



Vulnerability, Coping, Adaptation, and Accumulation among Women of Irisvale Resettlement Area in Zimbabwe's Umzingwane District

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Abstract

This study of women's vulnerability, coping, adaptation, and accumulation in an agrarian setting of the Umzingwane district of Matabeleland South province explores issues that surround Irisvale women as they act and react in response to climate change and policy stimuli that focus on them. Using a qualitative case study design, the study engaged twenty women aged between 21 and 79 between May 2020 and January 2021. Findings indicate that women at Irisvale are not a homogenous group. While some are very vulnerable and hardly cope, others are living relatively comfortably by the standards of the area. The women employed strategies like growing small grains such as sorghum and millet, harvesting *Mopani worms (amacimbi)*, and petty trade to ameliorate their situations depending on their capabilities. We recommend that the government and NGOs should avail more social assistance to help manage the negative effects of climate change and government policies.

Keywords: climate change; diversification; livelihoods; women; rural areas; Zimbabwe

Introduction

The World Economic Report (2021) views 2020 as one of the warmest years on record, with very intense storms, heatwaves, and floods. The Intergovernmental Panel on Climate Change (IPCC, 2007) points out that a medium-high emission situation describes a mean annual surface air temperature increase of between 3 and 4 degrees by 2080. This calls for a high level of coping and adapting shortly. The Food and Agriculture Organization (FAO) (2004) suggests that the frequency of droughts has also increased from one in a decade to one every three years in Zimbabwe. Khanal (2009) and Goddard (2010) point out that extreme weather patterns have affected people's activities globally, and they have had to adapt to the variations and inconsistencies of the climate to survive and in some instances, thrive. This study explores how women at Irisvale have fared within a very constraining environment to accumulate wealth and live more comfortably. According to Eele (1996) and de Loe and Kreutzwiser (2010), the understanding of adaptation moves beyond conventional notions of coping. Rather, they view adaptation as the capacity of social actors to shift livelihoods under stress and develop supporting systems that are resilient and flexible enough to absorb and respond to the impacts of climate change. Although recent scholarship on rural livelihoods tends to be sectoral and treats issues like coping and adaptation separately, this paper employs a historical view that traces Irisvale women's exploits as a continuum from vulnerability to accumulation. However, it also pays attention to the fact that the women studied are at various livelihood stages. The objective of the study is to explore livelihood strategies that women at Irisvale Resettlement Area in Umzingwane District use to cope with and adapt to adverse conditions brought about by climate change and unfriendly state policies. It also examines factors that enable women at Irisvale to accumulate wealth.

Background

Climate change has led to the redrawing and reclassification of Zimbabwe's agro-ecological regions (Manatsa et al., 2020; Mugandani et al., 2012). Umzingwane district falls under agro-ecological natural regions IV and V which are characterised by extended periods of dry spells and low agricultural potential. It is also characterised by low and erratic rainfall, between 450- 650mm per annum, making it prone to droughts and insufficient food for the locals. According to the Meteorological Office (2017), the Umzingwane district receives rains between November and April. Chronic food insecurity characterises agro-ecological regions 4 and 5, (Dube et al., 2014; Myers, Heinrich & Rusike, 2010). Besides limited crop production, villagers in the district make a living on petty and cross-border trading, livestock rearing, remittances from the diaspora, and gold mining. Umzingwane district has a population of 36 580 females, and of 36 709 males (ZIMSTAT, 2021). There are slightly more men in the district because of activities such as gold panning which bring in men from other regions of the country. Even though women are almost equal to men in numbers, they have traditionally been invisible in terms of participation in the public affairs of the community.

Before political independence in 1980, women were oppressed politically, socially, and economically. They did not have any decision-making space and were treated as minors at law (Tichagwa, 1998; Gaidzanwa, 2004; Chingarande, 2009). This changed after independence when the state pursued a conscious policy to change women's situation, in line with international and regional instruments that attempted to upgrade the status of women (National Gender Policy, 2013). While women have struggled with oppression within a patriarchal order, they have also had to face challenges presented by nature through droughts, floods, and other extreme weather changes. As Chingarande (2013: 276), citing Lambrou & Piana (2006) and UNFPA (2009), says:

at the household level, the ability to adapt to changes in the climate depends on control over land, money, information, credit and tools, low dependency ratios, good health and personal mobility, household entitlements and food security, secure housing in safe

locations, and freedom from the violence which are not readily accessible to women.

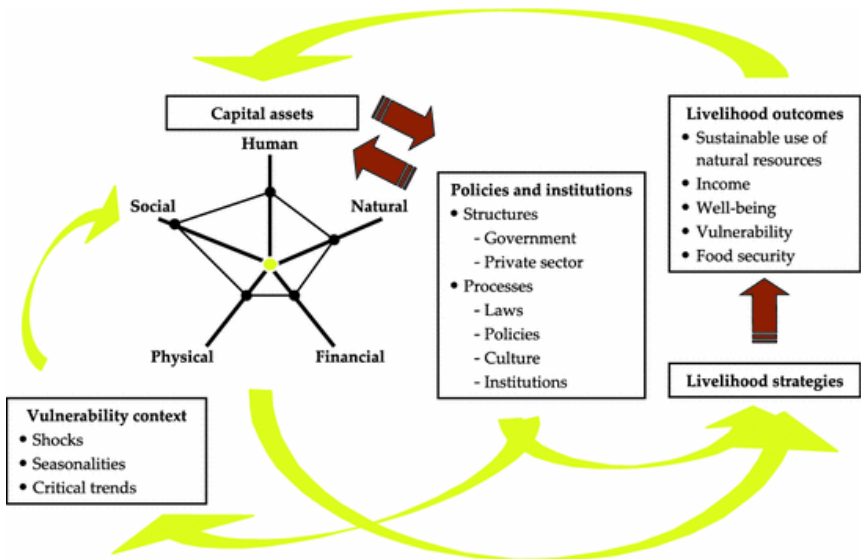
Women have also suffered from state policies that have impacted negatively on them. They were more affected by the Economic Structural Adjustment Program than men when they had to bear the brunt of caring for their families and being involved in petty trading after men had lost their jobs through retrenchments. Generally, there are more male than female workers in the formal labour market, (Zimbabwe National Statistics Agency [ZIMSTAT], 2019). Land reform programs of the 1990s and 2000s did not recognise women as individuals separate from men, thereby perpetuating a situation where women continued to be subordinate to men. These programs have left women in Irisvale very vulnerable. It is necessary to explore their livelihoods and adaptation mechanisms. This study traces changes in processes, practices, and structures that Irisvale women used to limit potential damages and to benefit from opportunities associated with climate change and livelihood diversification.

Conceptualising Livelihoods of Women in Rural Areas

The livelihoods perspective, developed originally in the 1990s (Scoones, 2009; Tambe, 2022), is still widely recognised as offering a comprehensive framework for understanding how people in rural areas live. It was a response to overtly technical and technocratic approaches to rural development, which were concerned primarily with improving the efficiency and productivity of agricultural practices in developing countries. The perspective organises the factors that constrain or enhance livelihood opportunities and shows how they engage with each other. Serrat (2017) sees it as positioned to help plan development activities and assess the contribution that existing activities have made to sustaining livelihoods. The approach is preoccupied with differentiation among people and how and why people make the choices that they do, (Brycesson, 2002; Scoones, 2019; Serrat, 2017; Tambe, 2022). It rejects the idea that people's well-being can be understood solely on a simple technical or financial analysis of the sectors in which people earn their living, or that this would be an adequate basis for developing policies or interventions to support them. A livelihoods approach

tries to hold two perspectives that have sometimes been viewed as opposites. On the one hand, it is essentially an actor-oriented perspective and yet, on the other, it involves political economy analyses. It also sees it as necessary to embrace the diversity and complexity of people’s livelihoods and so avoids the easy generalisations of some macro-economic or national development planning approaches which are least likely to be relevant to the poor, or people from different backgrounds. Using this approach, researchers can study sections of people, for example, women, as is the thrust of this paper.

Figure 1: The livelihoods framework used in the study



Source: Serrat (2017: 22)

Figure 1 shows the five pillars of the Sustainable Livelihoods Framework which are interconnected and interrelated. The first concerns the vulnerability context. Irisvale is located in an arid region and is susceptible to droughts, resulting in perennial water challenges, and this affects many other areas of people’s lives. The second pillar is the Asset base (Tambe, 2022) consisting of five assets, normally referred to as capitals. These capitals are not ranked in any way and the order presented is just for clarity. ARAS, 44, 2, December 2023

Human capital consists of such essentials as stored knowledge, skills and health. Financial capital deals with issues of credit, remittances and savings. Natural capital encompasses such issues as grazing areas, water bodies and forests. Physical capital includes infrastructure, agricultural implements and household assets (Serrat, 2017). Social capital refers to social organisations, traditional norms and customs, ethnic networks, links with traditional or political leadership and other relationships of trust (Scoones, 2019). These capitals are useful in understanding the situation Irisvale women find themselves in.

The third pillar consists of policies, laws and institutions. This study analyses the policies that affect women in Irisvale showing whether they result from the state, private organisations, social institutions or the local culture. The fourth pillar concerns the livelihood strategies and what the women do to manoeuvre within their context. These strategies are determined by the first three pillars. Over the years, women in Irisvale have either chosen strategies that lean towards government and donor interventions or a total break from these. Chimhowu and Hulme (2006) point out that upon resettlement, farmers were not allowed to venture into anything other than agriculture. This was regardless of whether it rained or there was drought. However, the villagers invented other livelihood strategies in the face of continuous droughts. The fifth pillar is about the livelihood's outcomes which express people's aspirations such as improved levels of food security, income and wellbeing and a reduction of vulnerability.

Methodology

In line with Charmaz (2008), the qualitative case study approach was utilised to view the world from the perspective of Irisvale women. Riaan et al. (2010) points out that qualitative methods deploy an inductive and exploratory methodology designed to investigate complex, non-quantifiable processes and the meanings that people assign to these processes. It draws its strength from its explanatory power, the richness of data, and the depth of understanding. Therefore, as a research design, the case study claims to offer richness and in-depth information, capturing as many variables as possible and identifying how a complex set of circumstances come together to

produce a particular manifestation (Yin, 2003).

Irisvale is a resettlement area that is 82 kilometres from Bulawayo, Zimbabwe's second-largest city. Map 1 below shows the location of Umzingwane within Zimbabwe.

Map 1: Study area (Umzingwane district)



Source: ZIMSTAT Cartography Section (2018)

Twenty women were purposively selected for in-depth interviews for nine months between 2020 and 2021. There were seven widowed, ten married and three divorced. Of the married women, the study discovered that most of their spouses reside in neighbouring South Africa and only visit once a year. Thus during the course of the year, married women are left to fend for

themselves and their families. The study also engaged four key informants, one from the Ministry of Women’s Affairs, Community, Small and Medium Enterprises, another from the Department of Agricultural, Technical and Extension Services (AGRITEX), a third from the ministry of mines, and a fourth from a local NGO. The study used thematic analysis to categorise and understand data (Braun & Clarke, 2006). As part of the ethical considerations and to protect the identity of participants, the study utilises pseudonyms to refer to participants. All the photographs (of cattle and other resources) were taken with the consent of the participants.

Demographic characteristics of research participants

Table 1: Participants’ age categories

Age group	Number of women
21 to 30	1
31 to 40	2
41 to 50	4
51 to 60	6
61 to 70	4
71 to 80	3
Total	20

Table 1 shows that most interviewees (14 out of 20) were in the age groups 41 to 70 years of age. These were free to speak for themselves and their families and to engage in in-depth interviews as their spouses were either deceased or worked out of the country.

Table 2: Participants’ highest level of education

No Schooling	1
Primary school level	12
Secondary school level	5
Tertiary education	2
Total	20

Most of the women had very limited education, the majority (12 out of 20) with primary education only. Only two of the participants had tertiary education. In terms of family sizes and the number of dependents, most participants (16 out of 20) cared for orphans whose number ranged from 1-

6. Five of the participants had 5 or more orphans, leading to heavy burdens and strain on their livelihoods. The majority had between one and two orphaned children in their care.

Findings

Women at Irisvale are not a homogenous group in terms of livelihoods but are found at various stages along the livelihood continuum. Their responses to climate change and other policies varied according to their endowments. Some aspects were found to be common to all the Irisvale women such as their being the main providers of food and care for their families. They were also instrumental in community projects and gatherings like funerals and weddings. However, despite participating in such important roles at Irisvale, the women largely remain less visible, as men continue to be perceived to be the dominant actors in the public sphere.

Figure 2: Irisvale women's livelihood strategies

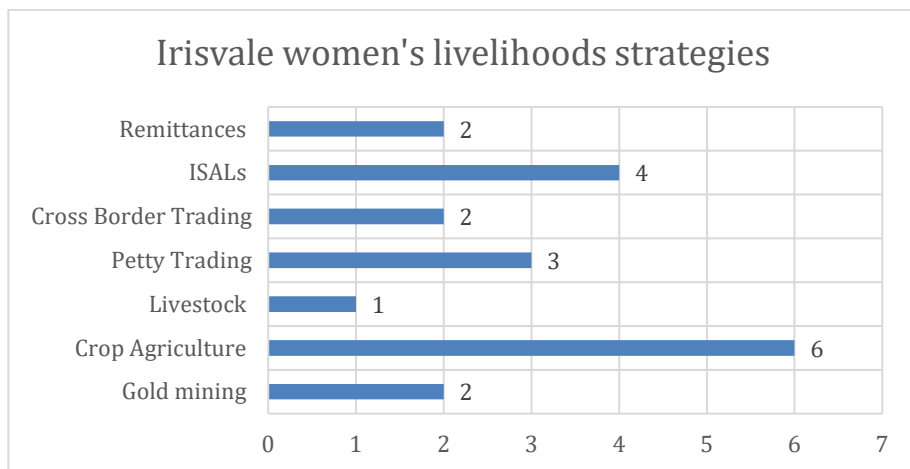


Figure 2 shows that women in Irisvale simultaneously shift between livelihood options, but the most common livelihood strategies are participation in Internal savings lending clubs (ISALs) and crop agriculture. Successive droughts in the area force the women to consider other options like trading and gold mining.

While the most common livelihood strategy appears to be agriculture, figure 2 shows that most participants (70%) now depend on off-farm activities. The women argued that successive droughts due to climate change and the economic downturns have led to partial, and in some cases, a total abandonment of agriculture.

Participation in community activities

While the district has more men than women, the Irisvale community is more female than male. Most males are not at home due to migration and gold panning. There is active participation of women in all the community committees although there seems to be a gender dimension to this participation. Men participate more in committees like the Dip tank and Grazing. This is not surprising as men have interests in cattle which gives them more power and respect in the community. There is also more male participation in the ministers' fraternal, which is a group of religious leaders from different churches. This was expected in the study as the community is patriarchal. Table 3 below illustrates the main committees that women participate in within Irisvale. There are more women in such committees as the veld, water, gardens fire, school development, Village development committees (VIDCO) and Ward development committees (WADCO). VIDCO and WADCO are interestingly political and this shows the rise of Irisvale women. There is a very high level of participation of women even though they generally have lower levels of education.

Even for those committees where women formed the majority, most of the most powerful positions were held by the few men on the committees. A key informant pointed out that women occupy posts such as those of Committee members and Secretaries, which are less powerful compared to that of the Chairperson or deputy. Generally, participation has boosted women's levels of confidence. This was pointed out by one female

participant who stated that previously Irisvale was a men’s area, but now women’s voices are being heard. She stated:

“Iminyaka edlulileyo, omama babengabothithisi sibili, kathesi amaphimbo abo asezwakala. Inengi labafazi alilamasimu aqondane labo kodwa sokusiba ngcono kuliminyaka” (Years back women were [barking] like puppies, but now their voices are being heard. Most of the women here do not have land in their names. However, it is becoming better).

Table 3: The various committees that women participate in

Name of Committee	Males	Females
Gardens Committee	28%	72%
Veld Committee	32%	68%
Water Committee	39%	61%
School Development	40%	60%
Fire Committee	43%	57%
WADCO	45%	55%
VIDCO	48%	52%
Grazing Committee	70%	30%
Fraternity Committee	71%	29%
Dip Tank Committee	72%	28%

Vulnerability

Most women in Irisvale lack empowerment to control their lives and better manage their vulnerable contexts. They delicately balance their triple roles in the reproductive, productive, and community spheres as they struggle to be mothers, breadwinners, and caregivers. This makes their positions at Irisvale precarious. Vulnerability can also take a gendered form. At Irisvale, the distribution of financial, social, human, and physical capital resources between men and women is in favour of men even at the smallest level of the distribution of food portions within a household. As one participant said:

uma ngipheka, kumele ngisikelele inyama engaqondananga, ngoba umasengiphakulula, kumele yena athole enengi kuleyami (when I am cooking, I need to have an odd number of pieces of meat in the pot because when I dish, he should have more than me).

She went on to say:

kuleminye imisebenzi akhangele ukuthi ngizayenza njengokupheka, ukuwatshimphahla, loku thezinkuni (there are some tasks or roles that he expects me to do without question, such as cooking, washing clothes, and gathering firewood).

For her, doing these tasks alone gave men more time to engage in activities that brought them more income than women. Men also had more time to rest, refresh and refocus, something that women in Irisvale long for.

Another participant, a widow, pointed out that since her husband passed away, it has been very difficult to access credit from lenders. She mentioned that the lenders are very few because of the harsh economic situation and they prefer to lend to better-off families. These are usually male-headed families. The result has been that women like her are left out of development initiatives and benefit only on a marginal scale, whether the initiatives come through the state or private sector. To this end, she lamented, “*bayaqala bakhethane bona bodwa*” (the powerful in this area start by selecting each other). One participant pointed out that she did not get any education and had to depend for all written communications on her son who was learning at a local primary school. She pointed out how lack of education has affected her all her life. She has missed out on many opportunities, but she has also seen men with little education getting access to resources.

Households with at least one orphan were more likely to be vulnerable compared to those without. It was also found that households that reported receiving remittances and were involved in ISALs and gold panning, were likely to be less vulnerable than those that were not able to do so. Households that participated in small-scale gold mining and cross-border trading were thriving as opposed to struggling.

Coping strategies

Locals depend on firewood for their cooking and commercial purposes. However, this sets them on a confrontational path with powers outside their villages especially the Environmental Management Authority (EMA) which curbs rampant cutting down of trees for subsistence and commercial uses. In defiance, one participant (“MaSiwela”) said:

Asingeke sayaliswa ukugamulinkuni. Ukubasumlilo yimvelo yethu. Lapha siyabe sinceda abangelawo amahloka, manje abeEMA bayasihlasela (no one should deny us the right to gather firewood. Making fire is our tradition. Here we will be assisting those who do not own axes, but the officials from EMA pounce on us).

The villagers now must play hide and seek with the EMA officials as they claim that without firewood from the local forests, their survival is compromised. Another woman said “*thina sasiphila ngezihlahla kusukela kudala. Kathesi sebesithi kufunekizincwadi. Ngezani lezo?*” (Since time immemorial, we pursued forest-based livelihoods, but now they want us to have letters, what for?). This has seen several locals being caught by EMA officials, having firewood confiscated, cautioned, and released. As a result, EMA is a feared entity among the peasants at Irisvale.

The villagers also depend on the harvesting of *Mopani* worms (*Gonimbrasia Belina*, known locally as *amacimbi*). This is mostly carried out by women who must compete with people from other provinces for the delicacy. The locals argue that those who come from other places just harvest in a very unsustainable manner, not caring about the future. The picture below shows the *Mopani* worms which are dried and sold for US\$20 per 20 kg bucket.

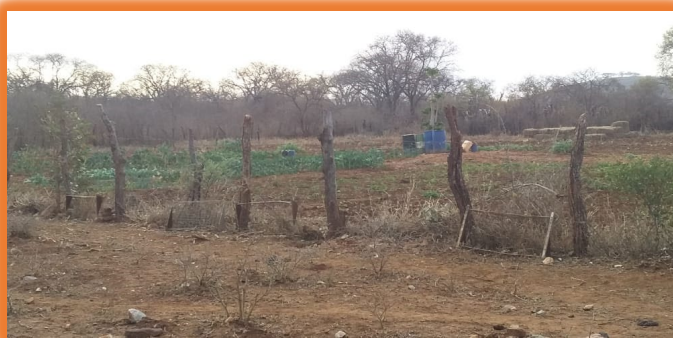
Figure 2: The Mopane worms that are harvested and sold



Women and adaptation

One participant (“MaDube”) pointed out that the Ministry of Women’s Affairs, Community, Small and Medium Enterprises Development provides opportunities for women and young people to start small-scale businesses like goat rearing, chicken keeping, and sewing. She pointed out that they have noticed that if people depend on farming alone, they may be vulnerable to continuous droughts induced by climate change. Nine participants claimed to have benefited from such programs. The women also engaged in market gardening as illustrated in the figure below.

Figure 3: The market gardening initiative



MaDube further pointed out that in 2015, there were some groups of women who owned sewing machines that they used to make children's clothes and church uniforms for the area. This not only set them up but helped the community look better as well. It was found in the study that moving into off-farming activities empowered women in the social, economic, and political aspects of life. From their discussions, most of the women are not likely to have crop agriculture as the main activity for their households. It seems the activities took the women from the private sphere and through selling and negotiating, their skills were sharpened. The businesses boost confidence and promote self-reliance in rural women who are culturally socialised to rely on men for livelihoods. A key informant pointed out that women now occupy important decision-making positions in committees (see Table 3 above), after gaining confidence:

Over the last few years, we have been seeing women occupying decision-making roles in the community, so far away from their traditional roles around the rural kitchen. They are now found in the school development committees, veld committees, water committees, garden committees, VIDCOs, and WADCOs.

Traditionally, women would stay at home while men worked mostly from outside the home. Another woman ("MaMpofu") noted that these years, weeding fields is not the first thing they do, rather after planting, they wait to see whether it is going to rain:

siyakhangela umkhathi. Eminyakeni silahlekelwe ngamandla amanengi. Siyabona abanye behlakula amasimu abo ngendlela emangalisayo, kodwa litshise ilanga, badane. Thina abanye siyagijimisa okunengi, ukuhlakula sikubone mbayimbayi (We look at the sky. Over the years, we have wasted energy. We have seen some farmers weeding their fields in a way that is amazing, but only to wilt due to the drought, and they become discouraged. Some of us run many activities and only weed later when we are sure the rains will continue).

Women at Irisvale have adapted to changes in climate and state policies in various ways. They have begun to move away from completely agricultural livelihoods and have taken up trading, harvesting and selling of indigenous fruits like *umviyo* and *umqokolo*; some harvest and sell *amacimbi* (Mopani) worms; some engage in cross-border trading; and yet others depend on remittances and gold mining among other options. Of late, households at Irisvale have been saving through substituting traditional foodstuff and at times chemicals for themselves and their livestock instead of buying from shops at steep prices. In terms of household savings, MaDube pointed out that food security is enhanced while household savings are improved because of the businesses they engage in among themselves. Several households managed to buy household furniture, pay tuition fees for their children up to the tertiary level, and provide food for their families.

Women have also resorted to the planting of drought-resistant crops, such as sorghum, *rapoko*, and millet in place of maize which requires high rainfall. They have also resorted to reducing their acreage as the grain began to fetch less in the market. This was caused by the closure of markets they could easily access and deal with like the nearby Grain Marketing Board depots at the nearby growth point, *Esigodini*. Business entities on the other hand did not make the women's situation any better as they would wantonly increase prices of inputs like fertilizers and seed thereby cutting their profitability. Many resorted to the use of organic manure and compost to capacitate the soils, especially in the years when they could not access the Presidential inputs scheme.

Another participant however explained that her household is male-headed but her husband was retrenched in 2008 at the height of the economic crisis from his work at a factory in Bulawayo. He moved from being a breadwinner to a dependent. And the woman then began to engage in cross-border trading. She pointed out that initially the husband was upset with the idea, leading to fighting when she had to spend some nights away from home. The husband could not tolerate it. The situation improved when relatives intervened to negotiate with the man on behalf of his wife. Now there is more money coming into the family than when the man was the breadwinner.

Irisvale women also reported that they had come together as a community to develop community gardens in areas where there is a water

source as an adaptation strategy. Each household member is allocated a portion of land in the garden where she grows various crops for subsistence and surplus for sale. This helps them to cope and even adapt to stressful conditions. The women have ownership and full control of their products and this helps them meet the immediate and intermediate needs of their households. Some professed to have paid school fees for their dependents as a result.

Many households at Irisvale now have brick houses with more modern (asbestos) roofing. This came as a result of engaging in other income-generating activities outside farming and the move to build houses has not only beautified the homes but come with an extra benefit of roof water harvesting which has become a major adaptive strategy employed by Irisvale women. This way, the Irisvale women conserve water and avoid walking long distances in search of water. The conserved water is mainly for domestic use although at times it is used for the small livestock like chickens and goats kept by these women. Irisvale women have also benefited from the boreholes sunk by the state and NGOs that work as the main supply system of water for the villages. In recent times, due to more accumulation by the villagers, some have put up solar-powered boreholes which have changed the way water is accessed.

One of the ways in which households survive at Irisvale is the crafty way they deal with Non-Governmental Organisations (NGOs). Wednesday is the day the community rests from various heavy farming chores. The day has invariably become the best day as NGOs come to convince the community to be part of their various programs. On a typical Wednesday, when the community would have gathered what type of organisation would be visiting them, for instance a food relief organisation, many present themselves as very poor and without any source of sustenance. This way they 'enact' poverty and can 'win' assistance from the different NGOs. In this way some households at Irisvale survive and cope with stresses.

Accumulation

The study found that eight of the twenty women were venturing into high-paying activities like general dealerships and gold mining or gold

‘dealing’ (both legal and illegal). They have had to brave the situation. The participants pointed out that fifteen years before, no woman in the area would dare challenge men in high-paying ventures. “Initially it was very tough competing with men”, MaGumpo said, “but with time men realised we are here to stay”. She mentioned that some have begun to employ men as gold panners on their mining claims. The women also pointed out that some of them have begun to rear cattle. This has also been traditionally a male domain, but they said they are breaking through into the area as well. They said they are not just concerned about the numbers but the kind of breeds as well. The picture below shows some of the cattle reared by women.

Figure 4: cattle rearing by women in Irisvale



Another strategy has been participating in internal savings and lending clubs (ISALCs). MaNyathi, for example, has been involved in ISALCs for the last four years. Before that, she used to depend solely on farming. She notes that:

ngisizangapha ngangingumyanga, ngasengisibangcono, kodwa ngenxa yokwehla kwemali lendlala, ngabangumyanga onukayo. Ngehluleka ukuhambisa abantwana esikolo, bacina khonapha e primary (when I first came to this area I was poor, then we started doing well, but because of

economic problems [due to SAPs] and droughts, I became very poor and had to withdraw my children from the local primary school).

Over the years she learned to live within her means and then she was introduced to the ISALCs in the community. Joining this type of club boosted her adaptive capacity and she has been able to build an asbestos-roofed house, send her grandchildren to school, and live comfortably. MaKhumalo said that sometimes women support each other's fundraising events, where the hosting person prepares different types of foods and the rest are expected to buy these. The fundraising events are a hive of activity. This has united women as well and assisted them to adapt to changing times.

Another woman praised the Ministry of Women's Affairs, Community, Small and Medium Enterprises Development policies for levelling the playing field. She noted that had it not been for the Women's ministry that developed with initiatives and training for women, they would still be well behind men. Now, due to assistance from the Ministry, they can stand on their own and look after their families, including the very men who previously stressed them. She said involvement in various projects has exposed women to decision-making and now they lead the various committees in the area. Engaging in activities such as goat rearing and ISALs has removed the exclusion that women in the area have been suffering since independence.

However, some women indicated that their participation in various income-generating activities outside agriculture is still limited because their spouses do not trust them. One participant said that her spouse forbids her from taking part in a private business such as petty trading. Some women stated that they are not allowed by their spouses to attend important program meetings, workshops or events, especially those that involve travelling outside their community.

Long before the state allowed individuals to buy or sell in foreign currency, villagers at Irisvale had already adapted the monetary system. The women would sell their wares in either grain or foreign currency (especially the South African Rand) or cash, which they would quickly turn into foreign currency through the 'informal market'. This way, the villagers were cushioned from the hyperinflationary environment prevalent in the country.

As they saved in foreign currency, it meant their savings were stable and they could invest without headaches. The women in clubs would act as a ‘bureau de change’ to villagers who depended on remittances from family members who work in South Africa. This has made clubs very viable and helped raise the profile and visibility of women who are now involved in other sectors of society. Irisvale now has more than 25 women who are involved at various decision-making levels in politics, business, and society.

The Ministry of Women’s Affairs, Community, Small and Medium Enterprises Development, noted above, runs several programs that provide skills and material support to women in Irisvale. Besides the Ministry, NGOs are part of the institutional structures that have been providing the necessary support. Overall, a sizeable number (12) of women are venturing into high-paying activities like general dealership, transport, and gold mining or gold ‘dealing’ whether legal or illegal. These are making women count in Irisvale.

One way that education services have been enhanced is through cooperation among the community members. A local newspaper, the *Chronicle* (2016), described the community as a self-reliant lot who believe they can develop their community using local resources and labour. They were also seen as determined to lock donors out of their area, as over the years, donors came with various interventions but still left them dependent. Several the respondents were very vibrant when talking about their experiences as a community. They pointed out that since 1985, although they have had four or five councillors, they did not have a proper secondary school. The councillors that were elected would always push for the secondary school to be built by the government in their village but to no avail. Finally, in 2014 they began to mobilize through some women and the local councillor who had been enlightened through a Tanzanian-influenced program dubbed the Church Community Mobilization Process (CCMP). They raised money to buy cement among themselves and they began to work. This made them visible and local cement companies came in to assist with more cement. Women were the most active in the building of the school. More women were involved in the building than men.

Figure 5: the school built by Irisvale community members in 2017



Discussion

Vulnerability

Households are viewed variously, with scholars like Finley (2010), conceptualizing households as battlefields where conflict, abuse, neglect and depression are commonplace. In Irisvale, female-headed families are fast becoming the norm as men migrate outside the country or engage in gold mining outside their villages. A ZIMVAC Assessment (2017) shows that poor households face similar challenges. Compared to men, Irisvale women have less access to credit and extension services. This could be because women in Irisvale are generally less visible than their men. Interventions, even though they are open to all, usually take a male-centred approach which relegates women to second place. The World Bank, FAO and IFAD (2009) have pointed out that generally women the world over have less access to improved technologies, which undermines their resilience to cope with stress and shocks. How poor households can cope with and mitigate the impacts of shocks and ongoing stresses depends on factors at the micro and intra-household level. IFAD (2009) also explains that women typically have lower levels of education, have less access, ownership and control of productive assets and different social networks to men, leading to lower economic

productivity and income generation, and weaker bargaining positions in the household. This was found to be true for Irisvale. In times of crisis, underlying gender biases may mean that the assets of female or female-headed households' assets are more vulnerable to stripping than those of men, and the impact may be lengthy if what has been sold cannot be replaced. Byrne and Baden (1995) also argue that in crises, women's bargaining position and entitlements may also be reduced more rapidly than those of male members of households.

Coping Capacities

Women and the Irisvale community at large have the ability to perceive climate change and this has positioned them at an advantage when it comes to adaptation. Their use of indigenous knowledge to predict weather patterns has cushioned them from the vagaries of climate change. Women at Irisvale also adapted quickly as a result of the 1990s structural adjustment programs and successive droughts over the years. Some had to move away from the mainly agricultural livelihoods they had known all their lives. This finding resonates with the views by Chaudhary, Rai, Wangdi, Mao, Rehman, Chettri & Bawa (2011) and Komba & Muchapondwa (2012) who argue that it is possible to minimize the impacts of climate change and other shocks brought about by constraining state policies and a hostile business environment. Loison (2015:1136) reiterates that “survival-led diversification is mainly driven by push factors and occurs when poorer rural households engage in low-return nonfarm activities by necessity to ensure survival, to reduce vulnerability or to avoid falling deeper into poverty”. Eriksen, Brown & Kelly (2005), Ellis (1998), and Carney (1999) reveal that the notion of coping has its origins in the sustainable livelihood framework. The framework recognizes that livelihoods are derived by households who choose strategies to eke out a living depending on the balance of various forms of capital (human, social, natural, physical and financial) made available to them by institutions and entitlements, which are themselves embedded in the wider political environment.

The sustainable livelihoods approach gives us a picture of how people in areas like Irisvale modify their livelihood strategies within a context of climate change and various socioeconomic and political risks. At

Irisvale it has been shown that most households diversify from mainly agriculture and pursue different options as a strategy of coping like petty trading and *Mopani worms* harvesting. Reardon, Matlon and Delgado (1988) highlight that coping behaviour is a component of diversification. In line with arguments by Cooper et al., (2008), it can be argued that the situation at Irisvale indicates that coping is reactive. The villagers first experienced successive droughts and an economic crisis before developing an adaptive capacity. Berman, Quinn, & Paavola (2012) say that coping capacity is seen as a prerequisite for adaptive capacity.

Adaptive strategies

The women of this study reiterated their respect for the environment. Land was the main natural resource that provided for their livelihood needs. With the low level of education that they possess, it would be expected that they would find it very difficult to engage in alternative sources of livelihood requiring high levels of education. However, the study found that women are responsible for most of the food and assets in the households. They are inextricably linked to their land; hence they expressed their concern and exasperation at the inability of the natural resource to continue providing for their livelihoods. They felt limited in the process. This relationship between women and the environment is corroborated by eco-feminism theory (d'Eaubonne, 1974; Merchant, 2005) which postulates that women's relationship with the environment is inseparable (Warren, 2013). Because the relationship between women and nature is intricately intertwined, any environmental ills are likely to touch women's lives in direct and immediate ways (Warren, 2013).

Women at Irisvale employed adaptation strategies to survive the vagaries of climate change and negative policy changes from the state, along with an ever-changing business environment. The use of organic fertilizer is an adaptive strategy. Rossen and Bierman (2005) point out that organic fertilizer improves soil structure and increases the water holding capacity of coarse-textured clay soils; it provides a slow release of nutrients, reduces wind and water erosion, and promotes the growth of earthworms and other beneficial soil organisms. Some women mentioned delayed planting of crops as another adaptive strategy. While FAO (2000) holds the view that delayed

planting is an effective adaptive strategy to climate impacts, claiming that planting at the onset of the coming of rains ensures germination of the seeds, women at Irisvale seem to have done it for a different reason. They stated that they will not be sure that the rains would come or would be enough, so they use the time they normally use for planting on other activities, like petty trading and gold panning. Nyahunda and Tirivangasi (2021) argue that farming is a futile exercise in dry areas such as Umzingwane. Brycesson (1997) sees a departure from the farm towards a semi-urban environment in a de-agrarian mode. Jerie and Matanga (2011) mentioned that peasants in Mberengwa would resort to early planting, planting drought-tolerant crops, basin tillage, transhumance movement, supplementary feeding, destocking, deep welling, barter trade, selling/hired labour, and begging as ways of coping. The Organisation of Rural Associations for Progress (ORAP) (2013) adds commercial sex work and beer selling as other activities engaged in by rural women.

Those women who have stuck to agriculture have adapted by diversifying their crops, trying out new varieties, especially small grains, delaying planting dates, and using soil conservation methods (conservation agriculture locally known as *gatshompo*). Some members of the Irisvale community are known for using indigenous knowledge to avoid costly chemicals and pesticides. Chaudhary et al., (2011) in India, came to a similar conclusion that unique indigenous knowledge helps locals to adapt better to vagaries brought about by climatic change and negative government policies. Ericksen et al. (2011) are of the view that adaptation occurs with the influence of socio-economic, cultural, political, ecological and institutional factors that shape the human-environment interactions.

Phiri et al., (2014) point out that in response to negative climate impacts, smallholder farmers are adopting a variety of adaptation strategies. For example, some of the adaptation measures used by Zimbabwean smallholder farmers include diversifying crops, planting different crop varieties, changing planting dates, and increasing the use of irrigation and soil conservation techniques. The Zimbabwean government has initiated moves away from prioritising maize to drought-resistant crops like sorghum and pearl millet as an adaptive strategy and Irisvale women have by and large

embraced this as a strategy against both climate change and ever-rising input and commodity prices.

Accumulation

Through participation in various clubs and committees, women at Irisvale are becoming very visible and are being considered for community and political leadership. These findings corroborate Sathiabama's (2010) argument that economic empowerment from microfinance and entrepreneurship can lead to the empowerment of rural entrepreneurs in many ways including socio-economic opportunity, property rights, political representation, social equality, personal rights, family development, market development, community development, and national development.

As Irisvale villagers began to diversify, their fortunes changed. They have been able to set more varieties of food on their tables and generally their tastes have changed. The study by Mutesasira and Nthenya (2014) of income-generating groups in West Nile, Uganda concluded that the lives of very low-income people were transformed in the process, as they began to save as a result. A study by Adams et al. (2018) in Ghana revealed that money-lending institutions began to view villagers in good light after they engaged in income-generating projects. There are some that became serious 'money changers' in the ward. They change to and from any form of currency and they also operate in paperless money especially via the cellular phone. Others depending on their links with "corridors of power" own gold claims and employ several gold panners in the process.

In line with findings by Chikwava (2013), villagers in Irisvale were found to have made more money through diversifying their livelihoods than from farming. Some had bought household assets like solar panels and farming implements such as ploughs and constructed asbestos-roofed houses. Chikwava (2013) found out that some villagers had graduated from owning small businesses to big businesses and were able to improve the quality of their housing. Brick moulding has also become an interesting phenomenon in the area alongside woodworking. Allen and Hobane (2004) found that the Savings and Lending program in Zimbabwe had contributed to increased levels of business and consumer assets amongst the great majority of members' households, and some improvement in the quality of housing.

In Gwanda south, Manyani (2011) also mentions major changes in the house plans and structures, which she described as resembling the common town and city houses. She also reported increased mobility from villages to towns, and improved farming techniques. Manyani's (2011) findings are in line with Chimhowu and Woodhouse (2006) who concluded that there was growing class differentiation within rural communities, evident not only in income and housing, but also in the size of herds and breed of herds and, with land holdings, in the types of agricultural techniques employed and the yields achieved.

The villagers in Irisvale began to participate in income-generating activities without government assistance as the state still stuck to its position that the villagers needed to be doing what they had come to the resettlement for. There are times when Irisvale villagers just act to meet their own needs without waiting on the central or local government to lead the way. This has come out very clearly in the initiatives that the villagers have taken to build their own secondary school and to carry out road repairs on their own.

Villagers in Irisvale have not waited for the state or capital to lead the way. The women that accumulate are mostly those that move in quickly when various interventions are introduced to Irisvale. These women participate more in various committees, have strong social capital, and are involved in numerous projects such as gold panning and livestock rearing. As a result, they have greater opportunities for political offices. Those that are simply coping have links to migrant workers in South Africa, Botswana, and overseas. They depend more on remittances than their own produce. The successive droughts have incapacitated them in many ways, and they find it difficult to stand on their own.

Although thirteen of the women have no or only primary school education, their stories as shown above indicate success despite the low levels of education. This speaks to the way the women were able to make use of other forms of capital available, including social capital. The older women struggled more as they had to take care of orphans in the process. This complicated the way they eked out their living. Older women are certainly more vulnerable to the vagaries of climate change and the changing socio-economic environment. With the load of orphans in their care, they have less social capital and find it hard to negotiate through the terrain. They find

themselves struggling to cope and wait for the intervention of the state and well-wishers.

Conclusion

Women at Irisvale cannot be lumped into a single livelihood's category, but instead are heterogeneous, and found rather in four categories: those who are vulnerable, those who are coping, those adapting, and those accumulating wealth. Within each of the four categories, the women employ different livelihood strategies. The study recommends that the state give women and men title deeds to their rural land so that the land becomes bankable, and they can access loans. This way they can rely less on remittances as the women would be more empowered by title deeds to land. There is a need for government institutions like AGRITEX and EMA to mount awareness campaigns to inform and educate rural people by providing adequate coping and adaptation information, rather than being punitive, for example by effecting arrests as in the case of EMA. The state and NGOs should pool resources together to mitigate and adapt to climate change and avail more social assistance (especially for the old aged) to help manage the negative effects of climate change and government policies. The study has revealed that beyond agriculture, women now pursue other off-farm activities which have also assisted them to deal with the vagaries of climate change.

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