority of households believe they would be able to access short-term financial and in-kind assistance from members of their community, yet only a minority of households acknowledge a willingness to contribute their own time or money to assist others.

Two conclusions are possible. A large proportion of households could simply be overestimating the availability of assistance – perceiving greater generosity among their neighbors and within the village than actually exists – and would, in a time of crisis, be surprised at their inability to access short-term support. Alternatively, the majority of households – approximately 70% – that expect to be able to access assistance could simply all be relying on the same 30% of the population that acknowledged a willingness to contribute their time and/or money. While such an arrangement could effectively address infrequent idiosyncratic shocks in a population, covariant crises such as a drought or the epidemic spread of HIV/AIDS – that concomitantly affect a significant proportion of the population – would overburden and collapse such an arrangement given the disproportionate reliance on the minority of households willing to offer assistance. It should be noted that this scenario of overburdening households willing to assist has been documented in other studies.[113] In either case, we are able to conclude from these findings that the level of available assistance within the population is tenuous, and the true availability of short-term assistance is significantly less than its perceived availability. While the implications of the research are devastatingly apparent, subsequent research should investigate these preliminary findings and the issue of perceived versus actual assistance in greater detail.

4.4.5 Community Association and Cohesion

Having analysed the nature and amount of physical, financial and natural capital owned and controlled by households in the population (a measure of the actual capital available within the social network), the likelihood/expectation of communal response to covariant crises, the perceived availability of short-term financial and in-kind assistance in response

[113] Wakefield and Poland 2005. p. 2824.

to an idiosyncratic shock, and the willingness of households to offer financial and in-kind assistance to others within the population, it is useful to also measure basic social involvement and communal association – the social cohesion or interconnectedness of the population. The extent and nature of group membership and association is often the basis of non-familial relationships and partially determines the strength and nature of social networks through which assistance is sought and obtained in a time of crisis.

Individual households within the population were assessed on the nature and prevalence of group and organisation membership in order to more fully understand and measure social cohesion and the level and multiplicity of associations. 82% of households belong to and attend a church, 12% belong to a local prayer group, and 79% belong to a burial society in the area. Nearly 52% of households belong to a local credit finance group and 18.2% belong to a local *stokvel* – an informal, revolving group savings scheme. Nearly 6% of households are actively involved with a political group and 2% belong to a local civics organisation. 1.8% of households belong to a local cultural association, 1.5% to a traditional healer association. 1.7% are involved with the local school committee and 1.5% with a local farmer's group. 1.5% of households are involved with a local water and sanitation committee and 1% belong to the local health committee. 1% are involved with a non-finance or credit related women's group, and slightly less than 1% are involved with either a village or neighborhood association or a local sports group.

Beyond assessing the nature of association within the population, the prevalence of group and organisational membership provides another measure of cohesion and interconnectedness of the social network. Nearly 97% of the population belongs to at least one formal organisation or group within the population, 75% of the population belongs to between two and four different groups or organisations and 7% of the population belongs to five or more distinct groups. While formal group membership is an inadequate measure of the actual formal and informal associations or connections an individual or household maintains within the population – and is wholly unable to measure the strength or nature of the associations – it provides a means of analysing the interconnectedness and cohesion of the social network. These measures of the nature and magnitude of social cohesion, thus, provide a more meaningful basis for analysing the aforementioned findings on the amount of actual capital within the social network, the perceived availability of assistance within the network and individual willingness to assist others in times of crisis.

CHAPTER 5

5.0 Conclusion

The study set out to examine the resources and relationships available to impoverished rural households in South Africa to adapt and cope in response to crises. The HIV/AIDS epidemic was selected to provide a unique context of vulnerability within which to frame the analysis of household means of adaptation and coping. The sustainable livelihoods framework was utilised to provide an effective model for delineating and detailing the diversity of resources and relationships available to households in isolation, and in the context of the broader social network within which they exist.

5.1 Financial, Physical and Natural Resources

With one-third of households relying on debt to local shops to provide for basic subsistence and consumption, and four-fifths of the population unable to organise even R50, a small amount of money, to cover unexpected costs by the end of the month, the population is characterised by widespread and severe impoverishment. As such, financial capital – the most readily convertible of asset type and, thus, most valuable in responding to crises – constitutes a reliable resource for only a handful of households and is unavailable for the overwhelming majority of the population.

Natural capital is similarly unavailable to most households as a resource for adaptation and coping as three-quarters of the population do not own their own land. Lacking ownership, most households are, thus, unable to utilise one of the most basic and critical means of adaptation in times of crisis – the ability to alter land-use and/or sell their land and property.

With less than half of all households owning any one distinct modern physical asset type, a mere one-third to one-quarter of the population own even a cell phone, radio or television – the most common and readily convertible of non-essential physical assets. Similarly, more than 40% of households do not own any one distinct livestock asset type, with most households owning only a few chickens or goats. Extremely low levels of physical capital ownership – across all modern and livestock asset types – thus, highlights the further scarcity of cash-convertible or readily-exchangeable resources within the population.

Accounting for physical and natural capital ownership, it becomes apparent that a mere 1% of the survey population is, in relative terms, asset rich. Only 0.3% of households own more than one plot of land. Similarly, multiple (non-livestock) asset ownership ranges from 0.3% to 4% of households by asset type with 1% of households consistently owning more than one of the most readily convertible and valuable physical asset types – televisions, radios and vehicles. Providing a distinct measure of relative wealth within the population, it serves to highlight the profound resource scarcity and lack of varied means of adaptation and coping available to the other 99% of the population.

While ownership of multiple televisions, chickens, radios, bicycles, goats or other physical assets, as well as access to credit facilities and financial capital, likely improves the capacity of these few households to respond and adapt to crises – given the relative multitude and diversity of available convertible resources at their disposal – it in no way guarantees that the means of survival are adequate. It merely serves to highlight the extreme minority of relative wealth within the population, and further contextualises the profound and generalised scarcity of readily-convertible financial, physical and natural assets in the population.

5.2 Social and Relational Resources

Having established the severity and magnitude of financial, physical and natural resource scarcity within the social network, it is possible to more effectively assess the value of social capital in context. Regardless of the strength of social cohesion and the willingness of individuals in a population to assist others in times of crisis, a lack of necessary financial, physical or natural capital within the network – owing to the generalised impoverishment of a population or individual household resource scarcity – undermines and effectively nullifies the value of relational resources as a means of responding and adapting to crises. Despite the existence of strong networks of support and adequate willingness to assist in the population, the fundamental inability of individual households to afford to help others may eliminate the instrumental value of social capital in practical, material terms.

Alternatively, adequate capital may exist within the network, but a lack of social cohesion or willingness to assist may result in the assistance remaining unavailable or inaccessible

to those in need. Beyond a generalised lack of willingness to assist – as evinced by two-thirds of the study population – household or group-specific exclusion is common within social networks, resulting in marked inter-household variation in assistance availability and access to social capital.

Despite constituting a relatively cohesive population, characterised by multiply-interlinked households, there is marked inter-household variation in perceived ability to access social capital. Furthermore, there exists a significant disparity between the willingness of households to assist others in the population and the perceived availability of assistance. Although approximately two-thirds of households believe they would be able to access financial and in-kind assistance in a time of crisis, only one-third of households in the population acknowledge their own willingness to assist others.

Given the aforementioned factors – the severe and generalised impoverishment of the population and the scarcity of all forms of capital within the network, the relatively low level of willingness to assist others in the population, the marked inter-household variation in access to assistance, the significant proportion of the population with no available source of assistance and the significant proportion of the population that could only rely on relatives in a time of crisis – it can be concluded that social capital is not a substantial or widely-available means of adaptation or coping for the overwhelming majority of households in the population.

5.3 Available Household Coping and Adaptation Strategies in Context

In theory, a diversity of coping strategies exist for households to respond and adapt to idiosyncratic and covariant stresses and shocks. However, given the prevalence and nature of the HIV/AIDS epidemic in South Africa, the severity of physical, natural and financial resource scarcity and the nature of social capital and relational resources available to the impoverished rural population, the options effectively available to individual households are significantly limited.

To *claim* – call in debts, appeal for charity or reciprocity or beg – is undermined as a coping mechanism by the generalised impoverishment and resource scarcity of the entire population as well as the covariant nature of the epidemic and the multiplicity of HIV-related crises affecting the population. To *deplete* – draw on and diminish existing stores

and sell available resources – is of limited value as a strategy in the context of severe physical, natural and financial capital scarcity as most households have little to nothing at their command to draw on or sell. For impoverished households in a resource-poor setting, to *hoard* – preemptively accumulate and store food and assets – is likely also not an available buffering strategy. And given the inability to claim or deplete, households are largely unable to *protect* – to preserve critical resources in the present in order to facilitate future recovery. Furthermore, as it is a resource-poor setting, *diversification* – seeking alternative sources of income and food – is likely difficult.

The most commonly utilised and productive coping and adaptation strategies to respond to HIV/AIDS are, thus, either limited or simply not feasible for most households in the population. The only universally available coping strategies for all affected households are to *stint* – reduce the quantity and quality of consumption – or to *move* – scatter family members. These two coping strategies are also the most potentially harmful, as they threaten the integrity of the household and the physical and emotional health of its members.

5.4 Implications for Research, Policy and Programming

By explicitly unpacking the resources and relationships available to and under the control of impoverished rural households, this study provides strong evidence of the heterogeneity of household composition and characteristics, the existence of significant variation in household-specific physical, financial, natural and social capital endowments, and marked differentiation in individual and household access to resources in the social network. These findings further invalidate generalised and uniform assumptions of the *rural poor* and the homogenous conceptualisations of *impoverished rural households* in the South and southern African context commonly asserted in existing research and literature.

A more thorough understanding of the heterogeneity of rural poor households has extensive research, policy and programming implications. By taking into account unique household characteristics and endowments, analytic research is able to provide more meaningful explanation of variation in the impact and effect of illness, death and other crises on the household. By more fully appreciating intra-household variation in access to and control of resources and relationships, programmes and policies can be designed that more effectively account for and build on the actual coping and adaptation strategies

available to individual households in the population. In this way, a more thorough, contextualised understanding of household response to crises can inform and benefit research, policymaking and programme development across a wide range of fields and focus areas.

The findings of this study specifically highlight the inability of singular measures to function as valid, reliable and sociologically meaningful indicators of social capital. The key implication for social capital analyses and research is that it precludes the use of sole measures of network cohesion or interconnectedness as indicators of social capital and emphasises the need for more robust measures that necessarily take into account not only social cohesion and the interconnectedness of the population, but also the existence and strength of shared social values of trust, reciprocity and a commitment to assist others, the nature and amount of actual resources owned and controlled by individuals and households in the population, as well as factors of differentiation within the social network that result in household and group-specific variation in access to the resources controlled by the population.

Furthermore, these findings question the practical value of social capital in populations characterised by severe and generalised financial, physical and natural resource scarcity. In order to assess its actual or effective value, subsequent analyses of social capital should not occur in isolation, but rather be couched within a full capital asset analysis or linked to individual analyses of the physical, financial and natural capital in the social network.

The research findings further emphasise that while capital substitution is theoretically plausible in all circumstances – and conceptualised as a fundamental component of the sustainable livelihoods framework – severe and generalised impoverishment at the household and population level may effectively nullify a household's ability to compensate with or interchange types of capital in order to smooth consumption and protect the aggregate livelihood. Livelihoods research and analyses should, thus, not assume the feasibility of capital substitution without preliminary household and network analysis on the nature, magnitude and availability of specific asset types, the nature and extent of the shock or stress affecting the household and/or population, and the social context within which it takes place. As the household's ability to compensate with or interchange types of capital fundamentally determines the value of specific capital assets and the actual coping

and adaptation strategies available to the household, subsequent research and analyses must explicitly examine and establish the feasibility of capital substitution in the research setting for asset analyses to be meaningful.

The significant disparity identified in this research between the acknowledged or perceived and actual prevalence and impact of HIV/AIDS in the population necessitates further research to more fully differentiate the role of stigma, a genuine lack of awareness on the HIV status of family and community members, and denial by survey respondents. These findings provide strong evidence that significant bias likely exists in other South and southern African studies that have attempted to assess the prevalence, impact or threat of HIV/AIDS with population surveys. Specifically, it underscores the need to critically reassess and analyse the validity and reliability of all data and findings derived from such studies.

Beyond the aforementioned implications, this research provides strong empirical evidence that the ability of a household to cope with and respond to HIV/AIDS and other crises is dependent not only on the unique array of resources and relationships available to and under the control of the individual household, but also directly on the attitudes and perceptions, resources, livelihood and relationships of the associations and communal networks and population within which it physically and socially exists. Subsequent research must, thus, seek to incorporate more robust and comprehensive measures and analysis of individual and population level resources and relationship, and subsequent policymaking and programme development, while necessarily focused at the population-level, must remain cognisant of and seek to account for and address intra-household heterogeneity in coping and adaptation.

Appendix A: IMAGE Study – Household and Senior Female Questionnaires

Rural AIDS and Development Action Research Programme
Sekhukhuneland IMAGE Study

Family Name

H100 : Household Members

Starting with the **HOUSEHOLD HEAD**, list all the **people** who are members of this household, including ;

- All household members who are currently usually sleeping here,
- other household members who are permanently resident here but are not currently staying at the house,
- domestic staff who sleep here > 5 nights per week
- anyone else staying here currently, and who has been here for > 4 weeks

*Go thoma ka **hlogo ga lelapa**, re fe maloko ka moka a lelapa, go akaretswa*

- *Kamoka bao ba robalago mo ga bjale.*
- *Bao ba dulago mo motseng efela ba sa dulego ka lelapeng gabjale.*
- *Bashomi ba ka lapeng bao ba robalago mo , mashego ago feta 5 ka beke.*
- *E mongwe yo adulgo mo ga bjale, gape o bile mo dibeke tsago feta tse 4.*

ID	Name	Sleeps here Robala mo (A)	Relation to HH head Tswalano le hlogo ya lapa (B)	Sex Botona (C)	Year of Birth Ngwaga wa matswalo	Marital Status Maemo go tsa manyalo (D)	In school Tsena sekolo (E)	Max level of schooling Maemo a go tsena sekolo (F)	Income from work Ditseno gotswa moshomong (G)	Income(s) from non-work Ditseno esgo tsa mosho-mo (H)	Position in village Maemo ka motseng (I)
1			T								
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

A (1) Usually sleeping at the house in last month / Atisha go robala ka ntlong (kgweding ya go feta), (2) Usually sleeping away from the house in last month / Atisha go robala kantle (kgweding ya go feta)

B (T) Household head (Tatana) / Hlogo ya lelapa, (M) Mother / Mme, (F) Father / Nati, (B) Brother / Buti, (Z) Sister / Sesi, (S) Son / Morwa, (D) Daughter / Morwedi, (H) Husband / Molekane wa monna, (W1) Wife no. 1 / Molekane wa mosadi wa mathomo, (W2) Wife no.2 etc…, (U) Unrelated / Motho fela, (R) Related indirectly by marriage / Leloko ka lenyalo, (P) Paying Tenant / O hirishitse, (Q) Query, (X) Unknown / a go tsebege

C (M) Male / Monna, (F) Female / Mosadi

D (1) Never married / Gase nke wa nyalwa/nyala, (2) Married or living as married / O nyetswe/nyetse goba o phela e kare o nyetswe/nyetse, (3) Divorced or Separated / Hlaolle/Hlaollwe/ kgaogantswe, (4) Widowed / Mohlolo/Mohlologadi

E (1) Currently attending school / Tsena sekolo, (2) Not currently at school / A ke tsene sekolo ga kjale

F (1) No formal schooling, illiterate / A se o tsene sekolo, (2) No formal schooling, literate / A se o tsene sekolo, efela okgona go ngwala, (3) Some primary / sekolosa fase fela, (4) Completed primary (standard 5) / sekolo sa fase(mphato wa 5), (5) Some secondary / secondary fele, (6) Completed secondary (standard 10 / matriculation) / feditse secondary (mhato wa lesome), (7) Attended / Tsene technical / vocational / training college, (8) Attended University / Tsene University

G (1) Self employed in agriculture / Moipereki go tsa temo, (2) Self employed in non-farm enterprise – registered business / Moipereki kgwebong e ngwaalshitwego eseng ea temo, (3) Self employed in non-farm enterprise – unregistered business(es) / Moipereki kgwebong esa ngwaalshwago eseng ea temo, (4) Student / Moithuti, (5) Salaried worker / Moshomo wago lefelwa, (6) Domestic worker / Moshomi wa ka gae …

G cont…. (7) Unemployed, looking for a job, often does casual, seasonal or contract work / Ga o shome, o nyakana le moshomo, o fela oshoma meshomo ya lebakanyana, (8) Unemployed, looking for a job, occasionally gets any casual, seasonal or contract work / Ga o shome,o nyaka Moshoma, eilra moshomo o mongwe le o monwe wa lebakanyana,le wa nako ya tumelelano (9) Unemployed, looking for a job, rarely or never had any work during the last year / Ga o shome, Onyakana le moshomo ga senke wa shoma mo ngageng wago feta, (10) Unwilling to work, retired or too young to be working / Ga ona maikemisetso ago shoma, o tlogetse moshomo goba o sale yo mannyane gore oka shoma, (11) Unable to work (handicap) / Gao kgone go shoma (sehole).

H - ASK ABOUT EACH ONE IN TURN - (1) State pension / Motente, (2) Child grant or other government benefit / Tshelete ya kana goba thusho gotswa mmushong, (3) Private / work pension / phetshene ya moshomong, (4) Financial gifts from non household member / Dimpho tsa ditshelete gotswa go kao esego ka lelapa, (5) Non financial gifts from non household member / Dimpho tseo sego tsa ditshelete gotswa go kao esego ka lelapa, (6) Receiving dividends from investments / Amogela dikarolo go tswa ho dipeeletso tsa tjhelete, (7) Receiving money from a business / Amogela tshelete gotsw kgwebong (8) Other source of financial income / Tse dingwe tsa methopo ya ditseno tsa ditshelete(efa ka moka). List all. If none / A go selo, mark (99)

I - ASK ABOUT EACH ONE IN TURN – (1) "Induna or member of induna's counsel" / Naluna goba leloko la komiti ya moshate, (2) "Member of chiefs family"/ Leloko la ka moshate, (3) "Member of local government or council structure" / leloko la mmusho wa selegae goba komiti engwe ya mmusho, (4) "Traditional healer" / Ngaka ya setso, (5) "Minister / pastor" / Morui, (6) "Shebeen owner" / Mong wa lefelo lago rekisa bjala, (7) "Educated professional" / Serutegi, (8) "Creche owner" / Mong wa sekolo sa kana, (9) "Senior member of a local organisation or society" / Leloko le legolo la mokgahlo motseng. If none / a go selo, mark (99)

H200 : Important Incomes

I previously asked you about whether the people in this household are working, receiving pensions or grants or bringing money into the household in other ways. Think about **all of the last year**. Over the course of the whole of last year what were the **two most important** sources of income for your household. This means which two sources of income could this house not have survived without. These incomes may be regular incomes, or one off incomes. They could be things that are coming in now, or other incomes that people had during the year, e.g. from seasonal work.

Mo nakong e fetileng ke go botsisitse gore ekaba batho ba ka mo gae ba a shoma, ba amogela tshelete ya motente, goba go tlisha tshelete ka lapeng ka mekgwa e mengwe. Nagana ka ***ngwaga wa go feta*** *. Mo ngwaga wa go feta ke methopo efe e mebedi ya ditseno e bohlokwa ka mo lapeng. Seo se era gore ntle le ditseno tse lelapa lebe le ka se phologe. Ditseno tse ekaba tsa ka mehla, goba tsa nakwana. E kaba dilo tseo di tlago gona bjale , goba ditseno tseo batho ba di amogelago mo gare ga ngwaga.*

	Describe / *Hlalosa*	Financial / *Ditshelete* (1) Non-Financial / *E sego ditshelete* (2)	Person(s) Batho *X = Whole Household / lelapa ka moka*
1			
2			

H300 : Dwelling Details

The next questions I will ask you will be about the main dwelling you and your household currently live in ….
Dipotsisho tse latelago di mabapi le mo wena le ba lelapa la gago le dulago gona.

Question Number			Codes	
H301	Nationality of the head of the household *Bodula bja hlogo ya lelapa*		1 = South African 2 = Mozambican 3 = Zimbabwe 4 = Other / Tse dingwe	
H302	In total, for this household, how many rooms are there that are used for cooking, sleeping, eating, general living *Ka kakaretso lelapa le nale diphaphosi tse kae tseo di shomishwago go apea, go robala, go ja, le go dula ?*			
H303	Does this household have land on which it grows its own produce? *Afa lelapa le , le nale tshemo e ba jalang dijalo ho yona?*		1 = Yes / *Ee* 2 = No / *Aowa*	
H304	Do you pay rent for the land on which you live ? *Le lefela rente ya lefelo leo le dulago go lona*		1 = Yes / *Ee* 2 = No / *Aowa*	
H305	What are the walls of the main dwelling primarily made of? *Maboto a mo le dulago gona a agilwe ka eng (karabo e tee fela)* [One answer only]	1 = Mud and sticks / *Mobu le diphatana* 2 = Mud bricks without cement / *Ditena tsa mobu tsa go se thibetswe ka samente* 3 = Mud bricks cement covered / *Ditena tsa mobu tsa thibetswa ka samente* 4 = Block bricks without cement / *Ditena tsa block tsa go se thibetswe ka samente* 5 = Block bricks cement covered / *Ditena tsa block tsa go thibetswa ka samente* 6 = Face bricks / *Ditena tse nyenyane* 7= Other / *Tse dingwe*		
H306	How does the household get its water? *Le hwetsa meetse bjang?*	1 = Tap in plot / *Pompi ya ka gae.* 2 = Tap in the village / *Pompi ya motseng* 3 = Borehole 4 = Collect rainwater / *Leageletsa meetse a pula.* 5 = River or stream / *Nokeng*		
H307	What sort of toilet does the household have? *Le shomisha ntlawana ya boithomela ya mohuta mang?*		1 = Modern with flush / *Ya meets* 2 = Pit latrine / *Ya molete* 3 = No facility / *Ga e gona*	
H308	Is the household supplied by electricity *Le nale Mohlagase ka mo gae?*		1 = Yes / *Ee* 2 = No / *Aowa*	
H309	In the last 2 months have you done any work on renovating, building on or improving the house in any way ? *Mo dikgweding tse 2 tsa go feta le kile la leka go tsosholosha, go kaonafatsao, goba go katolosha ntlo yalena ka tsela e ngwe?*		1 = Yes / *Ee* 2 = No / *Aowa*	

H400 : Household Asset List

Do people living in the household **own** any of the following items.
A fa batho bao ba dulago ka mo lapeng ba nale tse dingwe tsa dilo tse di latelago.

		Number owned / *Palo*	Code	
H401	Any land / *Naga*			1= small / *nyenyane*, 2 = medium / *magareng*, 3 = large / *kgolo*
H402	Cars or motorcycles / *Koloi goba sethuthuthu*			1=< 2 yrs old, 2 = 2-6 yrs old, 3 => 6 yrs old
H403	Televisions / *Television*			1=< 2 yrs old, 2 = 2-6 yrs old, 3 => 6 yrs old
H404	Hi-Fis / *Seyalemoya*			1=< 2 yrs old, 2 = 2-6 yrs old, 3 => 6 yrs old
H405	Fridges / *Setsidifatsi*			1=< 2 yrs old, 2 = 2-6 yrs old, 3 => 6 yrs old
H406	Bicycles /*Bicycles*			
H407	Cell phones /*Sella thekeng*			
H408	Cows /*Dikgomo*			
H409	Goats / *Dipudi*			
H410	Chickens /*Dikgogo*			

H500 : Credit and Savings

These questions will be about some issues related to this household's savings and borrowings …
Dipotsiso tse dilatelang di mabapi le dikadimo le dipolokelo tsa lelapa .

Question Number		Codes	
H501	Does the household head or household head's partner have a bank account ? *Afa hlogo ya lelapa goba molekane wa gagwe onale bank account (bobolokela bja tshelete pankeng)?*	1 = Yes / *Ee* 2 = No / *Aowa* 9 = Don't know / *ga ke tsebe* 99 = No response / *A gona karobo*	
H502	Does the household head / partner currently owe anyone money ? *A hlogo ya lelapa goba molekane wa gagwe o kolota motho yo mongwe ttshelete?*	1 = No / *Aowa* 2 = Household head / *Hlogo ya lelapa* 3 = Partner of Household head / *Molekane wa gagwe* 4 = Both / *Bobedi bja bona.*	
H503	**IF YES**, To whom do you currently owe money? *Ge ele gore go bjale,* *Ke bomang bao ba kolotwago ?* [List as many as necessary]	1 = Friend / *Mokgotsi* 2 = Bank / *Panka* 3 = Relative / *E mongwe wa leloko* 4 = NGO or Credit Organisation / *NGO goba Mokgahlo wa go adimisha ditshelete* 5 = Shop or store / *Lebenkele* 6 = Money Lender / *Machonisa* 7 = Other / *tse dingwe*	
H504	Imagine the response of the Household Head if he / she desperately needed to get R50 to pay an official body back by the end of the month for the household. Would this be …. *Akanya phetolo ya hlogo ya lelapa ge a nyakega ho fumana R50 go lefela lelapa lagagwe ho lekala la semmusho mafelelong a kgwedi, A se e kaba…*	1= No problem / E ka sebe bothatha 2 = Possible, but inconvenient / *Go ka kgonega, efela ntle le tetelo* 3 = Possible with real difficulty / *Goka kgonega ka boima* 4 = Impossible / *Go kase kgonege*	

H600 : Food Security

The next two questions will ask about whether your household has eaten recently.
Dipotsisho tse pedi tseo dilatelago di mabapi le gore lelapa le jele ese kgale.

Question Number		Codes	
H601	During the last month, how often have most of the family had a meal that consisted of pap alone, bread alone or worse ? *Mo kgweding ya go feta, ke ga kae mo Lelapa le jelego dijo gomme ele bogobe fela,borotho fela goba ka tlase ga moo?*	1 = Never / *Aowa* 2 = Once only / *gatee feela* 3 = A few times / *Nako e nyenyane* 4 = Often / *Kgafetsakgafetsa* 99=No response / *ga gona karabo*	
H602	While living in this house and during the past month have you or any of your own children gone without food or had a reduced amount to eat for a single day because of a shortage of food ? *Go duleng galena ka ntlong ye le mo kgweding ya go feta ekaba, wena goba e mongwe wa bana ba gago o ile a hlwa ntle le dijo goba gona go fokotsa seroto sa dijo tsa go jewa ka letsa tsi le tee ka leba ka la thaelelo ya dijo?*	1 = Never / *Aowa* 2 = Once only / *gatee feela* 3 = A few times / *Nako e nyenyane* 4 = Often / *Kgafetsakgafetsa* 99=No response / *ga gona karabo*	

H700 : Perception of own wealth, outlook for the future and recent crises

Finally in this questionnaire, I am going to ask you about your own perceptions of how your household is doing …
Sa mafelelo mo pukwaneng ya dipotsisho, ke rata go go botsisha gore o bona okare lelapa Lagago le bjang go ya ka wena.

Question Number		Codes	
H701	How would you describe the wealth of your household within this village? *Oka hlalosa bjang bohumi / bohloki bja lelapa la gago mo motseng ?*	1= About the same as most people / *O swana le bontshi bja batho* 2= A bit better off than most people / *O kaone go bontshi bja batho* 3= A bit worse off than most people / *O fase kudu go feta bontshi bja batho* 99 = No response / *ga gona karabo*	
H702	Think about the last year in comparison with other years. Would you say that things have been ….. *Gopodishisha ka ngwaga wa go feta gomme o bapetse le mengwaga e mengwe. O kare dilo di be di…*	1= Going well / *Sepela gabotse* 2= Going about normally / *Sepela gabotsana* 3= Going badly / *A di sepele gabotse* 99 = No response / *ga gona karabo*	
H703	During the last 6 months has anything happened to this household which has a serious negative effect on how the household operates? *Dikgweding tse 6 tse fetileng go kile gwa direga se sengwe ka lapeng, seo se dirilego gore dilo dise sepele ka tshwanelo?*	1 = Death or serious illness of an adult household member / *Lehu goba go lwala ga e mongwe e mogolo ka mo lapeng* 2 = Death or serious illness of a child household member / *Lehu goba go lwala ga ngwana kamo lapeng* 3 = Unexpected loss / cessation of a reliable source of income to the household / *Tahlegelo yeo esa letelwago / Go fedishwa ga ditseno tse tshepilweng tsa lelapa* 4 = Serious problems occurred as the result of a natural disaster / *Mathata a magolo ao a hlotswego ke thlago* 5 = Unexpected large payment had to be made / *Tefelo e kgolo eo esa letelwago* 8 = Other / *Tse dingwe* 99 = No event / *Ga go selo*	
H704	If YES, give brief details *Ge ele gore go bjalo, hlalosa ka boripana*		

Interviewer : Now go back and complete the final sections of the front page of this interview.

F200 : Group Membership

Now I'd like to ask you about the groups or organizations, both formal and informal, that you belong to. As I read the following list of groups please tell me if you belong to this kind of group and how active you are in the group presently.
Ga bjale ke tla rata go g botjisha mabapi le dihlopha goba mekgahlo mo motseng, ya sewgwera / ya semmusho eo o tseago karolo go yona goba o le go leloko la yona. Ke tla bala mehuta ya dihlopha/Mekgahlo, gomme ke kgopela gore o mpotje ge o le leloko la sehlopha sa mohuta woo, ga pe le gore o ots1ea karolo ka mokgwa ofe sehlpheng seo gabjale

Note to interviewer: Some people attend meetings now and then and would be considered 'members', whereas others are considered 'active' and attend regularly. Also, some are considered 'leaders" in these groups – such as the leader of a prayer group. Each group may only fall under one of the categories below

	Group type	NAME	STATUS 1=Leader 2=Active 3=Member 9=Not member	FREQUENCY 1 = Once a week or more 2 = Between once a week and once a month 3 = Occasional –c.4-10 times a year 4 – Occasional <4 times a year	IMPORTANCE If more than 1, rank the groups she feels are 'most important' to her (1,2,3)
F201	Farmers' group *Sehlopha sa balemi*				
F202	Traders' association *Mokgahlo wa barekishi*				
F203	Cooperative *Moshomo wa kopanelo*				
F204	Women's group (non-finance/credit) *Sehlopha sa basadi*				
F205	Credit/finance group (not SEF) *Sehlopha sa kadimashano ya tsa ditshelete(E se go SEF)*				
F206	Small Enterprise Foundation *Small Enterprise Foundation(SEF)*				
F207	Political group *Sehlopha sa dipolotiki*				
F208	Church *Kereke*				
F209	Cultural association *Mokgahlo wa tsa setso*				
F210	Neighborhood/village association *Mokgahlo wa mo motseng*				
F211	Parent group *Sehlopha sa batswadi*				
F212	School committee *Lekgotla la sekolo*				
F213	Health committee *Lekgotla la tsa maphelo*				
F214	Water/waste *Mokgatlo wa tsa meets*				
F215	Sports group *Sehlopha sa dipapadi*				
F216	Burial society *Sehlopha sa polokane*				
F217	Civics and TLC *Boramotse le Mmuso wa selegae*				
F218	Stokvel *Stokvel/ Mogodishano*				
F219	Prayer group *Sehlopha sa thapelo*				
F220	Traditional healer association *Mokgatlo wa dinyaka tsa setso*				
F221	Other *Tse dingwe*				

F300 : Community participation

Now I'd like to ask a few questions about how much people in this community work together …
Ga bjale ke tla rata go go botjisha dipotjisho tse mmalwa mabapi le ka mo batho ba mo motseng ba shomishanago ka gona ….

Qu. No.		Codes	
F301	Suppose a friend of yours in this village/neighborhood faced the following alternatives, which one would s/he prefer most? *Are tjee gore mogwera wa gago mo motseng wa geno o fiwa monyetla wa go kgetha go tse dilatelago, ke sefe seo aka ratago go se dira goena le tse dingwe ?*	1 = Own and farm 10 hectares of land entirely by themselves / *A be le naga eo elego ya gagwe eo eka bago 10 hectares ale nnoshi* 2 = Own and farm 25 hectares of land jointly with one other person / *Yena le babangwe babe le naga eo elego ya bona eo e ka bago 25 Hectares gomme bae leme bale mmogo* 3 = Don't know/not sure / *A ke tsebe/a kena bonnete* 9 = No answer / *A gona karabo*	
F302	If a **community project** does not directly benefit your neighbor but has benefits for others in the village/neighborhood, then do you think your neighbor would contribute **time** for this project? *(if the community project is not ordered by the chief)* *Ge project ya sechaba e sa hole moagishane wa gago, efela e thusha babangwe mo motseng, o nagana gore aka neelena ka nako ya gagwe tswelopeleng ya project eo?(ge fela project e sa laolwe ke kgoshi)*	1 = YES, Will contribute time / *Ee, o tla neelana ka nako .* 2 = NO, Will not contribute time / *Aowa, A ka se neelane ka nako* 8 = Don't know/not sure / *A ke tsebe/a kena bonnete* 9 =No answer / *A gona karabo*	
F303	If a community project does not directly benefit your neighbor but has benefits for others in the village/neighborhood, then do you think your neighbor would contribute **money (say about 10R)** for this project? *(if the community project is not ordered by the chief)* *Ge project ya sechaba esa hole moagishane wa gago, efela e thusha babangwe mo motseng, o nagana gore aka ntsha tshelete go thusha gore project e tswele pele? (ge fela project e sa laolwe ke kgoshi)*	1 = YES, Will contribute money / *Ee, o tla neelana ka tshelete.* 2 = NO, Will not contribute money / *Aowa, A ka se neelane ka tshelete* 8 = Don't know/not sure / *A ke tsebe/a kena bonnete* 9 =No answer / *A gona karabo*	
F304	If there were a problem that affected the entire **village/neighborhood**, for instance crop disease or floods, which scenario do you think would best describe who would work together to deal with the situation? *Read answers. Code only one response.* *Ge go direga gore go be le bothata bjo bo amago motse ka moka, bjale ka blwetsi bja dimela goba mafula, ke mokgwa ofe wo o ka hloloshago ka bokaone bao ba tlago shoma mmogo go lokisha seemo se?* *[BALA DIKARABO, swaya phetolo e tee fela]*	1 = Each person/household would deal with the problem individually / *Motho o mongwe le o mongwe o tla ikemela botateng.* 2 = Neighbors among themselves / *Baagishane ba tla thushana ka bobona* 3 = Local government/municipal political leaders would take the lead / *Ba mmusho wa selegae ba tla re eta pele bothateng bjo.* 4 = All community leaders acting together/ *Baetapele ba motes kamoka ba shoma mmogo.* 5 = The entire village/neighborhood / *Motse ka moka* 9 = Other (describe):/ *Tse dingwe (Hlalosa).*_____ _____	

F500 : Fire Scenarios

Imagine that your house has been completely destroyed by a fire. In this question we would like to know whether you feel you could turn to certain people.

A re tjee gore ntlo ya gago e swele loreloree ka mollo, mo dipotjishong tse ke rata go tseba gore o bona o kare o kaya lokologa go ya go mang/go batho ba bangwe.

			O ka kgopela …			
			A	B	C	D
Question Number	What to ask …	Codes	My family / relatives *Ba kelapa / meloko*	My neighbours *Baagihane*	People from the village I don't know well *Batho bao o sa ba tsebe go gabotsemo motseng*	People from the village I don.t know at all *Batho bao oba tsebago mo motseng*
F501	To shelter you for two weeks while you make other long-term arrangements? *Gore ba go fe bodulo tekano ya dibeke tse pedi, ge osa dira ditokishetso tsa lebakanyana?*	1 = Yes / *Ee* 2 = No / *Aowa* 99 = Don't know / *A ke tsebe*				
F502	To borrow 50 Rand to help you buy some clothes after the fire? *Gore ba go adime R50 go go thusha go reka diaparo ka morago ga mollo*					

Question Number		Codes	
F503	How confident are you that you **alone** could raise enough money to feed your family for four weeks? – this could be for example by working, selling things that you own, or by borrowing money (from people you know or from a bank or money lender) *O kwa o nale boitshepo bja gore wena o le nnoshi oka kgona go kgoboketsa tshelete yeo e ka lekanago go phedisha ba lelapa lagago tekano ya dibneke tse nne, e ka ba ka go rekisha dilo tseo elego tsaq gago, go shoma goba go adima tshelete go batho bao oba tsebago, goba pankeng goba go bo machonisa(baadimishi ba tshelete)?*	*1* = Very confident / *Ke itshepa kudu* 2 = It would be possible / moderately confident / *Go ka kgonega* 3= Not confident at all / *Ga kena boitshepo go seo.* 9= Don't know / *Ga ke tsebe.*	
F504	Would you say that your household's ability to survive this kind of crisis is better, the same or worse as it was 3 years ago? *O bona bokgoni bja go ka tswelela ga lelapa la gago ditiragalong jsa mohuta wo go le kaone , go swana goba go fokoga kudu go feta mengwaga e meraro yago feta?*	1= Better / Kaone. 2 = Same / Go a swana 3= Worse / *Goa fokoga* 9= Don't know / *Ga ke tsebe*	

F600 : Shortages.

In the past year, have you or your children ever gone without any of the following things you 'really needed' because of a shortage of resources (money):

Mo ngwageng wago feta, wena goba bana ba gago le kile la hloka tje dingwe tja the di latelago, ka lebaka la tlhaelelo ya didirishwa / tshelete.

Question Number		Codes	
F601	Food *Dijo*	1 = Never / *Aowa* 2 = Once only / *gatee feela* 3 = A few times / *Nako e nyenyane* 4 = Often / *Kgafetsakgafetsa* 8 = Not applicable *./A gona selo.* 99=No response / *ga gona karabo*	
F602	New clothing *Diaparo tje diswa*		
F603	School uniforms *Diaparo tja sekolo*		
F604	School fees *Tshelete ya sekolo*		
F605	Fuel (for cooking / heating)/ *Dikgong/Paraffin/mohlagase bjale bjale...(go apea/gore le ruthele/futhumale)*		
F606	Basic household items (for cleaning, cooking, sleeping) *Dinyakwa tje bohlokwa ka ntlong (tsa go robala,go hlwekisha goba go apea)*		
F607	Health care (Direct or transport to get to a clinic/hospital) *Tsa maphelo(clinik/sepetle kgauswi goba senamelwa sa goya Clinik/sepetlele)*		
F608	While living in this house during the past year has anyone from your household gone to another house to ask for food or money because of a shortage? *Mo ngwageng wa go feta ge lebe le dula lelapeng le, yo mongwe ka mo lelapeng o kile a kgopela dijo goba tshelete lelapeng le lengwe ka baka la tlhaelelo?*	1 = Yes / *Ee* 2 = No / *Aowa* 9 = No response given / *A gona karabo*	

F700 : HIV / AIDS

HIV/AIDS is becoming a much more common problem in many communities in South Africa. We would like to understand more about how households like yours are coping with the epidemic.

HIV/AIDS e thoma goba bothata bjo tlwaelegilego dichabeng tsa south Africa. Re rata go tseba/ Kweshisha kudu ka malapa ao a swanago le la gago gore le phela bjang le seemo se sa HIV/AIDS.

Question Number		Codes	
F701	I don't want to know who, but do you know of anyone who is infected with HIV or who has died of AIDS? *O tseba e mongwe yo a fetetswego goba a bolailwego ke HIV/AIDS?*	1 = Yes, But Not A Friend or Relative / *Ee, efela esego mogwera goba leloko* 2 = Yes, Friend Or Relative / *Ee, mogwera goba leloko* 3 = No / *Aowa* 8 = Don't Know / *A ke tsebe* 99 = No Response / *A gona karabo*	
F702	I don't want to know who, but to your knowledge, is anybody in *your household* living with HIV? *Ake nyake go tseba gore ke mang , efela go ya tsebo ya gago go nale motho yo a phelago le HIV ka mo gae?*	1 = Yes / *Ee* 2 = No / *Aowa* 8 = Don't Know / *A ke tsebe* 99 = No Response / *A gona karabo*	
F703	In the past year, have you discussed issues of sexuality or HIV/AIDS with your children? *Mo ngwageng wa go feta okile wa boledishana le bana ba gago mabapi le thobalano goba HIV/AIDS*	1 = Yes / *Ee* 2 = No / *Aowa* 99 = No children of ages 10-25 / *A gona bana ba mengwaga e 10-25.*	
F704	Are there currently any orphans living in your household whose parents possibly died of AIDS? *Afa ka mo gae gonale bana ba ditshiwana bao le dulago le bona ,gomme batswadi ba bona ba hlokofetse ka lebaka la AIDS?*	Number (Mark "0" if none) *Efa Palo (swaya ka "0" ge ba se gona)*	

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