



Agricultural Policy Research in Africa



# **WOMEN EMPOWERMENT, AGRICULTURE COMMERCIALISATION AND GENDER RELATIONS: A VALUE CHAIN ANALYSIS, MVURWI, ZIMBABWE**

Hazel Mutsa Kwaramba, Easter Chigumira and Levison Zimori

**Working Paper**

**WP|42**  
September 2020

# CONTENTS

<b>Acknowledgements</b> .....	<b>4</b>
<b>Acronyms</b> .....	<b>5</b>
<b>Executive summary</b> .....	<b>6</b>
<b>1 Introduction</b> .....	<b>7</b>
<b>2 Methodology</b> .....	<b>9</b>
2.1 The study area context .....	9
2.2 Justification of A1 farmers and study area.....	10
2.3 Land ownership and holding.....	10
<b>3 Findings</b> .....	<b>12</b>
3.1 Emerging commodity web.....	12
3.2 Value chains most effective in empowering women.....	13
3.2.1 Sweet potato value chain .....	
3.2.2 Poultry value chain .....	
3.2.3 Strawberry value chain .....	
<b>4 Discussion</b> .....	<b>25</b>
4.1 Key value chains that have been most effective in empowering women .....	25
4.2 Gender relational dynamics' impact on women along the value chain .....	25
4.3 Gender relational dynamics and women economic empowerment.....	26
4.4 Opportunities and challenges faced by women.....	26
4.5 Value chain analysis .....	27
<b>5 Conclusions and way forward</b> .....	<b>29</b>
<b>References</b> .....	<b>31</b>
<b>Endnotes</b> .....	<b>39</b>

## Tables

Table 2.1: Household structure and type of commodity per ward .....	9
Table 2.2: Land holding statistics for various Mvurwi farming areas .....	10
Table 3.1: Factors driving decisions within the commodity web.....	13
Table 3.2: Mvurwi sweet potato value chain .....	15
Table 3.3: Mvurwi poultry value chain.....	19
Table 3.4: Mvurwi strawberry value chain.....	22

## Figures

Figure 2.1: Study area map.....	10
---------------------------------	----

Figure 3.1: Emerging commodity web in Mvurwi .....	12
Figure 3.2: Sweet potato value chain.....	16
Figure 3.3: Poultry value chain.....	20
Figure 3.4: Strawberry value chain .....	23

## **Appendices**

Appendix 1: Households visited .....	33
Appendix 2: Household coding .....	35
Appendix 3: Factors driving changes in crop and livelihood choices .....	36
Appendix 4: Women economic empowerment policy context in Zimbabwe .....	38

# ACKNOWLEDGEMENTS

The authors are grateful for the contribution of Athanias Chimombe and Vimbainashe Shamakupe from Ministry of Lands, Water, Agriculture and Rural Settlement – Agritex and the Department of Agribusiness and Marketing. The research assistants; Tonderai Takavarasha for quantitative data analysis, Simbai Masikinye, Aisha Machingauta and Donald Chidembo for input during the field study and data analysis sessions. Special thanks to the study participants from Mvurwi who willingly provided valuable insights. Discussions with eMakambo – Knowledge Transfer Africa (KTA) and suggestions from Zimbabwe Evidence Informed Policy Network (ZeipNET) helped shape the ideas in this paper.

Hazel Mutsa Kwaramba is a governance and sustainable development specialist with an emphasis on women economic empowerment. Easther Chigumira is a land and agrarian expert with interest in rural development. Levison Zimori is a development programming expert focused on innovative solutions that promote poverty reduction

This working paper is funded with UK aid from the UK government (Foreign, Commonwealth & Development Office – FCDO, formerly DFID). The opinions are the authors and do not necessarily reflect the views or policies of IDS or the UK government.

# ACRONYMS

<b>APRA</b>	Agricultural Policy Research in Africa
<b>FTLRP</b>	Fast Track Land Reform Programme
<b>GMB</b>	Grain Marketing Board
<b>ICA</b>	Intensive Conservation Areas
<b>ISaLS</b>	Income Savings and Lending Scheme
<b>KII</b>	key informant interview
<b>MLAWRR</b>	Ministry of Lands, Agriculture, Water and Rural Resettlement
<b>MP</b>	Member of Parliament
<b>NGO</b>	non-governmental organisation
<b>SDG</b>	Sustainable Development Goals

# EXECUTIVE SUMMARY

This paper aims to develop a better understanding of the pathways women seek to construct livelihoods in or around existing commercialisation hotspots and along the value chain and the outcomes associated with these efforts. The objective of the paper is to provide evidence of the current status and future potential of multiple pathways to commercialising agriculture using selected value chains with a view to strengthening food and nutrition security and empowering women and girls. This study specifically focuses on three understudied commodities; sweet potatoes, strawberries and poultry (including meat and egg production), which were considered significant to household incomes and include women as significant actors. The paper draws on empirical work based on in-depth interviews with 14 households and Agricultural Policy Research in Africa (APRA) Workstream 1 data in Zimbabwe's Mvurwi farming area.

The findings of this APRA study reveal that most A1 farmers started with independent tobacco production as the main cash crop owing to high income returns. The proliferation of contract farming arrangements contributed to a decline in income returns realised from the crop. This resulted in increased A1 farmer inclination towards crops or off-farm activities that provide more frequent returns than the annual tobacco returns under fewer regulations. Increasingly, A1 farmers are using proceeds from tobacco to diversify into other crops with alternative markets. The preferred commodities include maize, poultry and sweet potatoes.

The findings show that alternative commodities have strong local market linkages. For these commodities, A1 farmers have more latitude on choice of markets and timing of sales in comparison to tobacco. Most A1 farmers are diversifying crop production or engaging in off-farm informal income-generating activities such as grocery shops, passenger cars for commuter transport, etc. with earnings from tobacco. The web of commodities revealed that women have higher involvement, control and ownership of sweet potato, poultry and strawberry production. The study shows that the majority of women farm on land allocated to their husbands, with widowed women transferring the land into their names after their husbands' passing. For

married women, the control of resources and decision-making are made by husbands (albeit 'in consultation' with the wives). In the case of widowed women, on the onset of losing their husbands, the widows found their 'power within'. This is illustrated by their increased sense of self-worth and self-knowledge and the ability to recognise individual differences while respecting others.

The study findings show that empowerment through agricultural commercialisation faces challenges such as access to finance for women A1 farmers and is layered with an interplay of social, cultural and traditional factors. Findings show that there were no organised social networks offering group loans or Income Savings and Loan Clubs (ISaLS) to women A1 farmers. In addition, land tenure, limited access to markets and price distortions due to interference by middlemen ('makoronyera') present hurdles women A1 farmers have to navigate in order to attain empowerment through agricultural commercialisation.

The main conclusion of the study is that there are various pathways to empowerment; some involving independence (of land, production, markets) and some through negotiating within a marriage contract but still being reliant on men. These findings have implications for women's empowerment through agricultural commercialisation. Firstly, there is a need for policy reform that will allow joint land allocation to a married couple to ensure productive continuity in the event of a spouse dying. Secondly, the development of policy frameworks that enhance the participation of more women stakeholders in the value addition of the three agricultural commodities. These will be buttressed by strategies to improve the participation of women across the value chains of the three commodities to improve earnings and enhance women's empowerment.

# 1 INTRODUCTION

It is widely accepted that women play fundamental roles in agriculture – accounting for over 40 per cent of its labour force worldwide – and that there is a strong link between women’s empowerment, gender equality and agrarian development. Women’s empowerment is considered to have a direct impact on agricultural productivity and household food security and is at the core of agricultural research and outreach practices in developing countries (Akter *et al.* 2017). Achieving gender equality and women’s empowerment is integral to each of the 17 Sustainable Development Goals (SDG) with SDG 5: “Achieve gender equality and empower all women and girls” and SDG 8: “Promote sustained, inclusive and sustainable growth, full and productive employment and decent work for all women and men.” In the context of women’s empowerment and commercial agriculture, the key areas for research have tended to focus on gendered patterns of agricultural production tied to aspects such as cropping patterns (Carr 2008; Doss 2002), household assets and control over income, land tenure rights, technology uptake (Diksha and Rada 2020; Bergman and Lodin 2012; Peterman *et al.* 2010; Quisumbing and Pandolfelli 2010; Quisumbing and Pandolfelli 2008) and gender gaps in productivity and access to extension services (Kurtege Sefer 2020; Kilic, Palacios-Lopez and Goldstein 2013). While much has been written about gender and markets, there remains a significant gap in knowledge of women in food value chains, their roles and contribution within the process, and of how gender relational dynamics empower or disempower them. This paper therefore engages with the different ways women engage with commercialisation along the value chain.

The paper conceptualises women’s empowerment as the ability of women to exercise voice and strategic forms of control over their lives and to generate regular and independent sources of income (African Union 2018). Furthermore, women’s empowerment in agriculture is recognised as the ability of women farmers to realise their full potential as economic and social actors through their ability to make decisions on matters related to agriculture as well as their access to the material and social resources needed to carry

out those decisions along the value chain (Akter *et al.* 2017; Alwang, Larochelle and Barrera 2017; McCarthy 2016). Women and men’s equal access to and control over productive resources and economic assets is a critical ingredient for the attainment of gender equality, empowerment of women and sustainable development.

This paper offers a gender relational analysis of the differential interaction of rural men and women within a commercialised hotspot and in agricultural markets. It serves to identify the areas in which gender relations determine access to (i) input provision and use, (ii) production (iii) post-harvest processing and storage and (iv) transportation, marketing and sales, and its impact on the performance and governance of the chain. In addition, the paper details the challenges and opportunities that women face in the agri-food value chains. The four key indicators used in this paper to ascertain women’s empowerment in agriculture commercialisation include (i) access to and decision-making power over agricultural production, (ii) access to productive resources (land or ownership rights and assets), (iii) access to finances and control over income and expenditures and (iv) access to input and output markets.

The proposition that underpins the APRA study on women’s empowerment and food and nutrition security of which the research reported in this working paper bears relevance to is that important insights regarding women and commercialisation can be gained from the study of the interplay of the various actors in existing commercialisation hotspots and the gender relational dynamics within agriculture value chains. Specifically, the study aims to develop a better understanding of steps and pathways by which groups of women seek to construct livelihoods in or around these hotspots, along the value chains and of the subsequent outcomes associated with these efforts.

The main objective of this paper is to provide evidence on the current status and future potential of multiple pathways to commercialising agriculture using selected value chains so as to strengthen food and

nutrition security and empower women and girls. The study was organised around three research questions:

1. Within commercialisation hotspots, what are the key value chains that have been most effective in empowering women, and why?
2. What are the gender relational dynamics and how do they impact women along the value chain?
3. What are the opportunities and challenges faced by women and how do they navigate these? How important are gender relational dynamics in this navigation?

This working paper focuses on targeted smallholder farmers in the Mvurwi area in Mashonaland Central Province, Zimbabwe – an area of high agricultural potential. While the Mvurwi area is known for the production of high value cash crops like tobacco and maize, this study specifically focuses on three relatively understudied commodities in sweet potatoes, strawberries and poultry. These commodities were considered significant to household incomes and seemingly included women as significant actors from production to market – albeit with the involvement of men – thus making these an important area of study to understanding agricultural commercialisation and women’s empowerment.

The rest of the paper is organised to include a methods section, which discusses how data was collected, presented and analysed. This is followed by a discussion on the context of the study area and then a presentation of the empirical findings on the value chains of the three commodities. This is in turn followed by a discussion on the key emerging issues from the research, which then leads to a conclusion.

## 2 METHODOLOGY

A qualitative case study research methodology was used to examine the agricultural commercialisation pathways and the levels of women's empowerment in three value chains in Mvurwi; poultry, strawberries and sweet potato. The study utilised observations, semi-structured key informant interviews (KII) and in-depth interviews. The semi-structured KIIs provided insights into gender- and policy-related issues faced by smallholder A1 farmers in respect of agricultural commercialisation pathways. The KII interview guide consisted of four sections: (i) market access issues, (ii) productive asset accumulation patterns, (iii) social benefits and (iv) contextual issues (gender relations). Participants described their experiences in agricultural commercialisation pathways using in-depth interviews, allowing for probing on the drivers of change at A1 farmer, community and macro levels that have contributed to the agricultural commercialisation pathways.

A selection of 14 A1 farmers' households from Wards 26, 27, 28 and 30 were visited between October and November 2019. The households were purposely selected and identified with assistance from three agricultural extension officers conversant with the various commercialisation pathways in Mvurwi. The households' selection had a two-fold significance: (i) to deduce the gender relational dynamics and (ii) to assess the formal and informal frameworks that support the smallholder A1 farmers in agricultural commercialisation pathways. The households were either male- or female-headed. Female-headed households were the result of (i) divorce, (ii) death of husband or (iii) husband working away from home. The social differentiation of the households helped express the relational views of men

and women, thus assisting in broadening reflections on gender relational dynamics. Table 2.1 highlights the household structure and the type of commodity of the respondents per ward.

A complementary analysis of existing quantitative data collected in the APRA Workstream<sup>1</sup> was conducted to corroborate the variables relating to the thematic focus of the paper. Statistical disaggregation guided by categories such as gender and marital status of household heads constituted the greater part of the analysis, and *p*-values were calculated to present whether differences (if any) between categories were random or otherwise among the A1 farmers.

### 2.1 The study area context

Mvurwi is located in Mazowe District, in Mashonaland Central Province of Zimbabwe, approximately 100km north of Harare (Figure 1.1). Mvurwi is one of four colonial subdivisions of Intensive Conservation Areas (ICA) in the district – the others being Barwick, Marodzi-Tatagura and Glendale (Sukume *et al.* 2015). Mvurwi has five large dams, numerous tobacco farmers and grain mills and the area produces large quantities of maize, tobacco, soya beans and horticulture. It has both commercial production, which utilises irrigation, and smallholder production largely dependent on rain-fed agriculture (Chigumira 2019). The majority of the population are small-scale farmers who rely on the agro-based economy.

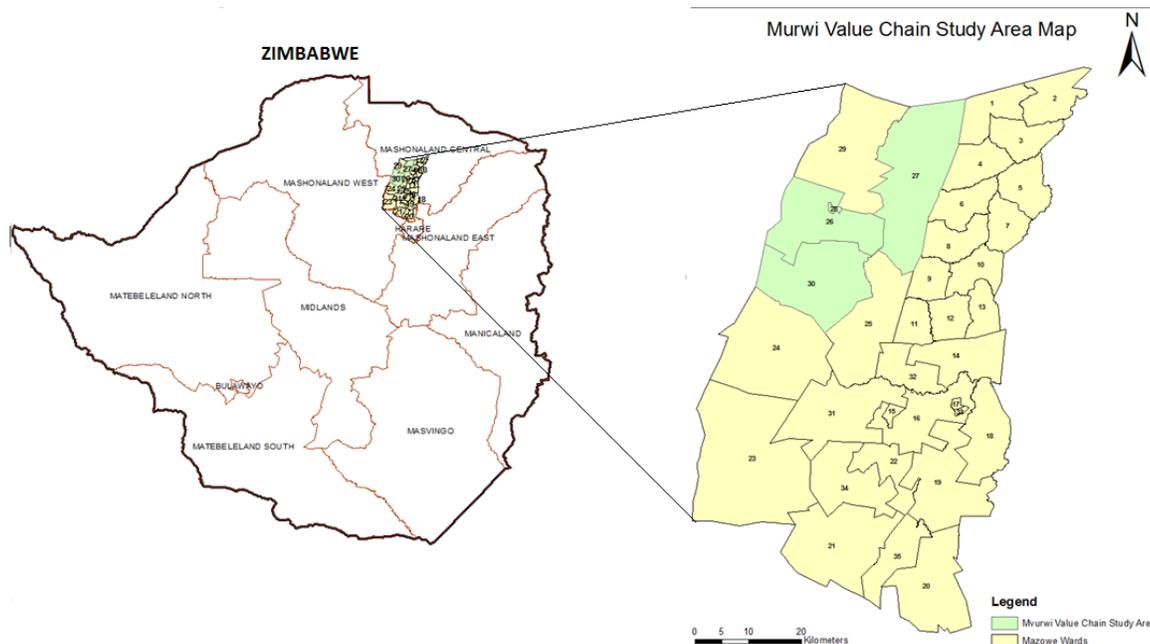
Mvurwi comprises three farm types (commercial, new resettlement and communal) covering 18 administrative

**Table 2.1: Household structure and type of commodity per ward**

Ward	Household structure	Number of households	Type of commodity
30	MH – male-headed households with wife	5	Strawberry, tobacco, sweet potatoes, poultry
	FM – female married	2	Sweet potatoes, poultry
26	FW female-headed households – widowed	2	Tobacco, maize, sugar beans, sweet potatoes
27	FW female-headed households – widowed	2	Poultry, maize, soya beans
	FM – female married	1	Poultry
28	FW female-headed households – widowed	2	Maize, soya beans, poultry farming

Source: Author's own

**Figure 2.1: Study area map**



Source: Author's own

wards. Mvurwi is in agro-ecological region II, which is classified high potential farming with an annual rainfall of between 700 and 1,050mm, with two main seasons; summer and winter. The topography of Mvurwi is characterised by blocks of granite and ranges of steep hills and dominated by sandy soils derived mostly from granite, making it suitable for the intensive production of tobacco (Chigumira 2019; Sukume *et al.* 2015).

### 2.2 Justification of A1 farmers and study area

Although there are a number of challenges faced by A1 farmers in Zimbabwe, the government recognises the contribution of small-scale farmers to the country's food security (The Herald, 4 July 2014). The Ministry of Lands, Agriculture, Water and Rural Resettlement (MLAWRR) produced a second Round Crop and Livestock Report noting that A1 farmers' contribution towards national maize production reached 219,055t and represented 24 per cent of the overall maize

produced during the 2019/2020 cropping season (MLAWRR 2020). Similarly, the discourse on the Fast Track Land Reform Programme (FTLRP) emphasises the importance of enhancing productive capacity and access to land, which are recognised as achievements of the programme (Tom and Mutswanga 2015). Chigumira (2019) notes that A1 farmers struggle to sustain or increase production owing to the reliance on rain-fed agriculture. Makonese, Annegarn and Chikowore (2013) discuss that constraints on increasing production are linked to a lack of funding for agricultural inputs, commercial farming skills and access to modern energy sources.

### 2.3 Land ownership and holding

Land is important for wealth accumulation, status and power. The land distribution between the genders in the four wards of the study area is skewed in favour of men. There are notable differences between A1 and A2 farmers regarding land distribution to women. Almost

**Table 2.2: Land holding statistics for various Mvurwi farming areas**

Ward	A1		A2		LSCFA		Illegal settlers*
	Male	Female	Male	Female	Male	Female	
26	338	97	80	55	0	0	79
27	604	120	17	4	11	0	96
28	Peri urban						
30	670	163	16	2	1	0	86
Total	2067	428	200	77	12	0	301
Proportion	82.8%	17.2%	72.2%	27.8%	100%	0	85% male and 15% female

Source: Ministry of Lands, Agriculture and Rural Settlement.

28 per cent of A2 farmers compared with 17.2 per cent for A1 farmers were women-headed households; as illustrated in Table 2.2.

Against this background, it became important to understand the extent to which access to and ownership of land by women is an enabling/deterring factor for facilitating agricultural commercialisation pathways. This necessitated identifying the key value chains that are most effective in empowering women within the commercialisation hotspots. An analysis of the gender relational dynamics and how they impact women along the value chain was carried out to draw insights into the opportunities and challenges faced by women and how they navigate gender relational dynamics.

# 3 FINDINGS

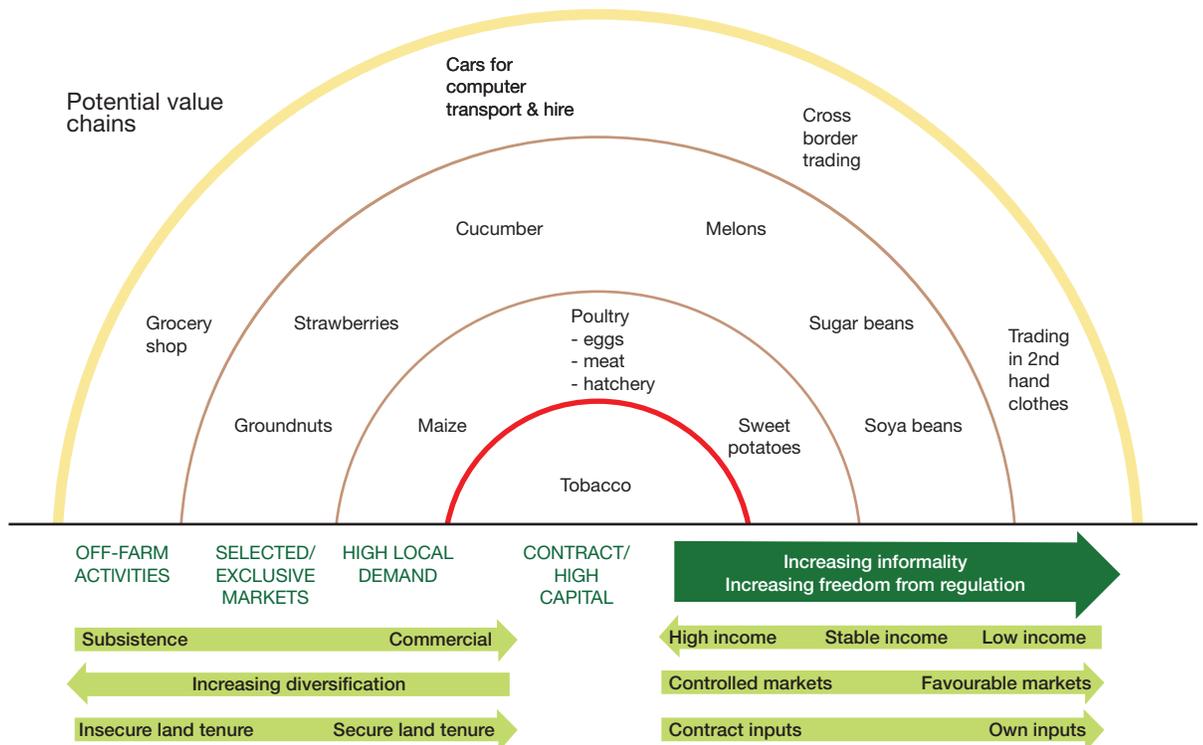
This section presents the findings and analysis for sweet potatoes, strawberry and poultry-egg value chains applied to the research questions. The following section outlines a web of commodities that characterise the farming activities of A1 farmers in the study area and the contribution of the three purposively selected value chains to the empowerment of women through commercialisation.

## 3.1 Emerging commodity web

The majority of A1 farmers interviewed generally started with independent tobacco production as the main cash crop owing to high income returns. In part, this was linked to the historical farming practice on the resettled ICA farms, agricultural extension support and highly controlled marketing and regulation. Although the income returns were high, they are associated with intensive labour requirements, strict regulations, high input costs and market prices determined beyond

the farmers' control. For a decade since the start of the FTLRP, tobacco companies were not contracting A1 farmers as they maintained their historical farmer arrangements. Foreign tobacco companies targeted this unserved market, resulting in competition with established companies for the A1 tobacco farmers.<sup>2</sup> The proliferation of tobacco contract farming arrangements gave farmers choices of contracting companies as well as having part of their crop self-financed. This led to the realisation of market price variations and decline in both income and returns realised from the contract crop. This resulted in increased A1 farmers' inclination towards crops or off-farm activities that provide more frequent returns than the annual tobacco returns and under fewer regulations or controls. Increasingly, A1 farmers are using proceeds from tobacco to diversify into other crops with alternative markets. One A1 farmer stated: "Sweet potatoes have low input costs. In two years, I want to stop tobacco farming because income is annual and high levels of deforestation mean

**Figure 3.1: Emerging commodity web in Mvurwi**



Source: Author's own

**Table 3.1: Factors driving decisions within the commodity web**

Factors driving Decisions	Off-farm activities	Selected/exclusive markets	High local demand	Contract/high capital
Farming capacity	diversification ● ●	subsistence	● ● ● ●	commercial ● ● ●
Income	low income	●	secure ● ● ● ● ●	high income ● ● ● ● ●
Land tenure	insecure ●			secure ●
Market conditions		favourable	favourable ● ● ● ●	controlled ● ●
Input supply		on resources ● ●	● ● ● ●	contract ●

● First crop/livelihood  
● New crop/livelihood

Source: Author's own

trees are in short supply now.”<sup>3</sup> As shown in Figure 3.1, the preferred commodities include maize, poultry and sweet potatoes. Alternative commodities have strong local market linkages. The next tier of commodities have high demand and include less perishable goods like groundnuts, sugar beans and soya beans. There are also niche market commodities in the same tier like strawberries, cucumber and melons that are subject to minimal regulations. For these commodities, A1 farmers have more latitude in comparison to tobacco on choice of markets and timing of sales.

Most A1 farmers are diversifying crop production or engaging in off-farm income-generating activities such as grocery shops, passenger cars for commuter transport, cross border trading and sale of second-hand clothes with earnings from tobacco (see farmer household decisions in Appendix 3 and classified into factors driving change of crops and livelihoods in Table 3.1). This was shown through farmer comments like: “I bought the passenger vehicle with proceeds from tobacco because the money comes in a lump sum. I use the vehicle for commuter transport and this generates income daily.”<sup>4</sup> The off-farm income-generating activities tend to be informal and do not conform to regulatory requirements. Formalisation of these off-farm activities is expensive, and as such they are chosen precisely for their informality. As a farmer accesses better resources (land, equipment, inputs), they become commercial and gravitate towards crops with higher margins, high input costs and competitive markets. Income similarly increases with the trend towards high-value crops at the centre of the commodity web.

Increase in resilience in the face of shocks (death of male head of household, loss of land lease, loss of productive assets such as draught animals and macro-economic shocks) leads to diversification of crops and livelihood options. With increasing adaptive capacity in the absence of structural support (such as social safety nets and equitable access to financial markets), women farmers move outwards in the commodity web as they embrace more informal, low-risk, low return, local favourable markets and low-input options. This diversified livelihood scenario has the characteristics of subsistence farming with significant traditional crops and off-farm activities.

### 3.2 Value chains most effective in empowering women

From the web of commodities, it was revealed that women have a higher involvement, control and ownership of sweet potato, poultry and strawberry production. Women’s visibility along the value chains of these commodities was observed to be higher compared to their male counterparts. This section details the findings from the three selected value chains most effective in empowering women in the study area. It also outlines the various gender relational dynamics and how they affect women’s participation, decision-making, control over resources and wealth accumulation.

#### 3.2.1 Sweet potato value chain Ownership and control over land

A review of land ownership documents obtained from the MLAWRR suggests a skewed land ownership

system in favour of men – as reflected in Table 2.2. However, with regards to control over land that is used for sweet potato production, more women (88.9 per cent) were revealed to have control over land compared to men (9.1 per cent), ( $\chi^2 = 0.001$ ,  $df = 1$ ,  $p = 0.001$ ). The high level of control over land for sweet potato production is rooted in its historical perception as a woman's crop, with its production largely being controlled by women. Approximately, each household that grew sweet potatoes during the 2016/17 season had 1ha of land allocated to sweet potato production.

### Inputs

In Zimbabwe, sweet potato consumption ranges from low to moderate depending on the harvest yields in a given year. Largely consumed as a supplementary food, it provides a source for food security to both the urban and rural populations. In Mvurwi, respondents use sweet potato varieties with high yields that include Brondal, Nernagold and Chingovha. These local varieties were selected for sowing based on maturity speed, potential production (size and quantity) and disease resistance. None of the farmers interviewed use improved seeds but rather propagate reserved seed in gardens through nursing seedbeds supplemented by submersible pump irrigation, which are then transferred to rain-fed fields. Farmers indicated use of organic fertiliser for sweet potatoes and weeding is the pest control method that is used. One stated: "I use cow dung in land preparation for my sweet potatoes and frequent weeding to limit pests because it is cheaper than pesticides and it works. My grandmother taught me."<sup>5</sup> Chemicals for pests and disease control are available in shops but sampled respondents indicated that the costs of the pesticides are too high and, as a result, they rely on traditional practices. Reportedly, constant weeding helps in minimising pests and diseases. The potato is manually harvested using hoes. Interviews corroborated findings from the quantitative household survey that no organisations or institutions offer technical support specifically meant for sweet potato production and/or sweet potato seed.

### Access to finance

Self-financing mainly from tobacco, maize proceeds and family resources were the most common mode of financing. All women reached through the quantitative household survey are subscribed to non-agricultural social groups (20 per cent) and church groups (80 per cent). There is no evidence of ISaLS within these groupings. Some of the farmers gave statements like: "I started sweet potatoes with proceeds from maize which I sold to the Grain Marketing Board (GMB),"<sup>6 7</sup> <sup>8</sup> while others indicated starting with proceeds from tobacco.<sup>9 10</sup> Thrive Microfinance Institution assisted

women A1 farmers' access to loans but most do not have the required records to access financing. Only 9.6 per cent of the farmers reached through the quantitative household survey indicated that they had applied for a loan in the three-year period preceding the survey and only 5.8 per cent obtained loans used to purchase farming inputs. Respondents cited lengthy application processes and high inflation as major deterrents to applying for loans. One farmer explained: "By the time the loan is approved, the money will have been eroded by inflation and you won't be able to purchase the inputs. There is no point."<sup>11</sup>

### Sweet potato production

In most households with sweet potato production including married households, women control the processes of production with the exception of two households with joint ownership. The quantitative household survey revealed that women worked an average of 114 days during the 2016/17 cropping season. Firstly, the seeds are propagated, the seedbed is nursed and seedlings are transplanted to open rain-fed fields. Most sampled respondents use own or hired oxen ploughs (40.4 per cent) and hired tractors (34.6 per cent) for land tillage and hand hoe for planting and weeding. The use of these modes of land preparation was almost the same across female and male-headed households, ( $\chi^2 = 0.206$ ,  $df = 3$ ,  $p = 0.417$ ).

### Post-harvest processes

Respondents indicated that after harvesting, the women wash and grade the sweet potatoes. Given the absence of cold storage facilities, the women dig up an estimated quantity of tubers to match perceived demand just before going to the market. A1 farmers in Mvurwi use an indigenous preservation and storage system consisting of soil banks (holes dug in the ground) which can reportedly preserve the commodity "for up to four months."<sup>12 13</sup>

### Sweet potato value chain analysis

This section presents the stages of the sweet potato value chain and outlines the processes and the corresponding emerging gender relational dynamics – as illustrated in Table 3.2.

The sweet potato value chain has low inputs and high returns with significant potential for growth. The farmers propagate their own vines (cuttings/slips) and use organic fertilisers, thus reducing input costs. However, the quality of the sweet potatoes can be improved if the farmers procure vines free from disease. Production methods remain traditional with limited extension support. Modern production methods increase input costs, production costs and yields. Traditional

**Table 3.2: Mvurwi sweet potato value chain**

	Value chain stage	Value chain process				Gender relational dynamics
1.	Inputs	Land; Finances; Propagated seed; Organic fertiliser; and Labour				<p>- In <b>married households</b>, the Offer Letter was in the name of the husband with the exception of one couple that did not have an Offer Letter and was sub-leasing; joint decisions and contributions were made on finances; identified sources included proceeds from tobacco and off-farm earnings – retirement package and sale of groceries; casual labour from the locality consisting of mainly women and family labour was used. Overall, women were in charge and more knowledgeable about sweet potato production. An exception was noted in one household that did not have an Offer Letter but were leasing farmland through labour provision to the owner of the land. In this case, the husband was the decision-maker in all the aspects concerning sweet potato production and sales.</p> <p>- <b>Female-headed households</b> (widows) had managed to change Offer Letters into their names; sole decisions and contributions were made on finances; proceeds from maize sold to the GMB under Command Agriculture and brick moulding.</p>
2.	Production	Submersible pump irrigation to nurse seed bed at gardens; Field preparation using tractors or ox drawn ploughs; Transplanting using hoes; Manual weeding; Organic fertiliser application; Manual harvesting				<p>- In <b>married households</b>, women were responsible for and participated in the production stage; men assisted in land preparation by sourcing ox-drawn ploughs or tractors; transplanting and weeding were dominated by women; organic fertiliser application was mainly conducted by women, hired and family labour. It was noted that in the household without an Offer Letter, tasks were shared more equitably with the husband responsible for the heavier tasks. The wife and the children also contributed at all stages of the workflow.</p> <p>- In <b>female-headed households</b>, all processes were the responsibility of the women, who did most of the work, relying mainly on family labour and to a small extent hired help most often casual labour.</p> <p>- Findings from WS1 data indicated that in Mvurwi, 50% of female-headed households have at least a single male permanent employee. 40% have a single female permanent employee.</p>
3.	Post-harvest processes	Manual sorting and washing; Packaging for market in 50kg sacks; Underground storage in soil banks; (indigenous method)				In <b>all households</b> , women dominated this stage including the household that is leasing farmland.
4.	Transportation	Own vehicle packaged in 5kg & 10kg potato sacks; Public transport (Commuter omnibus users packaged in 50kg sacks); and Hitch-hiking (packaged in 50kg sacks) Scotch cart (packaged in 50kg sacks)				<p>- In <b>married households</b>, men dominate this stage with women assisting to ferry goods to the pick-up points, in the household with own transport, the husband ferried goods.</p> <p>- The average transportation costs incurred by households was ZWL459 (US\$57) as at 2019 season prices before the hyper-inflationary period and there was no significant difference between female and male-headed households, (<math>\chi^2=0.468</math>, <math>df= 1</math>, <math>p= 0.568</math>).</p> <p>- In female-headed households, all processes of the transportation were the responsibility of the women with support from family members and, in some cases, hired labour.</p>
5.	Food processing	Nil				
6.	Markets	1. Farm gate direct sales to local community	2. Mvurwi Town	3. Mutorashanga Turn-off (Highway)	4. Harare Highway	- In <b>married households</b> , the majority of men are responsible for off-farm sales while women coordinate farm gate sales to locals. In <b>female-headed households</b> , women were responsible for sale at market point and assisted by family members at farm gate.

7.	End consumers	1. Local community	2. Mvurwi residents	3. Travellers
----	---------------	--------------------	---------------------	---------------

Source: Author's calculation

markets can be lost as the production becomes more mechanised. The demand for sweet potatoes is fairly constant in the target markets if quantity and quality improve. New markets can be accessed, for instance, in processed goods like flour, confectionery products and crisps. There is potential for improved returns to farmers if post-harvest handling, selection and grading, storage and packing are improved. This will result in standardisation and in turn will make their produce attractive to commercial buyers.

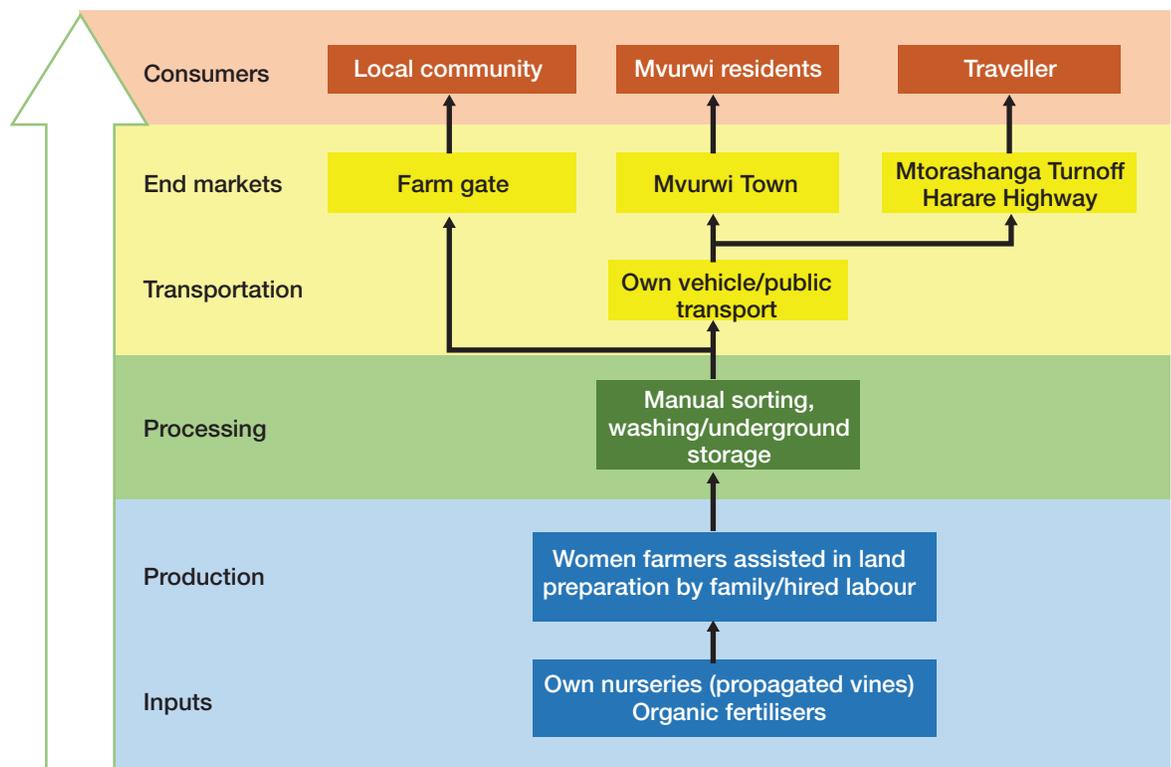
### Asset accumulation of sweet potato farmers

It emerged that sweet potato production has given women more financial bargaining power and decision-making within households. Findings indicate that the gender asset gap exists as asset accumulation patterns are still perceived along gender lines. In most cases, assets such as livestock, small vehicles, farm machinery (ox-drawn ploughs, water pumps), and even 'ownership' of land are held by men. The vehicles were acquired from different sources of income. For one family, it was a combination of the husband's employment and sweet potato earnings. For another, the car was funded by tobacco and sweet potato earnings. In both cases, the wives' earnings from

sweet potato production were included in the funds used to purchase the vehicles. When asked whose decision it was to purchase the vehicles, most male respondents claimed it was a joint decision. Notably, in both cases the cars were registered in the husband's name.<sup>14 15</sup> Women's finances in most cases are used for household expenses and improvements, food security for the family and intangible assets such as the ability to provide educational assistance to children.

Study findings show that in the case of widowed households, the death of husbands is a defining point, for all the ownership of the land was with their husbands. The widows went through a difficult period of about one and a half years during the process of changing the ownership into their names. One woman said: "When I lost my husband, I had to learn about the legal system concerning land tenure, operations of farming and family issues on inheritance. I had to learn to do everything."<sup>16</sup> Once they receive Offer Letters in their names, they start working on the land with the aim of acquiring assets. According to one widow: "I realise now that when my husband was alive, I did not push as hard. Now, I have to work hard for my children." She also added: "I think women have a fall back plan in their

Figure 3.2: Sweet potato value chain



Source: Author's own

husbands, but it is not secure. Look at what happened to me. I had to stand up and fight.”<sup>17</sup> Another widow said: “I have learned to spend most of our earnings on productive assets to reinvest and grow our product. This is the legacy for my children.”<sup>18</sup> This assertion was corroborated in a KII with a commercial farmer in Ward 25, who said: “One of the important success factors in farming is to reinvest on the farm, procuring equipment and maintaining infrastructure.”<sup>19</sup> In Text Box 1, a detailed account of a widowed sweet potato farmer is presented.

### **Text Box 1: Widowed sweet potato farmer<sup>20</sup>**

#### **Farmer background**

The widowed farmer’s husband died in 2014 and the farm was registered under his name. Soon after her husband’s passing, his family members took their four cattle. The reason given was she was lactating and that her children were too young to help herd the cattle. When they took the cattle, the in-laws promised that they would come back to help with land preparation and farming whenever assistance was needed assistance but they have never kept that promise.

#### **Challenges with securing inputs**

When her husband passed away, she could no longer access inputs from government-sponsored programs or the contract farming companies as she did not have an Offer Letter in her name. In addition, it was difficult for her to engage in income-generating projects, as her children were still very young. She would carry out casual jobs (‘maricho’) on other people’s farms in order to survive but the income raised was not enough to allow her to purchase inputs for farming. She resorted to selling off the nine goats she had when times were tough as there was no other way for her to raise money. She later formed a group with three other women and started a venture moulding bricks in order to earn income.

potatoes. Agritex technical support on sweet potatoes remains along the lines of traditional techniques; thus not supporting scaling up to commercial production. In addition, there was no evidence of seed house engagement for technical support as all the farmers rely on propagated seeds. The research findings indicate that there are critical shortcomings in the sweet potato value chain relating to access to working capital, agriculture extension services and market information. Admittedly, some of the issues are a result of the prevailing challenging macro-economic environment. In addition, good farm management practices, post-harvest handling, market institutions and value chain coordination remain curbed. This

#### **Land tenure**

After the death of her husband, she had to fight for three years to have the farm transferred into her name. She was able to obtain an Offer Letter with the assistance of the Agritex officer, who helped her to get an affidavit attesting to the fact that her husband was late and any benefits that accrued to him should now accrue to her as his widow.

#### **Government support and private sector/ investor engagement**

After obtaining her Offer Letter, she was able to return to farming and access inputs from Command Agriculture and the Presidential Inputs Scheme. She became the first A1 woman farmer in Ward 27 who was a beneficiary of these programmes. In addition, she works with Thrive Microfinance Institution, which assists their group of women with capital, access to markets, business training and inputs for her tobacco crop. She has now acquired two cows from proceeds from tobacco. She also hires her cows for land preparation. The money generated from this buys small assets like poultry, plastic containers and leather to make ropes that she also sells. She has a pump she uses to irrigate her garden but her fields are rain-fed.

Despite women being highly involved in sweet potato production and having much control of the value chain commodity compared to their male counterparts, ownership of land is skewed towards men – especially in married households. Lack of control over this critical asset (land) is a hindrance towards women’s efforts to access lines of credit. Furthermore, there was no evidence of institutions or organisations such as non-governmental organisations (NGO), universities, Department Research and Specialist Services offering technical support for the production of sweet

implies that there is neither vertical integration nor horizontal integration and the farmers produce and sell unprocessed produce direct to consumers without value addition. The net effect results in limited income for the A1 farmers.

### **3.2.2 Poultry value chain Inputs**

Poultry production is concentrated in five households among women with support from family members and hired labour, with the exception of two households that

indicated it is a family project. The farm visits established various commodities within the poultry value chain that consist of free-range eggs, meat and sale of day-old chicks. Farmers purchase Hyline point of lay birds and the housing from Novatek in Harare, feeds and veterinary supplies are purchased in Mvurwi town at ProFeeds and ProVet outlets. The two egg producers confirmed the use of a combination of concentrate and home-made supplements such as soya beans and maize. One of the egg producers stated: "I supplement my feed with green leafy vegetables to boost egg production levels, size and the colour of the yolk comes out a brighter yellow."<sup>21</sup> She indicated that the Agritex officers trained them on the formulation of supplementary feed that is more affordable for them.

### **Access to finance**

Among the A1 women farmers who constituted the majority (five of the seven) of the poultry farmers in the sampled wards, self-financing from tobacco proceeds is the most common source of funding for poultry operations and includes the purchase of livestock, housing (at substantial cost made from brick and cement with iron roofing sheets, comprising of fencing), feed and veterinary supplies. The quantitative household survey reflected that approximately 40 per cent of female-headed households relied on their 2016/17 tobacco income to establish their poultry projects. In the two households with joint ownership between husband and wife, the source of funds for poultry projects was reported as family resources derived from various activities.

### **Poultry production**

The production processes depend on the commodity produced – for instance egg production, indigenous chicken (road runners) for meat or day-old chicks. The main by-product of poultry farming is organic fertiliser that is used in the cropping on the farm. All the households interviewed – including male-headed – indicated a preference for indigenous chicken production. This is linked to growing demand on the market. One household explained: "I used to do broilers but the feed is so expensive and they do not fetch as much on the market so I switched to indigenous chicken."<sup>22</sup> Quantitative findings show that female-headed households that are into poultry production own an average of 43 birds, with one exceptional household owning 255 birds at the time of the survey. Around 40 per cent of these female-headed households bought feed for their livestock – including chicken – and the patterns of buying feed were found to be similar to those of male-headed households, ( $\chi^2 = 0.081$ ,  $df = 1$ ,  $p = 0.077$ ). About

73 per cent of the households had, at some point, bought drugs from the veterinary department for their livestock production, and this practice was similar across female- and male-headed households, ( $\chi^2 = 0.306$ ,  $df = 1$ ,  $p = 0.434$ ).

### **Post-harvest processes**

There are no post-harvest processes for all three poultry products.<sup>23 24 25</sup> Survey results show that 70 per cent of the female-headed and 50 per cent male-headed households produced chicken for sale and consumption. Consumption patterns vary across households – female-headed households consumed an average of 12 chickens while male-headed households consumed an average of 17 chickens during the 12-month period preceding the survey.

### **Markets**

Most of the poultry produced is sold at the farm gate to the local community owing to the small-scale production levels – the exception being the eggs producer, who sells most of her produce beyond the farm gate to various markets, as shown in Figure 3.2. The same farmer prefers direct sales without the use of middle men, stating: "I don't use middlemen 'Makoronyera' (commodity brokers) because they suppress prices. Using them is killing myself."<sup>26</sup> Notably, other farmers concurred with this assertion and even in other value chains, comments decrying middlemen were common in the study area. There is a general perception that they negotiate unfairly to the disadvantage of the farmer in order to make more money. One of the Agritex officers interviewed confirmed: "Women farmers need to be capacitated with price negotiation skills. In our interaction with women at Mbare Musika and other markets, we have noticed that most of the women farmers are constrained by their lack of involvement in decision-making, as some have to seek commodities pricing advice from husbands or partners."<sup>27</sup> Another Kll respondent (eMkambo) asserted: "The use of mobile phones and social media by farmers is a game changer to accessing agricultural information practice and market information."<sup>28</sup>

### **Poultry value chain analysis**

This section presents the stages of the poultry value chain and outlines the processes and the corresponding emerging gender relational dynamics, as illustrated in Table 3.3.

The supply side of the poultry value chain illustrated in Figure 3.3 is constrained by high stock feed costs within a hyper-inflationary environment. Value of chickens or eggs sold tends to be marginally above

**Table 3.3: Mvurwi poultry value chain**

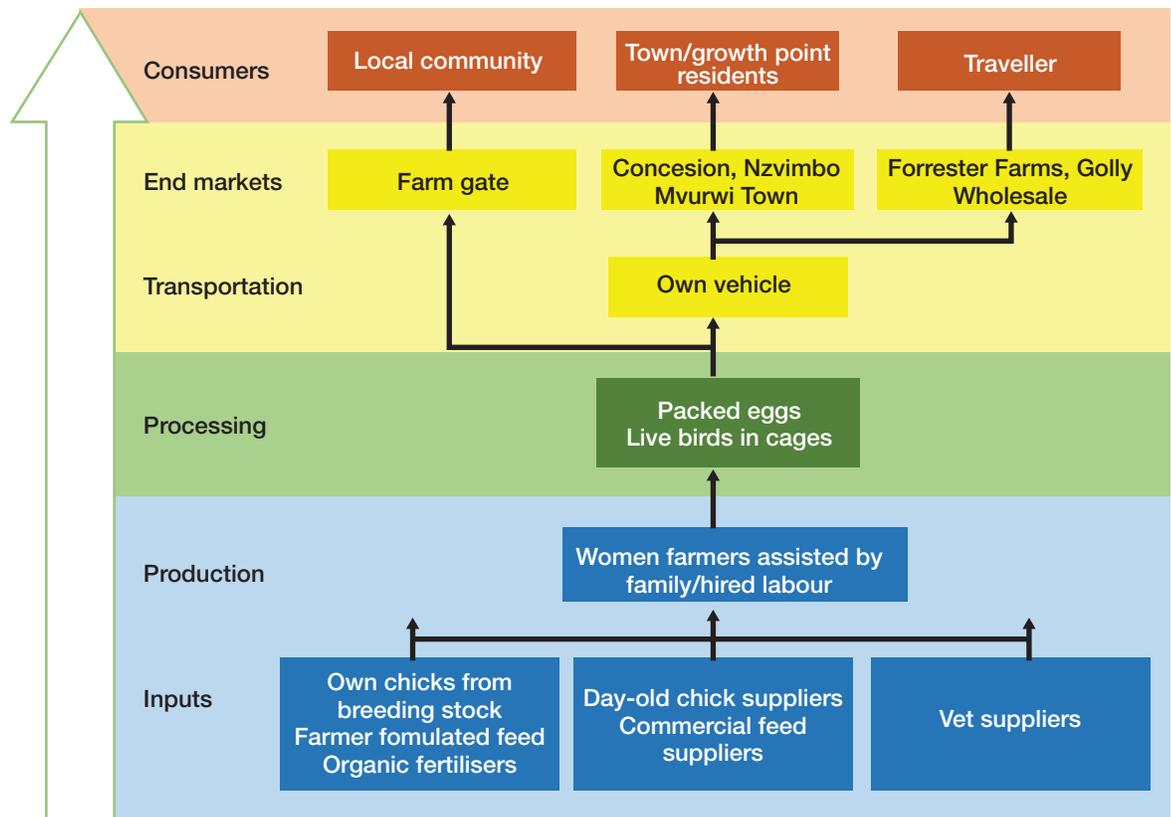
	Value chain stage	Value chain process		Emerging gender relational dynamics	
1.	Inputs	Land; Finances; Poultry; Livestock housing; and Labour		<p>- In <b>married households</b>, the Offer Letter was in the name of the husband, with the exception of one couple that did not have an Offer Letter and was sub-leasing. In two households, joint decisions and contributions were made on finances as all income is viewed as household income. In five households, these were the woman's project; identifying source of finance including proceeds from tobacco; bartering trading with leafy green vegetables and grain. Casual labour from the locality consisting of mainly women and family labour was used.</p> <p>- <b>Female-headed households</b> had Offer Letters in their name and were sole decision-makers. In the case of adult children, consultations were made. Heads had sole responsibility for sourcing financing and proceeds from maize (sold to the GMB under Command Agriculture) and brick moulding.</p>	
2.	Production	Cleaning housing; Feeding livestock; and Administering medication		<p>- In <b>married households</b>, women were responsible for and participated in the production stage; men's roles were not pronounced even in the two households that indicated that the project was under joint ownership. Chores were performed by women, hired and family labour.</p> <p>- In <b>female-headed households</b>, all processes were the responsibility of the women, who did most of the work relying mainly on family labour and, in some cases, limited casual labour.</p>	
3.	Post-harvest processes	Packaging into crates of 30 eggs		In <b>all households</b> , women dominated this stage.	
4.	Transportation	Farmer (1) owns vehicles; Farm gate sales – no transport required		<p>- In <b>married households</b>, women are very involved in this stage as well. The men's role was not visible.</p> <p>- In <b>female-headed households</b>, all processes were the responsibility of the women.</p>	
5.	Processing	Nil			
6.	Markets	1. Farm gate direct sales to local community	2. Concession; Nzvimbo; Mvurwi	3. Forrester Farms; Golly Wholesale	<p>- In <b>married households</b>, the two husbands who were in joint ownership were not visible at this stage; the adult sons were responsible for off-farm sales by making deliveries using family owned vehicles while mother coordinates farm gate sales to locals. A woman with adult sons received help from them as value chain actors and facilitators to gain entry into institutional markets.</p> <p>In <b>female-headed households</b>, women were responsible for sale at market point and assisted by children at farm gate.</p>
7.	End consumers	1. Local community	2. Concession, Nzvimbo & Mvurwi residents		

Source: Author's own

input costs due to inflationary effects. Subsequent batches are therefore reduced in size as working capital is eroded. Increasingly, farmers use organic production methods, which entail the use of unrefined stock feed and traditional indigenous herbs for medicines. The demand for poultry products remains high and is largely met by commercial firms e.g. Irvines using out-grower

models. Smallholder farmers dominate the free-range chickens, which have a higher retail price per bird and are in smaller quantities. There is higher potential in growing the urban markets (Mvurwi, Concession and Nzvimbo) as the farmers can meet the local community demand with increased production. There is potential to improve processing by slaughtering and introducing

**Figure 3.3: Poultry value chain**



Source: Author's own

a cold chain for chicken products such as processing cold meats, chicken sausages or cut chicken pieces as well as targeting special market sectors like Halaal; resulting in improved returns for the farmer.

### Asset accumulation patterns for poultry farmers

The poultry value chain was dominated by women farmers who have made asset acquisitions traditionally associated with male accumulation patterns such as vehicles and ploughs in addition to household assets. The poultry farmers in the study – with the exception of one – produce other commodities such as tobacco, maize and sweet potato. According to one: “I will not stop farming tobacco. It gives significant earnings in a lump sum that I use to fund other projects that generate income all year round like my eggs and maintenance of the vehicles that I also hire out.”<sup>29</sup> Study findings show that the two households acquired small vehicles (pick-up truck and 3.5t truck) with income realised from tobacco and poultry production. The vehicles are used for various farm operations and hired out to neighbouring farms. Five households had passenger vehicles and of those, two used them for commuter transport to generate off-farm income. Text Box 2 outlines a detailed description of a married woman poultry farmer.

The poultry value chain is dominated by the production of free-range chickens, eggs and day-old free-range chicks. There is limited use of techno-expertise in chicken production, which results in losses along the value chain. Markets for the by-products, eggs and day-old chicks are sourced within the farming communities, local institutions and growth points. Similar to sweet potato production, women’s engagement in value chain commodity is high compared to their male counterparts. Once again, there is no value addition to both the chicken for meat and eggs and there is no vertical integration that would involve poultry companies like Irvines and Surrey. Involvement of such companies through the out-grower model would likely bring both financing and the much-needed technical expertise as well as value addition.

### 3.2.3 Strawberry value chain

#### Respondent characteristics

The study found only one strawberry farm, which is run by three brothers and their wives. The father of the three sons was a Malawian migrant labourer who worked for the previous commercial farmer. A lack of employment opportunities and limited formal education contributed to the brothers joining farming. The 6ha plot was subdivided equally among four brothers before their father died. Three of the brothers formed a family

## Text Box 2: Woman poultry farmer<sup>30</sup>

### Farmer background and land tenure

A 90-year-old husband and 48-year-old wife moved to the farm in 2007 with four cows and a scotch cart. The husband is originally from Malawi and he still works as a carpenter in the community. The farm Offer Letter is in the wife's name and all farm production activities fall under the purview of the wife. She is fully in charge of all decision-making processes concerning the farm. She grows tobacco under contract and, in addition, maize she sells to the Grain Marketing Board.

### Diversified income streams

Using proceeds realised from tobacco sales, she started with 96 layers for egg production in 2015 and increased to 288 in 2019. She sells her eggs to the local community. In addition, her son has a grocery dealership at Nzvimbo Growth Point and supplies local institutions. The farm also makes deliveries with their own vehicles. Another income stream is the hiring out of the two pick-up trucks to neighbouring farmers to transport their tobacco to the market. The farmer expressed a desire to focus on poultry in the long term

and grow maize and sugar beans for personal consumption while dropping tobacco.

### Circular economy

The A1 woman farmer uses some of her maize as chicken feed and also grows green leafy vegetables to supplement chicken feed. The waste from the layers is used as organic fertiliser for maize and green vegetables.

### Asset accumulation

The farmer acknowledges that tobacco transformed their life as it enabled her to start the layers project. She has been able to develop her homestead – they have acquired a home solar system, an irrigation system for the tobacco seedbed and green vegetables, three scotch carts, two pick-up trucks and a station wagon vehicle. Her son is a motor mechanic and he services their fleet of cars. Their herd of cattle has now increased to 18 since they moved to the farm. The couple refers to equal joint ownership of the farm and all the assets acquired through proceeds from the farm.

consortium to amalgamate the land and started all-year strawberry farming under irrigation on 2ha. The brothers reported that they currently have 200 avocado plants and expect this to be one of their production lines. They also grew potato and maize in season.

### Inputs

The family started strawberry farming with one plant given to them by their father in 2001. They have propagated approximately 5,000 from that first plant over the years. Farming inputs are made from the proceeds from strawberry sales and pesticides are obtained from Mvurwi or Bindura. They source packaging from Mbare Musika in Harare in the form of 250g punnets costing ZWL0.75 (US\$0.05). The family acquired an irrigation system where water is drawn from the dam using gravity. The main source of labour on the farm is the family labour and five hired workers who come twice on a daily basis to pick the strawberries in the morning and in the evening. The wage is ZWL30 (US\$2) daily – but sometimes payment is made in grain.

### Strawberry production

The skills and knowledge for strawberry farming were obtained from the former commercial farmer and their late father. These include propagation,

required plantation spacing and pesticide use. Each unit, comprising of a brother and a sister in-law, has specific tasks that they are responsible for both at the farm and off-farm. The units deliberately do not pair a husband and wife for transparency and accountability purposes. The strawberries are manually harvested in the evening, then packed and stored outside overnight in the low temperatures and early in the morning. After the morning pick, the product is taken to the market.

### Post-harvest processes

As the strawberries are picked straight into the punnets, there is no washing or grading process. This results in first grade being mixed with lower grades and, because they are packed to the brim, the strawberries bruise; thus lowering the quality of the product delivered to the market. In addition, the farm does not have refrigerated storage facilities – further increasing the post-harvest losses. One of the wives indicated that they had been encouraged to make jams from the strawberries as a form of value addition. She said: “We received jam-making training. However, we have not been able to do it because we do not have electricity.”<sup>31</sup>

### Access to markets

The strawberries are mostly sold along the Mvurwi-Harare highway, Bindura and Concession. The price

**Table 3.4: Strawberry value chain**

	Value chain stage	Value chain process		Gender relational dynamics		
1.	Inputs	Land; Finances; Pesticides; Packaging and labour		At the strawberry farm, three brothers farm with their wives and all members are responsible for specific tasks in the workflow. However, pertaining to the decision-making, on the income and expenditure the brothers decide what is to be prioritised and the wives are allocated the balance for their needs. Attempts to ascertain if the women were in agreement with this arrangement were met with: "This is what we do and it works."		
2.	Production	Pump irrigation to water the strawberries; Planting of the strawberries; Manual weeding; Manual harvesting		Women are responsible for and participate in the production stage but marketing and selling is the responsibility of the husband. The women have no control over finances post marketing and selling.		
3.	Post-harvest processes	Picking strawberries and packaging		Women and children dominate this stage.		
4.	Transportation	Public transport (commuter omnibus) and Hitch-hiking		The women assist in ferrying goods to commuting points;		
5.	Food processing	Nil				
6.	Markets	1. Farm gate direct sales to local community	2. Mvurwi Town	3. Mutorashanga Turn-off [Highway]	4. Harare Highway	The men are responsible for both off- and on-farm sales with assistance from the wives.
7.	End consumers	1. Local community	2. Mvurwi Town	3. Travellers		

Source: Author's own

of the strawberries is ZWL10 per punnet, (US\$ 0.67). Study findings indicate that the pricing strategy is arbitrary in that it is set low to ensure high volumes of sales. One of the brothers stated: "Our product is highly perishable. We have to sell it on the day, so it is better we lower the prices so that we do not have losses."<sup>32</sup> When probed on recovering costs of labour, transport, irrigation systems and pesticides, the response was: "The input costs are very low. Against the volumes of the strawberries we harvest, we still make a profit."<sup>33</sup> Another challenge faced by the farmers is the lack of refrigerated storage and transportation as they rely on commuter omnibuses to ferry goods to the market.

### Value chain analysis

The key actors in the strawberry value chain include strawberry farmers, local communities, transporters and commuting public. Table 3.4 shows the strawberry value chain.

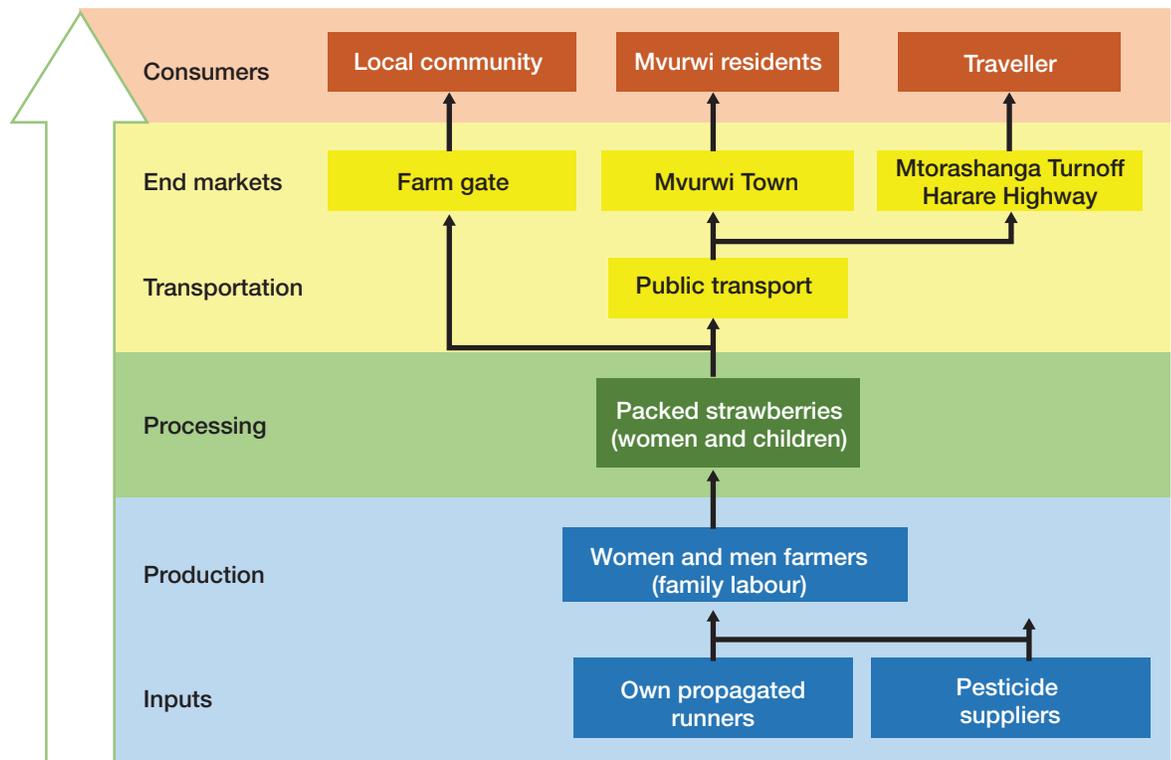
Strawberry farming is a low-input, high-return value chain. There is minimal pesticide used. The farmers use runners from their plants to propagate new plants. The only significant input cost is family and hired labour; as illustrated in Figure 3.4. The demand for strawberries is high as the country has very few producers. The

farmers have potential to improve quality of their strawberries and access high value markets. However, there was limited evidence of the farmers exploring more lucrative markets such as hotels, supermarkets or food processors. This is exemplified by a short-term supply arrangement in 2010 where the local Member of Parliament (MP) approached the farmers. The MP bought strawberries to supply Alpha & Omega yoghurt manufacturers. Currently, the selling prices are very low; impacting on returns to the farmer. This can be reversed if farmers target high-value markets in Harare and other cities and towns. There is also potential for growth if the farmers access improved seed varieties from specialist seed farmers and improve on grading, start processing jam and introduce cold chain and efficient transportation.

### Asset accumulation of strawberry farmers

Study findings indicate that the gender assets gap exists as asset accumulation is perceived along gender lines. This is exemplified by investment on the farm which includes water pumps, irrigation pipes and equipment as well as the diesel pump being owned by the male members of the family. Most of the assets acquired by men are productive and are given first preference of purchase to enhance the farm's productivity. The

**Figure 3.4: Strawberry value chain**



Source: Author's own

men also acquired solar panels and sound systems for home entertainment. The types of assets acquired by the women are mainly consumptive household items such as household utensils, beds, clothing and education for their children. Attempts to ascertain if the women were in agreement with this arrangement were met with: "This is what we do as a family and it works."<sup>34</sup> A detailed description of the strawberry farm operations is presented in Text Box 3.

The sample under study had only one case of strawberry farming, which was made up of a partnership of three brothers and their wives. The farmers have fairly high levels of knowledge in the production of strawberries and also installed a syphon irrigation system. Labour was provided by the family members but there was no value addition to their produce except packaging – even though the wives had been encouraged by their biggest client to add value to their product by making jam. The farmers cited a lack of necessary equipment and reliable clean energy for the production line as deterrents to value addition. In addition, the lack of cold storage facilities further reduced their revenue due to high post-harvest losses brought about by the high perishability of their product.

The various economic shocks in recent years; cash shortages, introduction of electronic money, removal of the multi-currency system, hyper-inflation, drought,

electricity and fuel shortages have left the majority of A1 farmers vulnerable and uncertain of the future. At the time of the field visits, farmers were uncertain about how they would acquire inputs for the next season. According to one farmer: "The money I made from selling tobacco has been eroded by inflation,"<sup>35</sup> while another lamented: "The GMB delayed paying for my maize. When they paid, the money could not buy anything. We are at a loss. We do not understand anymore."<sup>36</sup> The constraints faced by the farmers were corroborated by a key informant, who explained: "You cannot plan if you live season to season. This contradicts commercialisation that is premised on long-term planning."<sup>37</sup>

### Text Box 3: Strawberry farm

#### Land tenure agreements

Farming activities began in 2001 with the farm measuring 6ha in size. The farm is located on state land that was on the previous commercial farm. There have been land disputes over the plot with some of the new settlers. At that point, the family sought a court order and a ruling was issued stating that they could stay on the farm as their family had always been settled there. The court order was in the name of their late father.

#### Labour issues

The main source of labour on the farm is family labour that consists of the three brothers and their wives as well as five workers who come twice on a daily basis to pick the strawberries in the morning and in the evening. It emerged that the labourers are paid about ZWL30 (equivalent to US\$2) daily or sometimes payment is in

grain, which is subject to negotiation as it is not necessarily fixed. The amount is agreed on day-to-day taking into account various contextual factors.

#### Inputs

Main inputs required are chemicals at the flowering stage for the strawberries. Purchase of inputs is made through money raised from the sale of the strawberries. A major input is water, which is drawn from the dam using gravity.

#### Women empowerment

Decisions about how to invest proceeds are made only by the males in the family (the three brothers). The women are involved in the production processes at every stage from production to sales. At household level, any income left after reinvestment into the farm is subject to joint decision-making between husband and wife.

#### Asset accumulation patterns

There is some evidence of asset accumulation with the purchase of productive assets such as livestock and irrigation equipment. Irrigation infrastructure consisting of 2,500m of pipes

and a water pump were installed on the farm. However, the size is too small and hence the water pumped is still not optimised. A proportion of the proceeds. A proportion of the proceeds appear to be consumptive as they purchase household goods such as kitchen utensils and solar for home theatre systems. There isn't a set percentage that is reinvested into the farm; it appears to be informed by what needs to be purchased according to the brothers and this is carried out in an arbitrary manner.

#### Factors enhancing/success

1. Constant supply of the strawberries as a good cash flow generator
2. The low overhead costs of growing and maintaining the crop
3. Irrigation system reducing reliance on rainwater

#### Factors that may deter success

1. Limited access to formal markets
2. Current pricing is arbitrary and does not adequately consider cost of inputs such as labour, packaging, energy and transport. The pricing is derived from the highly perishable nature of strawberries
3. Lack of refrigerated storage facilities which is leading to high post-harvest losses
4. Lack of entrepreneurial mindset evidenced through statements such as: "The government must fund value addition and construct greenhouses"

#### Lessons learned

1. Strawberry farming has relatively low costs in the long term while providing constant harvests provided there is a water supply
2. A challenge of the FTLRP is that it has seemingly created a dependency and not nurtured an entrepreneurial mindset needed for agricultural commercialisation
3. There is need for incorporation of post-harvest technologies that create value-addition opportunities through value chain development

# 4 DISCUSSION

## 4.1 Key value chains that have been most effective in empowering women

Agricultural production is embedded in a social context that defines the work men and women do and how resources and benefits are distributed. The Mvurwi study highlights that women are more actively involved in agricultural activities within the emerging three commodities – sweet potato, poultry and strawberry. However, for the most part, their participation/involvement levels do not extend beyond production related operations. This positioning to some extent curbs women's bargaining power, decision-making and control over income and expenditure within the household. This corroborates research that has shown that the majority of women in rural Zimbabwe are engaged in subsistence agriculture and low value commodity activities, while men predominate in higher value enterprises (Moyo 2016). This is contrary to gender gap frameworks (Meinzen-Dick *et al.* 2011; Jensen 2006; Vijaya 2003), which have shown that closing the gender gap through participation in agricultural activities would generate broader social and economic benefits by strengthening women's direct access to and control over resources and incomes. Within the context of the Mvurwi study, married women and men often have separate roles, activities and incomes that they use to meet family consumption and investment needs in line with their responsibilities within the household. These are generally based on long standing and established traditional patriarchal structures and practices that involve women in decision-making within the family. It appears that decisions are jointly made; particularly pertaining to the domination of men in the marketing of agricultural products and the utilisation of proceeds.

## 4.2 Gender relational dynamics' impact on women along the value chain

Findings suggest that the gender disparity of the FTLRP beneficiaries has a direct influence on the level of women's participation in agricultural commercialisation pathways and asset accumulation. As such, the gendered patterns of land distribution in Mvurwi were key in understanding the levels of women's decision-

making power at household level. The study shows that the majority of women farm on land allocated to their husbands with the exception of widowed women and one married woman whose husband is of Malawian origin. Widowed women only transferred the land into their names (a lengthy process taking up to 18 months) after their husbands had passed away. As a result, most of the women start learning about the legal system of land tenure, farming operations and marketing only after losing their husbands. When married, they do not play an active role in this aspect as they rely on their husbands. It is probable that this is linked to patriarchal structures and practices.

Gendered agricultural production in crops such as sweet potatoes has, to an extent, given some married women more financial bargaining and decision-making power within households. This is mainly attributed to gender differentiation of tasks, as women are more involved in sweet potato farming and poultry. However, the gender asset gap exists as a perception of asset accumulation patterns in both tangible assets – such as livestock, small vehicles, farm machinery (ox-drawn ploughs, water pumps) and ownership of land, and intangible assets – such as the ability to provide educational assistance to children and food security for the family. The study findings reveal that there are gendered patterns of asset accumulation, as married women tend to invest in children's education, small livestock and household goods. In comparison to men, one married woman and widowed women acquired productive assets that include ploughs, vehicles, machinery and large livestock. The common factor with the latter group of women is that all have land ownership. Findings suggest that if a person has land ownership, they focus on acquiring productive assets.

The study shows that all women respondents from the 14 households are producers of commodities such as sweet potatoes, poultry and strawberries. Notably, the majority of married women respondents are not involved in marketing and sales of their produce. Often, the husbands are the ones in charge of marketing and sales. In married households, it was reported that the decision-making and control of income is joint. At the strawberry farm, the decision-making on income and

expenditure rests with the brothers, who prioritise allocations, while the wives are allocated the balance. Of the households that had acquired small vehicles, only three households had operational vehicles. The vehicles were always described as family assets with joint ownership. Of importance to note is only one of the women interviewed in the 14 households had a driver's license. Moreover, the vehicles were registered under the husbands' names with the exception of the female farmer with the elderly husband.

### **4.3 Gender relational dynamics and women economic empowerment**

Often, the depiction of women empowerment is a win-lose kind of relationship between men and women. The common perception purports that having power involves taking it from one party and then using it to dominate and prevent others from gaining it. In married couples, husbands would control resources and decision-making and have power over those without (wives). Similarly, VeneKlasen and Miller (2002) maintain that when people are denied access to important resources like land, healthcare and jobs, 'power over' perpetuates inequality, injustice and poverty. In the majority of the 14 households, it was observed that couples concentrated on finding common ground among different interests and building collective strength even though the husbands had land ownership – for instance at the strawberry farm. Based on mutual support and collaboration, they were able to multiply individual talents and knowledge emanating from 'power with' (VeneKlasen and Miller 2002). Through 'power with,' married women were able to build bridges across different interests to transform and reduce social conflict and promote equitable relations in their production; resulting in women empowerment gained through social interdependence. This process involved their husbands, male and female children as well as community members.

In the case of widowed women, empowerment from agricultural commercialisation through gender relational dynamics followed a different path. It appears that on the onset of losing their husbands, the widows found their 'power within' (Rowlands 1997). This is illustrated by their increased sense of self-worth and self-knowledge as well as the ability to recognise individual differences while respecting others. The widows showed a higher capacity to imagine better futures and hope that they will attain better lives through hard work. Their individual stories affirmed their resolve and the common human search for dignity and fulfilment. Through the reflection in telling their stories, there was

recognition of their 'power to' (VeneKlasen and Miller 2002) in recollecting the obstacles that they have overcome, like transferring the land into their names, starting again from scratch (brick moulding) and rising to be able to acquire some productive assets like ploughs, carts and sending children to school. By their own admission, their agency increased from the setback they experienced and they learned to act and change their circumstances. These findings affirm observations made by Kwaramba *et al.* (2012) that suggested that women who attained economic empowerment through township tourism homestays in Joza Township, South Africa displayed higher levels of emotional intelligence and were widowed or divorced.

### **4.4 Opportunities and challenges faced by women**

The study noted that access to finance for women farmers is complex and is layered with an interplay of factors that fall into two basic categories. The first is made up of social, cultural and traditional elements. This aspect has taken shape over many centuries. It is anchored in the patriarchal system and manifested in the lower economic status of women. The system draws legitimacy from an established belief system that ascribes a lower financial status to women as illustrated in the default position where Offer Letters are mostly in the husband's name. A key informant from a local microfinance institution concurred: "Access to finance is an intricate issue that is loaded with power negotiations for women."<sup>38</sup> In addition, the role of family and others in business decision-making was described as having a significant impact on financial access. Sometimes, a woman can qualify for financing but will not take up a loan without seeking permission from her husband because it will shift the power balance in her family. The commercial farmer from Ward 25 interviewed adds weight to this assertion when he states: "The majority of my employees are widowed women. They are hard-working and honest compared to their male counterparts and yet they face difficulties in accessing credit. It is a systemic shortcoming."<sup>39</sup>

The study established that an A1 woman farmer started producing sweet potatoes when her husband was working in Harare and production and sales steadily increased. She wanted to expand operations and acquire irrigation equipment but did not qualify for financing. This coincided with the retirement of her husband and he financed the irrigation equipment from his retirement package. This resulted in a 'soft' shift in the ownership of the sweet potato project, which is now co-owned by the couple. The woman

articulated: “I am responsible for the production of the sweet potato plant and all farm operations and my husband is in charge of sales and marketing.” Probing on if she was happy with the new arrangement, her husband responded: “The market environment is not very friendly for women.”<sup>40</sup> To this response, it was observed that the wife looked away in silence. When the husband was still employed, the wife was also managing the market operations. When the couple was asked who has control over the income and who makes the financial decisions in the household, the husband responded: “It is a joint decision. We have equal control.”<sup>41</sup> Again, the wife remained silent without maintaining eye contact. This suggests that the voices of women are generally suppressed – particularly in public – by established traditional practices and gender roles. On the other hand, it is probable that the shift in eyes and silence by the wife does not necessarily translate into having no say in decision-making. Perhaps this is a more acceptable form of public engagement within the cultural context. There is a common saying among the Shona: ‘All decisions are made in the bedroom’, but it is the husband who announces to the family or public (often as if it was only his idea). Perhaps this is a show of masculine power and it would appear the wives are comfortable with the husband taking on this role publicly. This observation is related to the theory of social interdependence when it is applied to women’s economic empowerment in that it juxtaposes “economy and society, showing how economic decision-making and action is shaped by the shared values, norms, beliefs, meanings, history and rules, of the formal and informal institutions of society. The merging of economy and society has been described elsewhere as helping to develop shared meaning and values and to strengthen social interaction” (Kwaramba 2012).

#### 4.5 Value chain analysis

The sweet potato and strawberry value chains have limited backward and forward integrations. Smallholder A1 farmers as growers are at the central point. Owing to the prevailing macro-economic environment characterised by high inflation, power and fuel shortages (LEDRIZ 2018), it emerged that A1 farmers are not linked with input suppliers (backward integration). There is no value-addition process to any of the three commodities. A commercial farmer from Ward 25 said: “From my experience, investing in private sector companies in the value chain secures interests and ensures farmers have a voice up the value chain.”<sup>42</sup> The study established the majority of sampled A1 farmers (78 per cent) sell directly to the consumers and do not want to sell through the middlemen. It emerged

that the preference is to have a family member – most often the husband – sell at one of the local markets. Farm gate sales are made by other family members (wives or children). As a result, farmers are selling to the end consumer on a retail basis and thus, middle men and transporters are not visible along the three value chains. The dominant mode of transporting the produce to the market points is through passenger commuter omnibuses. Some use ox-drawn carts and the few with cars use them. The absence of cold storage and chain facilities results in high post-harvest losses for the strawberry commodity that see the farmers sometimes giving the produce to neighbours for free; while sweet potatoes are preserved using indigenous techniques.

The absence of post-harvest processing for sweet potatoes and strawberries can be accredited to the current consumption patterns of the commodities in Zimbabwe. All poultry products are also not processed; eggs are packaged in cardboard crates and sold to the end consumer while the chickens are sold as live birds for meat. Sweet potatoes are largely consumed as a snack or as a substitute for bread when available and, in the main, are not permanent in Zimbabwean cuisine. In addition, there are limited processed sweet potato products such as crisps and flour by local NGOs’ small-scale initiatives such as Southern Alliance for Indigenous Resources and Self Help Development Trust or bakery products on the market in Zimbabwe. As a result of selling unprocessed sweet potato, there are no linkages with suppliers of machinery, utility suppliers, spare parts and packaging materials along the value chain. It appears there is not much demand for sweet potato products in the local market. However, in other markets like Tanzania, Uganda and Kenya, the demand remains unmet (Mmasa and Msuya 2012). In 2015, the European Union partnered with ZimTrade, the national trade development and export organisation under the Marketing and Branding for International Competitiveness, to raise capacity for sweet potato among other products for exports. Strawberries are not widely consumed as fruits owing to their high price but they are processed into confectionery, dairy and preserves products. Hence, various opportunities exist in the local market. According to the women strawberry farmers, their biggest clients are former white commercial farmers who now live at Malvin House old people’s home in Mvurwi, where one of the wives worked as a part-time maid. The residents at Malvin House taught the women farmers to make jam from their strawberries and they are a potential market for the strawberry jam.

Market information asymmetries result in poor arbitrary

pricing by the majority of the farmers (Cohen, Sedowski and Kwaramba 2016). When asked on the pricing strategy utilised, all farmers reported that they peg their price to match other farmers in the locality. Probing revealed that the strawberry farmers do not factor in labour costs and cost of inputs like seed, fertiliser and pesticides; illuminating the fact that the pricing model used does not factor in an accurate cost of inputs – let alone labour. This was also observed for the poultry and sweet potato produce as the farmers reported that they peg their prices against prevailing market trends; the exception being one egg producer using a cost-based pricing model. The strawberry producers alluded to differentiated pricing that lowers towards the end of the market day owing to the high perishability of the product. Another aspect that contributes to the poor pricing is the absence of knowledge of a standardised grading system for strawberries and sweet potatoes. Related challenges within the value chain include the lack of value addition owing to no application of post-harvest technologies, the absence of cold chain systems and the weak extension services support for both products.

# 5 CONCLUSIONS AND WAY FORWARD

The research findings indicate that there are critical shortcomings in the sweet potato and strawberry value chains relating to access to working capital, agriculture extension services and market information. Admittedly, some of the issues are exacerbated by the challenging macro-economic environment. In addition, good farm management practices, post-harvest handling and technologies, market institutions and value chain coordination remain curbed. This implies there is neither vertical integration nor horizontal integration and the farmers produce and sell unprocessed commodities directly to consumers. The net effect results in limited income for the A1 farmers – particularly women, who face elevated participation challenges in commercialisation related to diminished access to high quality inputs, access to finance and high value markets. Additional barriers affecting married women include low propensity to pursue land ownership and this in turn impacts their acquisition of productive assets. Furthermore, the division of labour often situates them mainly within the production levels; thus affecting the levels of returns realised and how they participate in decision-making at the household level and along the value chain.

Self-financing from tobacco sales remains the major avenue to which women A1 farmers diversify to other commodities. The involvement of most married women in the sweet potato value chain decreases at the marketing level and this leads to women being sidelined and not fully benefitting from the revenue. Notably, findings suggest that married women also derive benefits through social interdependence from their ‘soft power’ and relationships with the family and their husbands to advance their economic empowerment. Married women value interdependence or even dependence and pursue group obligations rather than individual autonomy.

In all three commodity value chains, in the male-headed married households there is insufficient evidence to suggest that increased control over household income gives women a stronger bargaining position over household decision-making regarding agricultural investment, consumption and production. This could be attributed to the strong hierarchical and collective

family values enacted through social interdependence (integrative negotiation, conflict resolution, values and trust) by married women. In this regard, social interdependence can to some extent explain how the social economy can complement women’s economic empowerment within marriage and family contexts. A contrast was observed in widow-headed households; the experience shows that after the loss of a husband, women actively fight structurally-embedded informal (family) and formal (institutional) frameworks to attain land ownership, giving widowed women increased control over income and sole decision-making powers regarding agricultural investment, consumption and production. Narratives shared and observations suggest empowerment took a different dimension for widowed women characterised by self-efficacy, independence, self-reliance and the capability to assert oneself and influence one’s environment. Notably, economic empowerment seems to have resulted from ‘necessity’ and situation (i.e. being widowed) rather than any intrinsic entrepreneurial characteristic that influences and drives women’s increased production. In this regard, the women strawberry farmers (also wives) may be in their ‘comfort zone’ and as a result, after receiving training for jam making they are still yet to operationalise the knowledge gained.

The study established that the resilience of women A1 farmers is disproportionately affected by shocks compared to male counterparts. An example of such a shock would be the death of a husband and subsequent loss of land lease where the land was in the husband’s name. This forces women to move from high input, high labour lucrative crops that require access to finance (such as contracted tobacco) to more informal, low risk, low return, local favourable markets and low input crops and other livelihood options like brick moulding. Evidently, women farmers managed to build resilience over time and were able to switch to highly profitable crops or livestock. The way the poultry enterprises are managed, for example, shows risk management capacity while maximising income potential. Evidence shows that when husbands notice potential in a wife’s enterprise, they invest in it; as exemplified by husbands abandoning tobacco to join their wives in sweet potato farming. The study concludes that there are

different pathways to women economic empowerment premised on i) social interdependence that entails negotiating within the marriage contract but still reliant on men and ii) independence and autonomy (of land, production, markets) at the family level.

Strengthening the capabilities of women farmers and widening pathways to commercialising agriculture using selected value chains to strengthen food and nutrition security and economically empower women and girls requires support on the production side as well as financial market institutions enhancing the internal accumulation of capital and increased investment in both backward and forward integration. The improved integration of women into varied pathways to commercialising agriculture commodities and financial markets requires much better regulation alongside increased public fiscal support and incentives for SMEs to add value to the produce within agricultural zones and kick-starting rural economic development.

The Government could use various approaches to promote the economic empowerment of women in agriculture by introducing incentives for investments that improve diversification and value addition. Promoting food supplies to local markets could be enhanced through public procurement programmes; including for various social institutions (e.g. school feeding programmes), while significant value-added products could target supermarkets, hotels and even export markets. These strategies can improve the participation of women throughout the value chain of the agricultural production of the three commodities to improve earnings and enhance women's economic empowerment. There is a need for educating and capacity-building of women farmers on start-up seed money and the importance of reinvesting earnings (financial literacy) into recapitalisation, procurement of farm equipment and maintenance of infrastructure.

Agricultural commercialisation involving women is essential for economic empowerment. On the one hand, this requires public support for investments into electricity, irrigation and marketing infrastructure, as well as social services in rural areas. On the other hand, it requires policy implementation. The policy environment<sup>43</sup> for women's economic empowerment is supportive and encouraging but implementation is weak. The constitution of Zimbabwe promotes full participation of women in all spheres of Zimbabwean society based on equality with men. The constitution provides overall policy directions for national development and development measures must protect and enhance the rights of people – particularly women – to equal opportunities in development.

Through research and development, local universities should collaborate with local communities and launch innovation hubs for production that promotes sustainability.

Progressive women participation across value chains for the future will be achievable when gender relations within family and society are equitable. Since land has productive and reproductive functions, access to finance and the control of agricultural resources have to become equitable in gender terms. Increasing women farmers' access to finance – independent of their spouses – will buttress their production capacities. Access to such credit lines can be enhanced through improving the processes of transfer of land ownership to women farmers, especially in cases of deceased spouses – as this has proved to be a hindrance among widowed women. In addition, there is a need for policy reform that will allow joint land allocation to ensure continuity in the event of a spouse dying. Currently, only women stand to lose their livelihood in the case of bereavement of their spouses and the reverse does not impact men in the same way. This requires building the knowledge base and capabilities of women and girls to manage various agriculture commercialisation pathways. This would inform social protection systems that enable equitable gender access and sharing of productive services.

# REFERENCES

- African Union. (2018) *African Union Gender Strategy 2018-2027*, African Union Secretariat: Addis Ababa, Ethiopia
- Akter, S.A. *et al.* (2017) Women's Empowerment and Gender Equity in Agriculture: A Different Perspective from Southeast Asia, *Food Policy* 69, (C): 270–279
- Alwang, J.; Larochelle, C. and Barrera, V. (2017) Farm Decision Making and Gender: Results from a Randomized Experiment in Ecuador, *World Development*, 92, (C): 117–129
- Anon. (2014) *Zimbabwe: A1 Farmers More Productive*. *The Herald*, 4 July 2014, <http://www.herald.co.zw/index.php> (accessed 10 November 2019)
- Bergman, J. and Lodin, S. (2012) Intrahousehold Bargaining and Distributional Outcomes Regarding NERICA Upland Rice Proceeds in Hoima District, Uganda, *Gender, Technology and Development* 16(3): 253–278
- Carr, E.R. (2008) Men's Crops and Women's Crops: The Importance of Gender to the Understanding of Agricultural and Development Outcomes in Ghana's Central Region, *World Development* 36(5): 900–915
- Chigumira, E. (2019) *Building Livelihoods: Young People and Agricultural Commercialisation in Africa: Zimbabwe Country Study*, APRA Working Paper 25, Brighton: Future Agricultures Consortium
- Cohen, E.; Sedowski, L. and Kwaramba, H.M. (2016) *Women Agribusiness Entrepreneurs in Zimbabwe: Evaluating Access to Capital and Markets*, *Strategic Economic Research & Analysis (SERA)*, Zimbabwe Program, [http://pdf.usaid.gov/pdf\\_docs/PA00MDKP.pdf](http://pdf.usaid.gov/pdf_docs/PA00MDKP.pdf) (accessed 10 December 2019)
- Diksha, A. and Rada, C. (2020) Gender Norms and Intrahousehold Allocation of Labor in Mozambique: A CGE Application to Household and Agricultural Economics, *Agricultural Economics* 51(2): 259–272
- Doss, C. (2002) Men's Crops? Women's Crops? The Gender Patterns of Cropping in Ghana. *World Development* 3: 1987–2000
- Jensen, L. (2006) *New Immigrant Settlements in Rural America: Problems, Prospects, and Policies*. The Carsey School of Public Policy at the Scholars' Repository, 17, New Hampshire: Carsey Institute, University of New Hampshire
- Kilic, T; Palacios-Lopez, A. and Goldstein, M. (2013) *Caught in a Productivity Trap: A Distributional Perspective on Gender Differences in Malawian Agriculture*, Policy Research Working Paper No. 6381, Washington, DC: World Bank, <https://openknowledge.worldbank.org/handle/10986/13182> L (accessed 15 February 2020)
- Kurtege Sefer, B. (2020) A Gender- and Class-Sensitive Explanatory Model for Rural Women Entrepreneurship in Turkey, *International Journal of Gender and Entrepreneurship* 12(2): 191–210
- Kwaramba, H.M. (2012) *Everything is Connected: An Interpretive Study of Local Economic Development in South Africa*, Enschede: University of Twente
- Kwaramba, H.M.; Lovett, J.C., Louw, L. and Chipumuro, J. (2012) Emotional Confidence Levels and Success of Tourism Development for Poverty Reduction: The South African Kwam eMakana Home-Stay Project, *Tourism Management* 33(4): 885–894

- Labour and Economic Development Research Institute of Zimbabwe (LEDRIZ) (2018) *Women at Work Casualization and Implications for Decent Work for Female Workers in the Horticulture Sector of Zimbabwe*, Harare: Labour and Economic Development Research Institute of Zimbabwe
- Makonese, T.; Annegarn, H.J. and Chikowore, G. (2013) An Overview of Energy Use Scenarios in the A1 Resettlement Farming Areas of Zimbabwe: A case OF CC Molina, Sanyati, *paper presented at the 21st Domestic Use of Energy Conference*, Cape Town, 3–4 April
- McCarthy, L. (2016) *Empowering Women Farmers in Agricultural Value Chains*, London: Twin and Twin Trading
- Meinzen-Dick, R. *et al.* (2011) *Gender, Assets, and Agricultural Development Programs: A Conceptual Framework*, CAPRI Working Paper 99. Washington, D.C.: CAPRI
- Ministry of Lands, Agriculture, Water and Rural Resettlement (MLAWRR) (2020) *Second Round Crop and Livestock Assessment Report 2019/2020 Season*, Harare: Ministry of Lands, Agriculture, Water and Rural Resettlement. [https://fscluster.org/sites/default/files/documents/2nd\\_round\\_assessment\\_report\\_2020\\_draft\\_26\\_may.pdf](https://fscluster.org/sites/default/files/documents/2nd_round_assessment_report_2020_draft_26_may.pdf) (accessed 29 June 2020)
- Mmasa, J.J. and Msuya, E.E. (2012) 'Mapping of the Sweet Potato Value Chain Linkages between Actors, Processes and Activities in the Value Chain: A Case of "Michembe" and "Matobolwa" Products', *Sustainable Agriculture Research* 1: 130–146
- Moyo, S. (2016) *Family Farming in sub-Saharan Africa: Its Contribution to Agriculture, Food Security and Rural Development*, Working Paper No. 150, International Policy Centre for Inclusive Growth (IPC-IG): Brasilia
- Peterman, A.; Quisumbing, A., Behrman, J. and Nkonya, E. (2010) *Understanding Gender Differences in Agricultural Productivity in Uganda and Nigeria* International Food Policy Research Institute (IFPRI): IFPRI Discussion Papers
- Quisumbing, A. and Pandolfelli, L. (2008) *Promising Approach to Address the Needs of Poor Female Farmers*, Washington, DC: International Food Policy Research Institute
- Quisumbing, A.R. and Pandolfelli, L. (2010) Promising Approaches to Address the Needs of Poor Female Farmers: Resources, Constraints, and Interventions, *World Development* 38(4): 581–592
- Rowlands, J. (1997) *Questioning Empowerment: Working with Women in Honduras*, Oxford, UK: Oxfam Publication
- Sukume, C.; Mavedzenge, B., Murimbarimba, F. and Scoones, I. (2015) *Space, Markets and Employment in Agricultural Development: Zimbabwe Country Report*, Research Report, 46, Cape Town: PLAAS
- Tom, T. and Mutswanga, P. (2015) Zimbabwe's Fast Track Land Reform Programme (FTLRP): A Transformative Social Policy Approach to Mupfurdzi Resettlement (Shamva District, Zimbabwe), *IOSR Journal of Humanities and Social Sciences (IOSR-JHSS)*, 20(8)(1): 51–61
- VeneKlasen, L. and Miller, V. (2002) 'Power and Empowerment', in, *A New Weave of Power, People & Politics: The Action Guide for Advocacy and Citizen Participation*, Bourton on Dunsmore, UK: Practical Action Publishing
- Vijaya, R. (2003) *Trade, Skills and Persistence of Gender Gap: A Theoretical Framework for Policy Discussion*, Working Paper, 2003, Washington DC: International Gender and Trade Network

## Appendix 1: Households visited

Farm name	Marital status	Ward no.	Type of farming	Number of workers	Property acquired
Hariana	Married (male)	30	Strawberry	8	<ul style="list-style-type: none"> <li>- Water pipes</li> <li>- Water pump engine</li> <li>- Livestock</li> <li>- Furniture</li> <li>- Blankets &amp; pots</li> </ul>
Hariana	Married (female)	30	Sweet potato	15 (casual workers)	<ul style="list-style-type: none"> <li>- 7 cattle</li> <li>- 2t of fertiliser</li> <li>- Security fence</li> <li>- Building a house</li> <li>- A truck</li> </ul>
Umvukwes Flats	Married couple	26	Tobacco & maize	3 (permanent workers) & 25 (casual workers)	<ul style="list-style-type: none"> <li>- 4 cattle</li> <li>- Scotch cart</li> <li>- A car (Toyota Wish)</li> <li>- 3 roomed house</li> <li>- 3 water pumps</li> </ul>
Forester J	Widow	27	Poultry farming, maize & soya beans	Number not provided	<ul style="list-style-type: none"> <li>- Cattle</li> <li>- Goats</li> <li>- Plough</li> <li>- Build a house</li> <li>- Harrows</li> <li>- Wheelbarrow</li> </ul>
Mvurwi Town	Widow	28	Potatoes & sweet potatoes	12	<ul style="list-style-type: none"> <li>- 2 cars</li> <li>- Carts</li> <li>- A residential stand</li> </ul>
Umvukwes Flats	Married (female)	26	Tobacco & maize	6 (casual workers)	<ul style="list-style-type: none"> <li>- 18 cattle</li> <li>- 2 ploughs</li> <li>- 3 ox-drawn carts</li> <li>- Built houses</li> </ul>
Forester J	Widow	27	Tobacco, maize, Soya beans & Groundnuts	Number not provided	<ul style="list-style-type: none"> <li>- 5 cattle</li> <li>- Furniture</li> <li>- Plough</li> </ul>
Musonedi	Married (woman)	30	Tobacco, maize, sugar beans & egg business (abandoned in 2018)	3 permanent workers (2 boys & 1 lady) Number of casual workers not provided	<ul style="list-style-type: none"> <li>- A house</li> <li>- Plough</li> <li>- Cultivator</li> <li>- Cattle</li> </ul>
Pembi Chesi	Widow	26	Tobacco, maize & beans	Family labour (Number not provided)	<ul style="list-style-type: none"> <li>- 2 cattle</li> <li>- Solar panel</li> <li>- Furniture</li> <li>- Diesel water pump</li> <li>- A car</li> </ul>
Forester J	Married	27	Poultry farming (eggs) & tobacco (now abandoned)	3 permanent workers (number of casual workers not provided)	<ul style="list-style-type: none"> <li>- 14 cattle</li> <li>- 3 scotch carts</li> <li>- 3 cars</li> <li>- 3 ploughs</li> <li>- Refurbishment &amp; expansion of house</li> <li>- Water pump</li> <li>- Solar system</li> </ul>
Pembi Chesi	Widow	26	Groundnut, sweet potato & broilers (suspended the broiler project)	Number not provided	<ul style="list-style-type: none"> <li>- Scotch cart</li> <li>- Wheelbarrow</li> <li>- Cultivator</li> <li>- A car</li> </ul>

Mvurwi Town	Married (female vendor)	28	Potatoes, groundnuts, cabbages & beans	N/A	- Building a 5-roomed house
Hariana	Married (female)	30	Poultry (eggs) & tobacco	3 permanent workers & 20 casual workers	- Incubator - Car - A lorry - A house in concession - Built additional fowl runs - Irrigation equipment - Built tobacco bans
Hariana	Married (male)	30	Tobacco & sweet potato	Not provided	- Cattle - Scotch cart - A house - Truck - Solar panel - Irrigation equipment
Hariana	Married (male)	30	Sweet potato, maize & tomatoes	10 casual workers	- 2 cattle - Goats - Scotch cart - Plough - Water pump - Irrigation pipes
Hariana	Married (male)	30	Tobacco & poultry (road-runners)	Not provided	- Cattle - Goats - Generator - A borehole
Hariana	Male (female)	30	Broilers & roadrunners	3 permanent workers	N/A

## Appendix 2: Household coding

Farm name	Code	Respondent code	Key M = Married W = Widow
Hariana Farm	H	HM1 - Strawberry HM2 - Sweet potato HM3 - Poultry (eggs) HM4 - Sweet potato HM5 - Sweet potato & tomatoes HM6 - Poultry (road-runners) HM7 - Broilers & road-runners	
Musonedi	M	M1 - Egg business	
Forester J	FJ	FJW1 - Tobacco, maize, soya beans & groundnuts FJW2 - Poultry farming FJM1 - Poultry farming	
Umvukwes Flats	UF	UFM1 - Tobacco & maize UFM2 - Tobacco & maize	
Mvurwi Town	MT	MTW1 - Potatoes & sweet potatoes MTM1 - Potatoes	
Pembi Chesi	PC	PCW1 - Tobacco, maize & beans PCW2 - Sweet potato & broilers	

### Appendix 3: Factors driving changes in crop and livelihood choices

	Main crops/ livelihoods when allocated land	Change of crop/livelihood choice		Reason for changing crop/ livelihood	Farmer
		From	To		
1	Maize	Maize	Sweet potato	Food security	Allocated farm in 2000; husband took over sweet potato production in 2016
	Tobacco	Tobacco	Sweet potato	Income security, more profitable, low inputs	
2	Maize			Maintained diversified cropping, no changes	Allocated farm in 2005
	Tobacco				
3	Strawberries			Strawberry farmers since 2001, no change of crop	Brothers and their wives, former farmworkers
4	Tobacco	Tobacco	Poultry	More sustainable	Allocated farm in 2006; wife started poultry in 2018
5	Maize	Maize	Tobacco	Additional crop for income	Allocated farm in 2002, have tried diversified farming including poultry and sugar beans, settled on maize and tobacco
		Groundnuts	Tobacco	Groundnuts dropped because tobacco demands more time	
6	Tobacco			Not changed from tobacco, maize and sugar beans	Husband died in 2010, family supportive in change of lease
	Maize				
	Sugar beans	Tobacco	Trading	Diversified into selling groceries	
7	Maize	Maize	Tobacco	Added tobacco in 2008 for more income	Husband died soon after acquiring farm in 2004, lease transferred
8	Maize	Maize	Tobacco	Changed to tobacco in 2010 for income	Allocated farm in 2005
9	Maize			Problems with maize inputs but continued	Allocated farm in 2002, husband died in 2014
	Soya beans	Soya beans	Tobacco	Brick moulding and hired for ploughing by other farmers to cover inputs costs	
	Groundnuts			Tobacco solved maize + low input supply and income	
		Tobacco	Off-farm labour	Husband died, land tenure/ inheritance issues; labour challenges	
		Off farm labour	Maize	Access to inputs (Command) after resolving land tenure	
10	Tobacco	Tobacco	Poultry	Diversification of income sources (income security)	Started farming in 2007
	Maize	Maize		Tobacco & maize market conditions unfavourable	
11	Maize	Sugar beans	Sweet potato	For maize now depends on input scheme support	Allocated farm in 2001, husband died after 2012
	Sugar beans		Groundnuts	Food and education burden; low input requirement	

12	Poultry			Diversified into horticulture	Started farming in 2004, husband joined in 2016 on retirement. Capitalised farming from bank loans
13	Tobacco		Poultry	Tobacco remains main crop	Started in 2000, tobacco farmer with diversified farm enterprise
	Maize			Commercial level, resilient, contract and own finance	
				Abandoned poultry because of low profitability (economic environment)	
14	Tobacco		Sweet potato	No inputs and equipment	Former farm worker leasing land from A1 farmers, currently on second farm

## Appendix 4: Women economic empowerment policy context in Zimbabwe

The policy environment for women's economic empowerment is supportive and encouraging (but implementation is weak).

1. The draft Comprehensive Agricultural Policy Framework (2012-2032) addresses gender mainstreaming in agriculture. It acknowledges that women have difficulties in accessing credit, equipment and machinery essential for production, technical knowledge and expertise to produce high quality products and markets. The Framework also recognises that women remain largely excluded from the decision-making processes within the public and private spheres and this poses a major challenge for them to participate in the national development process. The Framework aims to remove barriers for women into agribusiness, and enhance their participation, through policy, government incentives and training. It aims to identify resources for investment, credit and partnership mechanisms that will enhance women participation in the sector and develop resources mobilisation strategy for women economic empowerment in the agricultural sector.
2. The Small and Medium Enterprises Act [Chapter 24:12] of 2011 promotes both formal and informal micro, small and medium-sized enterprises in Zimbabwe. Special consideration is made to women, youth, disabled persons and people living in rural areas during implementation.
3. The revised National Gender Policy (2013-2017) seeks to achieve a gender-just society where men and women enjoy equality and equity and participate as equal partners in the development process of the country.

# ENDNOTES

- 1 Work Stream 1: Provides a quantitative examination of a range of outcomes from engagement with different commercialisation options. It utilises econometric approaches for measuring the impact of commercialisation of a range of outcomes, such as income, distribution and food security, women and girls empowerment
- 2 Agronomist with a tobacco company, Ward 30
- 3 HM5; Married Female; Hariana Farm; Ward 30.
- 4 UF1; Umvukwes Flats; Married Couple; Ward 26.
- 5 HM4; Hariana Farm; Married Female; Ward 30.
- 6 HM2; Hariana Farm Married Female; Ward 30.
- 7 PCW2; Pembi Chesi Farm; Widowed; Ward 26.
- 8 HM4; Hariana Farm; Married Female; Ward 30.
- 9 HM5; Hariana Farm; Married Male; Ward 30.
- 10 MTW1; Mvurwi Town, Widowed, Ward 28.
- 11 FJW1; Forester J Farm; Widowed; Ward 27.
- 12 HM2; Hariana Farm; Married Female; Ward 30.
- 13 MTM1; Mvurwi Town; Married Female (Vendor); Ward 28.
- 14 UFM1; Umvukwes Farm; Married Couple; Ward 26.
- 15 HM5; Hariana Farm; Married Female; Ward 30.
- 16 MTW1; Mvurwi Town; Widowed; Ward 14.
- 17 PCW1; Pembi Chesi Farm; Widowed; Ward 26.
- 18 FJW2; Forester J Farm; Widowed; Ward 27.
- 19 CF; Key Informant Interview with a Successful Commercial Farmer in the Study Area.
- 20 MTW1; Mvurwi Town; Widowed; Ward 28.
- 21 M1; Musonedi Farm; Married Female; Ward 30.
- 22 HM6; Hariana Farm; Married Couple; Ward 30.
- 23 HM3; Hariana Farm Married Female; Ward 30.
- 24 FJM1; Fortester J Farm; Married Couple; Ward 27.
- 25 PCW2; Pembi Chesi Farm; Widowed; Ward 26
- 26 M1; Musonedi Farm; Married Female; Ward 30.
- 27 AO2; Agritex Officer - Key Informant.
- 28 EM; Interview with eMkambo Representative.
- 29 HM3; Hariana Farm; Married Female; Ward 30.
- 30 HM3 Hariana Farm; Married Female; Ward 30.
- 31 HM1; Hariana Farm; Married Female; Ward 30.
- 32 HM1; Hariana Farm; Married Male; Ward 30.
- 33 HM1; Hariana Farm; Married Male; Ward 30.
- 34 HM1; Hariana Farm; Married Females; Ward 30.
- 35 MTM1; Mvurwi Town; Married Male; Ward 28.
- 36 UFM1; Umvukwes Flats Farm; Married Female; Ward 26.
- 37 A; Key Informant Interview with an Agronomist.
- 38 MFI; Interview with Mvurwi based microfinance institution rep
- 39 CF; Key Informant Interview with a Successful Commercial Farmer.
- 40 HM2; Hariana Farm; Married Female; Ward 30.
- 41 HM2; Hariana Farm; Married Male; Ward 30.
- 42 CF; Key Informant Interview with a Commercial Farmer.
- 43 Appendix 4: Women Economic Empowerment Policy Context in Zimbabwe.

Kwaramba, H.M.; Chigumira, E. and Zimori, L. (2020) *Women Empowerment, Agriculture Commercialisation and Gender Relations: A Value Chain Analysis, Mvurwi, Zimbabwe*, Working Paper 42, Brighton: Future Agricultures Consortium

© APRA 2020

ISBN: 978-1-78118-687-9



This is an Open Access report distributed under the terms of the Attribution-Non Commercial-No Derivs 4.0 Unported (CC BY-NC-ND 4.0) Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. NonCommercial — You may not use the material for commercial purposes. NoDerivatives — If you remix, transform, or build upon the material, you may not distribute the modified material. You are free to: Share — copy and redistribute the material in any medium or format.

<https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>

If you use the work, we ask that you reference the APRA website ([www.future-agricultures.org/apra/](http://www.future-agricultures.org/apra/)) and send a copy of the work or a link to its use online to the following address for our archive: APRA, Future Agricultures Consortium, University of Sussex, Brighton BN1 9RE, UK ([apra@ids.ac.uk](mailto:apra@ids.ac.uk))

*All APRA Working Papers go through a review process before publication.*



**DO YOU HAVE COMMENTS ON THIS PAPER?**

*We would welcome your feedback on this working paper!*

*To provide brief comments, please follow this link to our short APRA Working Paper Feedback form: <https://goo.gl/forms/1iVnXhhrlGesfR9>*

Agricultural Policy Research in Africa (APRA) is a programme of the Future Agricultures Consortium (FAC) which is generating new evidence and policy-relevant insights on more inclusive pathways to agricultural commercialisation in sub-Saharan Africa. APRA is funded with UK aid from the UK Foreign, Commonwealth & Development Office (FCDO) and will run from 2016-2022.

The APRA Directorate is based at the Institute of Development Studies (IDS), UK ([www.ids.ac.uk](http://www.ids.ac.uk)), with regional hubs at the Centre for African Bio-Entrepreneurship (CABE), Kenya, the Institute for Poverty, Land and Agrarian Studies (PLAAS), South Africa, and the University of Ghana, Legon. It builds on more than a decade of research and policy engagement work by the Future Agricultures Consortium ([www.future-agricultures.org](http://www.future-agricultures.org)) and involves more than 100 researchers and communications professionals in Africa, UK, Sweden and USA.

Funded by



The views expressed do not necessarily reflect the UK government's official policies.