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"Living from Day to Day": Food Insecurity, Complexity, and Coping in Mutare, Zimbabwe

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In Zimbabwe, unpredictable conditions associated with structural and institutional factors exacerbated the combined effects of structural violence, economic and political instability, and climate change in the mid 2000s, contributing to widespread food insecurity. Drought, food shortages, and government settlement policy affecting both rural and urban populations has yielded a national human rights crisis. Drawing on ethnographic research conducted in Mutare, southeast Zimbabwe, in 2005–2006, the authors illustrate the flow-on effects of drought and government policy on the livelihoods of households already suffering as a result of the social impacts of AIDS, and how people in a regional city responded to these factors, defining and meeting their basic food needs in diverse ways.

KEYWORDS drought, government policy, HIV/AIDS, inflation, land reform, Zimbabwe

Anthropological interest in climate and food is longstanding, reflecting the traditional focus on small-scale societies and subsistence economies where weather and its unpredictability were constant concerns. Malinowski (1935/1995) on gardening and food security in the Trobriands, Michael Young (1971) on hunger in the same area, Firth (1936) on typhoon and food security on Tikopia, and Audrey Richards (1932, 1939) on famine in southern Africa, all highlight this tradition, although few revisit this material in the present. Against this backdrop and more recent writing (Baer and Singer 2010; Checker 2009; Crate and Nuttall 2010; Warner et al. 2010), the

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expanding literature on climate change in sub-Saharan Africa highlights the particularity of region and country setting in relation both to local vulnerability and resilience (Magadza 1994, 2000; Roncoli 2006; Roncoli et al. 2001; Roncoli et al. 2011; Tschirley and Jayne 2010; Twomlow et al. 2008).

With global warming, the dry savannahs of Africa especially are projected to experience further temperature extremes, erratic rainfalls, and recurrent crop failures, and so are already anticipated to be future food deficit areas. But climate changes foreshadowed to affect the region also include flooding, drought and unseasonal rain, difficulties in adapting agricultural practices, and changes in sea level, disrupting coastal and riverine delta settlements. While drought and extreme weather events associated with climate change on pastoralist communities is specifically documented (Blackwell 2010; Smucker and Wisner 2008; Speranza, Kiteme, and Wiesmann 2008), all communities will be affected, and urban communities—an increasing proportion of all populations—are as vulnerable as rural. For all communities, there is growing evidence of how climate change will affect water supply and food production, with poor nutrition interacting with poor health status and impacting morbidity and mortality. The challenges presented by this complex mix of environmental, social, economic and biological factors will continue to be greatest in countries which are economically vulnerable and politically volatile, and where infrastructure and governance is weak (Baro and Deubel 2006; Blackwell 2010; Devereux and Edwards 2004; Tadesse et al. 2008).

Our aim in this article is to illustrate the interplay of environmental and social factors through the example of Zimbabwe in the 2000s, when climate change, drought, food insecurity and political instability converged. We show first how serial drought, poor crops and a web of national and global historical, economic, political and social factors imploded to produce unprecedented crisis. We then turn to ethnographic research conducted in Mutare, southeast of the capital of Harare and close to the border of Mozambique, and describe these confluent circumstances as they affected the lives of residents, particularly households with specific urgent food needs for people with AIDS.

METHODS

In this article, we draw on data collected by the first author in Zimbabwe over a period of 13 months, from July 2005 and July 2006 (Gwatirisa 2008). The field research was conducted at a highpoint of the humanitarian emergency, caused in part by institutional policies towards informal urban settlements and economic activity, but compounded by drought, policies of farm ownership, the management of water, the sale of cash crops, structural adjustment, and the economic collapse of the country. Mutare's

industrial base is increasingly forestry and related industries (e.g., paper, joinery, timber for export), but also tea, vegetables and fruits. Ethnographic research was conducted with low-income householders in three high density suburbs of Mutare, Manicaland Province. According to Zimbabwe's population census of 2002, an urban area is defined in terms of population density as a place with 2,500 inhabitants or more, with a compact settlement and where the majority of employed persons are engaged in non-agricultural occupations (Central Statistics Office 2003). In this context, high density suburbs are defined in terms of population density, specifically the number of persons per square meter. Residential areas in the country have been divided historically into low density, middle density and high density suburbs. The high density suburbs (also known as townships) were formerly (i.e., before independence) meant for black people, and are characterized by low-rise detached and semi-detached residential units. Middle density suburbs were designed for the colored population, for instance, people of mixed black and white descent, and low density suburbs (comprised mostly of detached houses) for the wealthy white minority.

The study was concerned with how householders managed to procure food and non-food items (see Gwatirisa and Manderson 2009). It focused particularly on the household provision of care to people with HIV/AIDS, and explored the relationships of HIV to food production, food provision and distribution, and demand for food (see also de Waal and Whiteside 2003; Mason et al. 2010; Naysmith, de Waal, and Whiteside 2009). The ethnographic research highlighted the everyday circumstances of all low income urban dwellers at a time of high unemployment, lack of housing, food and water, as the currency collapsed. For economic, social and political reasons, most urban dwellers in the study were living well below the poverty datum line, often in abject poverty, with few options for survival but to engage in illegal income generating activities. But complicating this, we documented the interdependence of urban and rural dwellers, and their common vulnerability to drought and food shortages (Gwatirisa and Manderson 2009). In this article, we focus specifically on this nexus of suffering.

The research involved extensive participant observation and document analysis, including unpublished reports prepared by community-based and national non-government organizations, and press reports. Ethnographic data derived from key informant interviews with members of five non-government organizations involved in food aid, interviews with women caring for household members living with AIDS, and supplementary questionnaires. Through snowball sampling, 25 households were recruited to participate in the study where the designated head of household was employed in a low- to middle-income occupation, defined to include nurses, teachers, secretaries and civil servants in different government departments. In most cases (18/25), the household head (male if alive) was the sole

income earner. In the other households, a second member of the household contributed to the household income. The number of people per household ranged from 2 to 17, with a mean of 6.12; as described below, the largest households were an artefact of Operation Murambatsvina and the associated destruction of informal housing predominantly occupied by job seekers desperate for accommodation. In-depth interviews, conducted in Shona and lasting from 30–90 minutes, were open-ended, with probes used to assist respondents to recall landmark experiences related to food security and care-giving (Gwatirisa and Manderson 2009). In addition to these participants, 40 householders, including the primary income earners and primary caregivers of household members with AIDS—often one and the same person - also responded to a questionnaire, which enquired into household expenditure patterns, income levels, and coping mechanisms. The study had ethics approval from the Medical Research Council of Zimbabwe and the University of Melbourne, and informed consent was obtained from all study participants.

FOOD AND THE POLITICS OF LAND

In Zimbabwe as elsewhere in sub-Saharan Africa, drought and food insecurity are endemic, but the impact of this has been exacerbated by nineteenth, twentieth and now twenty-first century economics and politics (Devereux and Edwards 2004; Hamandawana et al. 2005). Colonial government land and border legislation and the appropriation of land for commercial farms has stripped most people of the option of indigenous hazard management, such as moving to new pastures (Torry 1979, 523; Clover and Eriksen 2009). At the time of Zimbabwe's independence in 1980, 6,000 white commercial farmers owned 15.5 million hectares of productive land, while 8,500 small-scale (African) farmers possessed 1.4 million hectares (Moyo 2000). The rest of the population (about 700,000) worked as communal subsistence farmers, on 16.4 million hectares (Sachikonye 2003). With independence in 1980, land began to be acquired to resettle indigenous communities from minority white farmers on a "willing seller, willing buyer basis." Until the mid-1980s, Zimbabwe continued to be the "bread basket" of southern Africa, with a thriving export market and a reasonably stable economy. But with the state-led emphasis on commercial mono-cropping and concentrated land ownership, subsistence production and mixed farming declined, and small rural communities became increasingly vulnerable. Lack of foreign currency available to the government slowed land acquisition, and in the first decade of independence, only a small proportion of the targeted population had benefited. Concurrently, the diversion of maize for refinement at large-scale mills blocked the access to grain of small-scale millers, preventing people from choice regarding maize (Jayne and Rukuni 1993; Jayne and Rubey

1993). In addition, the declining value of agricultural trade and international debt disadvantaged commercial farmers and impacted on the prices to consumers of all imported foods. The consequence was continuing decline in output of both cash and subsistence crops, increasing vulnerability and reducing foreign currency earnings. Climatic conditions—a series of devastating droughts from the early 1980s to mid 2000s—exacerbated an already potent environment, and drought caused and exacerbated growing unemployment on commercial farms and precipitated the migration of individuals and families to urban and peri-urban areas (Alwang, Mills, and Taruvinga 2002; Bird and Shepherd 2003).

In frustration at continued economic disparity, people increasingly invaded white-owned commercial farms in the 1990s, and in 2000, the "Fast-Track" land reform program was introduced, resulting in the coercive acquisition of about 90 percent of commercial farms owned by white farmers. Alterations to a regulation requiring household heads to reside locally forced women to play a greater role in non-agricultural income-earning activities, while men continued to work in commercial agriculture (Kinsey 2002). The result was increased migration to major towns in search of employment, although, as Deborah Potts (2006a, 2006b) documents in Harare, rural migrants in the city were increasingly no better off economically than they would have been in rural areas.

Following the 2001–2002 drought, food aid was provided by the World Food Programme and Food and Agricultural Organization. The maize was U.S.-produced genetically-modified maize, however, and this in turn precipitated a bitter local debate about health and the environmental dangers of GMO, the promotion of GMO crops in Africa (Clapp 2005; Mwale 2006; Zerbe 2004), and global power relations. Severe food shortages, after a second drought the following year (2002–2003), provoked further policy debate, this time particularly about the interactions between the food crisis and HIV, the conflicting demands for international and local NGOs in diverting resources to or from health services to food aid, and the lack of strategies to support the re-establishment of livelihoods for the people hardest hit (Griekspoor et al. 2004).

Historically, the primary buffer against hunger in rural areas, with increased monetization through the twentieth century, had been cash remittances from family members in urban areas, to enable rural householders to purchase food and seed. Increasingly unemployment in urban areas stripped rural dwellers of remittances, while at the same time, drought and declining production stripped individual urban households of food transfers from rural to urban families (Frayne 2004), and a growing number of rural and urban householders became dependent on food purchased at current market prices. Food security in towns and cities requires that commercial food production is of sufficient quantity to meet the requirements of both urban and rural populations or, alternatively, that the trade balance allows food to

be imported. In Zimbabwe, recurrent drought led to further crop failure and low yields, producing inadequate food to meet even the simplest subsistence needs of urban and rural populations. By the late 1990s—before the most recent droughts and food shortages, and before hyperinflation had completely eroded the purchasing power of Zimbabwean currency—the poorest urban residents were already spending a substantial proportion of their total income on food. Yet where a significant amount of the household's earnings is channelled to food procurement, poverty is manifested as food insecurity.

During the droughts of the 1980s and 1990s, the instability of food supplies for urban dwellers, through market mechanisms and rural-urban household food gifts, to an extent had been protected by urban agriculture. Kitchen gardens enabled householders to meet basic food needs or supplement basic purchases, protected the nutritional status of children, and for many, generated additional income by providing some surplus to sell in the parallel (street) market (Maxwell 1999). De-industrialization, retrenchments and unemployment, however, and the removal of food subsidies as a component of structural adjustment (Flynn 2001; Mudimu 1996), increased the vulnerability of all households. In urban settings such as Mutare, both salaried householders and those in economically more precarious positions depended on local production to meet domestic food needs and for sale. Consistent with earlier observations in Zimbabwe (Potts 1995; Rakodi 1995), study participants engaged in two forms of urban agriculture: the production of crops in home gardens; and cultivation in open and undesignated and undeveloped land within urban boundaries. Here women could plant maize, squash, yams, pumpkins, groundnuts, millet, and various leafy greens such as chomolia, spinach, and collard greens, so contributing to household income and food security, and so, it has been argued, preventing family disintegration and reducing social alienation (van Averbeke 2007). Most of these foods are relatively drought resistant. But the first practice (home food production) was difficult for most householders, who either had no rights to land as they were renting, or had insufficient space to undertake sufficient gardening to supplement their income. The second practice, prohibited under municipal laws and often putting urban food producers in collision with the police, involved people claiming patches of arable land for food-growing to compensate for shortfalls in food available and affordable on the market, and where possible, to sell surplus produce to expand their income. Government intervention brought this practice to an end.

OPERATION MURAMBATSVINA AND FOOD SHORTAGES

Operation Murambatsvina had far reaching consequences on the livelihoods and food security of urban dwellers in Mutare, as in other towns, where people had limited opportunity to find alternative activities to generate extra

cash. People were already finding it near impossible to keep pace with inflation, and the salaries of middle class income earners, excluded by their employment status from food aid, were eroded. In addition, there were high levels of unemployment in the formal sector, and because of droughts and labor shortages, there was little surplus food flowing from rural to urban areas. When the first author commenced field work in July 2005, the official exchange rate was around one United States dollar to ninety-ninety thousand Zimbabwean dollars (US 1:ZWD 99,000), although fluctuating daily. In the parallel market, the exchange rate was higher, with the United States dollar buying 250,000 Zimbabwean dollars. The price of a 50 kg bag of mealie-meal—enough processed maize to meet the basic food needs of a family of four for a month, was about ZWD 1,000,000 at the parallel market rate (US 4). Six months later, the purchasing power of the dollar had been eroded to the extent that residents could only make sense of their expenditure in parallel market terms. (By 2008, the IMF estimated the inflation rate was 150,000%). Participation by urban residents in the informal economy, trade and gardening, concurrent with salaried work in the service sector, was undertaken initially, according to study participants, "just to get a bit extra for other things that you can otherwise do without, such as *mari yeice*-cream (money for ice-cream)," that is, "pocket money" for non-essential items. But by mid 2005, people were using almost all income and undertaking any and every possible income-generating activity for *upfu*, literally mealie-meal, that is, for basic commodities necessary for sustenance.

Many householders sold goods such as bread, soft drinks, milk, cigarettes and other items from "tuck shops"—small makeshift kiosks usually built as an annex to the main house. Women also set up stalls on footpaths and in car parks to sell their own garden produce and to sell small quantities of fruit and vegetables obtained wholesale from larger markets. Flea markets enabled traders to sell goods brought into the country, in some cases illegally, predominantly from Mozambique. In addition, most urban dwellers, particularly in high density suburbs, constructed makeshift dwellings (*zvibhodhi*) in their backyards, as described above, to be leased out to people unable to find alternative affordable rental accommodation, also a growing problem with hyperinflation. Some people resided in zvibhodhi as a long-term solution to their need for inexpensive housing; for others it was a temporary measure while they searched for better accommodations. This in turn was an escalating problem because of the limited housing stock in contrast with the high rate of rural-urban migration. Money generated from rental from these shacks was used by household owners to augment income from formal employment.

The livelihoods of poor urban households deteriorated substantially with Operation Murambatsvina. When the Operation commenced in May 2005, these various structures—zvibhodhi, household kiosks and small food stalls—were classified as illegal because they were not included in approved

plans for dwellings or had not been registered. In the interests of "cleaning up" cities and "driving out trash," the government-initiated operation, often without warning, bulldozed and burned vendors' markets, informal market premises, and vegetable gardens. By the end of the Operation, approximately 30,000 vendors had lost their livelihoods as their goods and assets were confiscated by the police (United States Agency for International Development [USAID] 2005). At the same time, "illegal" structures—the zvibhodhi which provided housing for poor urban dwellers including rural immigrants—were smashed and burned (Tibaijuka 2005). Their demolition affected both landlords and tenants. Landlords lost a major source of livelihood. Displaced tenants spent nights on the street without shelter and begged for food; they had neither money to buy nor a place to prepare their own food. Those who were displaced and could do so moved to the houses of kin, swelling the numbers of people in individual dwellings. Further, at the time of Operation Murambatsvina, Zimbabwe had an unemployment rate of more than 70 percent, and more than 50 percent of the urban population in Zimbabwe were estimated to have depended on the informal sector (USAID 2005). Because of the high levels of unemployment, expanded households often comprised multiple adults and children without any opportunity to earn an income, such that all income generation and food sourcing fell to a single person. As we have noted, the households in this study ranged from 2–17 residents, in most cases, with only one person in employment, the value of their salary eroded by hyperinflation:

> Since my husband is the breadwinner and my sister-in-law has no source of income, my husband is sending her children to school and also buying medicine for her—it is expensive because she is not on any medical aid scheme. My husband has got a small security company which he runs. We are six altogether here . . . My husband's salary is way too low to sustain us—especially with our added responsibilities of taking care of our sick relative. (*Mai* Farai, 36)

HIV, FOOD, AND NUTRITION

HIV is hyperendemic in Zimbabwe, and HIV added to the vulnerability of households already fragile as a result of the accumulative effects of drought, famine, unemployment, hyperinflation, and Operation Murambatsvina. In part this led to the loss of labor on commercial farms and other work in rural areas, so affecting food production and its flow to urban family members, and this affected income earners in cities (so influencing remittances to villages). The growing incidence of HIV, and resultant number of people with AIDS in an environment where access to ART was problematic, led to a growing burden in households: the high cost of care giving for

people with advanced illness—in terms of cash demands, energy expenditure and time (2.5–3.5 hours a day on routine patient care)—adding to the burden and the cost of care to all householders (Hansen et al. 1998). With prolonged illness, household composition tended to swell independent of increasing rural to urban migration and housing shortages, as relatives took turns to provide the primary care or to assist the primary caregiver. When this occurred, the primary caregiver or head of household was responsible to ensure that there were sufficient provisions in the house to sustain visitors. Although in ideal circumstances this might be construed positively, as noted earlier, there were the limited resources available to householders, including food, especially after Operation Murambatsvina. Family members, neighbors, and others conventionally also sit with members in a bereaved household to provide support, but food insecurity and lack of housing and other infrastructure converged with the high numbers of deaths from AIDS in urban, low-income households, adding to the need for cash for funerals, and consequently forcing households to withdraw to avoid the social obligations of mourning. Such actions consequently undermined the continued viability of households (Gregson, Mushati, and Nyamukapa 2007).

But food shortages were felt sharply also on a day to day level. Although participants in this research ranked food as the second most important basic item of expenditure after shelter, a good portion of their household income was spent on food. Most participants indicated that over sixty per cent of their income was spent on food purchases, due to the inflated costs of food commodities on the parallel market. At the time of the research in 2005, the net income of a household had been reduced in value to such an extent that it was not possible to purchase a nutritionally adequate food basket, as illustrated in the quote below, where *Mai* Dobvu speaks of her monthly expenditure which far exceeds her husband's salary (the husband is the sole bread winner),

> Currently my husband is getting about 20 million dollars, and this is the breakdown: rent, $7 million; bills (i.e., electricity and water), $1 million; children's transport to school, $100 000 per day, which is $4 m per month for two children; 20 kg mealie-meal bag costs $400,000 on the black market because you can't get it in the shops where it would be cheaper, so that's $1 million for the 50 kg for the month; 2 litres cooking oil costs $700,000, we need 4 litres per month so that's $1.4 million. Two kg of rice costs $500,000—we need 6–7 kg and that's about $1.6 million. Children take rice or bread for lunch to school because they cannot afford to buy lunch at school that is the other reason why we need that much rice . . . We hardly buy meat these days because it is too expensive.

In another scenario, *Mai* Busi had become the sole breadwinner when her husband left his job due to his poor health. She also became his

TABLE 1 Foods that Help AIDS Symptoms

Type of food	Perceived benefit
Fruits (e.g., apple, lemon)	Cleans the mouth (*kusuka mukanwa*) and stops nausea (*kusvotwa*)
Tomatoes	Heals oral thrush
White meat	Easier to digest and increases CD4 count
Lacto and/or yogurt	Boosts the appetite
Brown rice or rice with peanut butter	Stops diarrhea (*kubata manyoka*)
Coca-Cola	Stops diarrhea and vomiting (*kubata manyoka nekurutsa*)

caregiver, as his health deteriorated due to AIDS complications and "poor nutrition." His nutritional needs became the major driver to procure food: he required, she explained, specific types of food such as vegetable leaves cooked in peanut butter sauce instead of cooking oil. Like other primary caregivers, she believed that cooking oil caused nausea, and sometimes diarrhea in people with AIDS, and health staff advised them to provide those with AIDS with foods such as red meat. People living with AIDS also requested lighter foods which were thought to be easily digestible, and they often had very specific food preferences (table 1). People receiving antiretroviral medication made other special food requests, said to reduce drug side-effects such as irritation in the stomach (*kumonywa mudumbu*), dizziness (*dzungu*), nausea (*kusvotwa*), dry mouth (*kuoma muromo*), diarrhea (*manyoka*), and vomiting (*kurutsa*; cf. Johnson et al. 2005).

Primary caregivers found it difficult to meet these specific demands for food, as the foods were often unavailable in supermarkets and, when available, were unaffordable. Hence continuing personal and familial demands were placed on those who were most able to generate income in order to meet the immediate food needs of the person with AIDS, the needs of other dependent householders (including children), the food needs of unemployed people relocated into houses where there were people sick with AIDS, and the food needs of those people drawn to the household because of AIDS-related kinship responsibilities (see also Gwatirisa and Manderson 2009).

RESILIENCE AND STRATEGIES FOR SURVIVAL

The strategies that were employed by households to procure food highlight the level of food stress experienced (Kruger, Schonfeldt, and Owen 2008). Coping strategies common at the time of the research included changed food consumption patterns, urban agriculture where still possible (as indicated above), and other income-generating projects to raise money to buy food and non-food items. We describe this last coping strategy below.

Food consumption patterns changed through a reduction in the number of meals per day, a decrease in the quantities of food consumed at any one time, and in some cases, skipping meals because of the non-availability of any food for a particular meal. Household members who were engaged in activities away from the home, such as those in formal employment, would bring food left over from the previous evening to work if they could, but from mid 2005, they generally went without; food from take-away shops was rarely affordable. Children too went to school without lunch because there was usually nothing left over; at times, there was no food in the house at all for days. Alternatively, the little food that was available was left for children and household members with HIV/AIDS, whose perceived food needs were greatest., Teachers and other salaried participants sarcastically talked about the "air-pie" they had at their workplace—a euphemism for nothing. As one participant put it, "We are now living from day to day."

While most caregivers demonstrated resilience, there was often a sense of hopelessness and desperation in narratives, as seen in the account below shared by a woman caring for her child with HIV:

> This child requires a lot of attention. I blame myself each time there isn't enough food to go around the family, because it affects him more. A child this age needs certain types of food—but I cannot afford it—he has to eat from the family pot and in most cases it is not enough. Because what we also do is, we don't eat everything at once—we take a bit from the same pot for the boy's frequent feeds—that is why sometimes there isn't enough for everyone. (*Mai* Mavis, 52)

Participants had changed their purchasing habits, due to the prohibitive cost of food, and most commodities were usually purchased in small quantities from the more expensive parallel market. Most respondents related how expensive it had become to get even the basic requirements all at once, and how they had resorted to buying only those items that were needed for immediate use, as this participant explained:

> The major challenge I am facing—and I am sure everyone else is facing the same challenge in Zimbabwe these days—is that of food. Food procurement can be very tricky especially for a woman—because you have to find food—you don't give up on food procurement. So we go to great lengths to get food. (*Mai* Charles)

In some cases, basic commodities such as cooking oil were foregone altogether, because people could not afford the items or they were not available at the time. People often foraged and used non-cultivated leafy vegetables, known in vernacular as *mowa* or *runi*, boiled in water only (cf. Benhura and Chitsiku 1991); some households might also be able to pick and boil a few green leafy vegetables, such as one commonly known

by locals as *covo,* from their landlord's garden, or their own, if they still had one. However, people increasingly subsisted on mealie-meal without any supplements.

Gendered aspects of food insecurity are important, and in this study, women constantly battled with the daily changes of food insecurity and lack of money: they were the primary caregivers for children and people with AIDS; procured, cooked, and distributed the food; and so made hard decisions about who might eat what food, and how much of it (see also Gregory 2005; Hunter, Twine, and Patterson 2007; Phillips 2005; Whyte and Kyaddondo 2006); they might have been sick themselves. But other demographic characteristics also played a significant role in determining the coping mechanisms employed by different individuals. Younger people tended to engage in activities that brought them more immediate benefits than did older people. For instance, when it came to food procurement, they had faster procurement strategies, such as getting supplies through their "connections" in the food industry, unlike older people who engaged in the more lengthy process of finding supplies on their own as they may not have had "connections."

Most of the income generating activities in which urban dwellers engaged during this period of drought, food shortages, and fear were meant to generate income as quickly as possible in order to beat inflation. Usury—the practice of lending money and having people pay it back with exorbitant interest—was especially common. Known as *chimbadzo* in Shona, the practice was especially common among low-income groups. Because most households did not have any disposable income at the end of the month, the fastest way to get money was to borrow. In most cases collateral was not necessary because the lender would charge up to 20% interest on the balance owing, on a weekly or monthly basis, depending on the agreement entered into by both parties. Usually people borrowed money because they did not have enough in the first instance, and when the time came to pay it back they still lacked cash and so would default on repayments, accruing greater indebtedness and perpetuating their poverty. Chimbadzo was mostly practiced by men, although most of the accounts of this practice were volunteered by female participants. As it is often a signal of poverty, those engaging in this activity preferred not to discuss it openly.

Yet another coping strategy involved trading money on the parallel market. Known to urban dwellers as money laundering, the practice became rife with hyperinflation, foreign currency shortages and precarious exchange rates. Previously, foreign currency could easily be obtained from different financial institutions, mainly banks and the *bureau de change.* Illegal dealings and lack of transparency in most indigenous financial institutions (i.e., those run by black Zimbabweans) resulted in a major crackdown on the sector between 2003 and 2004, and most of the indigenous banks as well as the *bureau de change* were forced to close down. This resulted in the

emergence of informal money traders, mostly from urban areas, who capitalized on the chaos in the financial sector and the political and economic fall-out from Operation Murambatsvina. Informal money traders operated in highly organized syndicates, and hence it was difficult for the police to apprehend them. Flouting official money exchange regulations is one major contributor of inflation, although, as some of the participants described it, "It is a chicken and egg story, we would not be doing this if the inflation was at normal levels. We will continue to use this illegal route until the government has done something about the economy."

By far the most common strategy employed by the urban poor to beat inflation involved crossing the border for trading purposes, usually by-passing the official immigration systems. Research participants, mostly women, crossed the border into Mozambique to purchase and bring back goods that were in demand in Mutare such as cooking oil, laundry soap, bath soap, sugar and dried fish. Traders also brought in second hand clothes, known as *mazitye* (a derogatory vernacular term for second hand items), for sale. Those caught had their goods impounded by customs officers at the borders, and/or were made to pay a fine. They were also fearful of malaria. One participant talked of how she was always well prepared for the trip, and how risky it was for anyone who overlooked the necessary precautions. This, combined with the long distances women walked across the border, took a big toll on women's health, who upon return from the strenuous trips, were expected to continue their roles as mothers, wives and caregivers. As one female participant said, "One cannot afford to be away for long because of other social responsibilities, yet also one cannot afford not to go because then poverty persists." Traders were well aware of these consequences, but were prepared to take the risk. They were not prepared, however, to increase the risk by including an anthropologist as an observer on these trips.

CONCLUSION

Growing public concern of the incremental affects of climate change has added a sense of urgency to the need to study the links between economic and environmental sustainability, food security, population growth and human health. In response, contemporary medical, environmental and agricultural anthropologists have addressed increasingly the social responses to climate change and environmental disaster, population resilience, and the policy roles of the discipline (Baer and Singer 2010; Crate and Nuttall 2010). Zimbabwe in the first decade of this century is an extreme example of the chaos and desperation that follows from drought, declining food production and availability, urban policies and structural adjustment. Here, a toxic mix of drought, crop failure, injudicious agricultural, trade and fiscal policies,

and—as reflected in land acquisition policies—the fallout from colonization, combined to produce extreme food shortages and sustained terror. The effects were arguably greatest in households already overcrowded and fragile as a result of HIV. Operation Murambatsvina exacerbated the vulnerabilities of urban and rural dwellers who were already suffering from food shortages, and the destruction of urban gardens stripped town residents of any resilience.

As a country case-study, Zimbabwe is an exception in terms of the timing of disaster and its individual players, but the circumstances are in place for recurrence throughout Africa and elsewhere. Burke and colleagues (Burke, Lobell, and Guarino 2009) have recently argued that by 2050, some three quarters of all countries in Sub-Saharan Africa will have novel climates with respect to both temperature and precipitation, and many countries will face enormous challenges to meet food production targets, and so unsettle food security in urban and rural areas. Projections of climate changes and the sustained inequalities that characterize the global political economy highlight the need now to understand the complexity that produces food insecurity and insufficiency in local settings. While meeting the immediate food needs of a household was considered locally and by humanitarian groups as a priority in emergencies, there were wider impacts on food insecure households, including compromised nutrition, pressures that undermined family cohesion, the social isolation of householders, and poor mental health (Hadley and Patil 2008; Kruger et al. 2008). Food insecurity is always complex, but more so when its multiple layers are compounded by political instability, structural and direct violence, and an economy in collapse.

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