

Empowering women through improved food security in urban centers: A gender survey in Bulawayo urban agriculture

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ABSTRACT

The major problems facing urban residents particularly women are poverty, poor food security, growing urban population, hunger and lack of formal employment. Due to lack of employment, the majority of women in urban centres are involved in urban agriculture. The major focus of this research was to establish to what extent women are being empowered through urban agriculture. The research sought to establish how women are contributing to urban poverty reduction, provision of urban food security and improved urban environmental management through their empowerment. The research used both qualitative and quantitative approaches and because the research involved an assessment of public opinion of a relatively large group, the survey method was used to conduct the research. Questionnaires, focus group discussion and observations were used as data collection instruments. From the list of 29 wards, simple random sampling of 10 wards was first conducted giving a percentage population of 34%. Twelve households from each ward, practicing agriculture at varying levels and on varying sites, were then identified giving a total sample of 120 respondents. The views of resident farmers were tapped through structured interviews, observations and group discussions with residents and agricultural officials. The SPSS package was then used to analyze the data. There was clear evidence that women are the major players in practicing urban agriculture. Women are being empowered by engaging in urban agriculture wherein they decide what to grow, cultivate their plots, and choose how to dispose of the produce. Whilst women are being empowered through urban agriculture, they face a number of challenges that include lack of finance to buy inputs, limited land for use in agricultural activities and the problem of marketing their produce.

Keywords: Urban agriculture, food security, gender, women empowerment.

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INTRODUCTION

Urban Agriculture has become one of the main activities undertaken by urban residents to alleviate threatening poverty and to improve both food security and nutrition in their households. This may be because lack of cash and meaningful income in urban centres more directly translates into lack of food (MDP Report, 2006). A number of scholars have written articles on Urban Agriculture (UA) with Urban Agriculture taken to mean 'the growing of plants and the raising of animals for food and other uses within and around cities and towns, and related activities such as the production and delivery of inputs, and the processing and marketing of products (van Veenhuizen, 2006). As a result of this, Hovorka

(2008) concludes that urban agriculture is changing the way people feed themselves in cities. Studies carried out on UA in most countries have shown a high percentage participation rate by women in UA activities (McFadden, 1996; The Chronicle, 2008). Because of the level of female participation in UA activities it becomes paramount to explore, understand and appreciate the role women play in feeding the cities. Of special consideration in this regard is the SADC Gender Monitor (1999) where SADC Heads of States stated one of their commitments as that of: 'Promoting women's full access to, and control over productive resources such as land, livestock, markets, credit, modern technology, formal employment,

and a good quality of life in order to reduce the level of poverty among women.' Havorka (2008) thus highlights gender as a means by which to disaggregate data and explore the socio-economic, location and human-environmental factors that influence the quantity and type of crops and activities that are practiced by different urban residents.

The following survey of gender in UA activities was done in Bulawayo, Zimbabwe and its major focus was to discuss the role of women in urban agriculture with special reference to the activities they do, and changes in women's traditional tasks and practices as well as their management roles. This survey was done under the Bulawayo Urban Agriculture Multi stake holder Forum in partnership with MDP and RUIAF and was financed by IDRC and DGIS under the theme: Cities Farming for the Future [CFF] whose main objective is to contribute to urban poverty reduction, urban food security, improved urban environmental management and empowerment of urban farmers. This study was carried out in Bulawayo during the months of August, September and October which according to the Zimbabwean calendar are the dry months of the year. Like all urban centres, Bulawayo was then experiencing growing urban population, poverty, hunger, lack of formal employment and had special opportunities provided for UA activities.

BACKGROUND AND CONCEPTUAL ANALYSIS

The position of women in Zimbabwe has always been a complex one. In the traditional society, women used to be treated as minors from birth to death. Most families tended to give to a male child, the opportunity to go to school at the expense of the girl child. In case the parents had challenges raising enough food to feed the family, the girl child would be betrothed to a man who was prepared to provide food. The girl child was not consulted and her feelings were not taken into consideration. The main argument regarding this is that gender is socially constructed and not ordained and therefore can be challenged and reformed (Ballantine, 1993; Meena, 1992; Moyana, 1994). The colonial governments however, continued with this traditional practice. The women were treated as second-class citizens. African women were initially not allowed to stay in urban areas. Their husbands left them in rural areas when they went to look for jobs in town. With the coming of independence a number of changes were legislated. Both sexes were given equal educational opportunities. The new Zimbabwean Government argued that equal opportunities should be given to all people in whatever productive sector and as a result policies like 'Growth with Equity', 'Affirmative Action for Women' and The National Gender Policy were put in place. These policies were on realization that women were sidelined on issues of national development and thus sought to 'redress the social, political, and economic inequities inherited at independence' (The National Gender Policy, 2000). These policies would thus enable women to participate

fully in national issues without undue hindrance. However, despite these government efforts, there still remain some cultural, traditional and social practices as well as laws which continue to militate against women's full participation and integration in national development, hence the need to analyze gender issues in all spheres of life.

Gender analysis involves the examination of men's and women's roles, responsibilities and social status in relation to cultural perceptions of masculinity and femininity (Feldstein and Poats, 1989; Woroniuk, 1997). Such perceptions tend to influence the activities that males and females practice on the ground in urban agriculture. Secondly, the location of the land, plot or farm where urban agriculture is practiced will influence the type of urban activities that will take place. Hovorka (2008) suggests that gender is an important organizing principle of social life and spatial patterns. Hanson and Pratt (1995) argued that in many contexts, the socio-spatial dynamic reveals variations in the construction of gender relations and more often than not spatial arrangements tend to work for men and against women. Where men and women are working as a team, the credit for success tends to be given to men. Men and women interact with the environment in different ways for different purposes depending on the availability of inputs and resources. The question of ownership and tenure has a bearing on the motivation that the tenant would have to start agricultural projects. In short, the ability of men and women to be successful in any agricultural activity depends upon accessibility of land or plot, how one interacts with the environment, the laws that are put in place to govern the agricultural practice, and accessibility of inputs and resources. All this would be directed towards addressing the issue of food insecurity threatening most urban areas today.

The meaning of food security has evolved over the years. According to Matshalanga in McFadden (1996), food security in its basic form refers to 'the ability to access food by all people, at all times in order to ensure a sustained healthy life.' Healthy life being the major objective makes the main determinants of food security to be both access and availability. Although at national level food availability may not always lead to food access, urban agriculture at varying levels is thus practiced so as to improve householders' food availability and access levels. For years urban agriculture has been practiced as an informal activity with no formal recognition into urban planning and economic development. After studies carried out in Zimbabwe have shown that the country's current legislations offered many opportunities for UA practices, the Zimbabwean cities have found themselves with the challenge of incorporating UA into urban planning hence the UA policy in the City of Bulawayo was drafted and approved on 05/07/2000. One of the rationales for approving the policy was to alleviate poverty, reduce destitution and improve the nutritional status of vulnerable groups in the urban community (Urban Agriculture Policy Bulawayo City). Included in the vulnerable groups are the widowed, the sick, caregivers,

single parents, the unemployed and the elderly. Women mainly belong to all these groups playing a central role in the production, distribution, purchasing, and preparation of food at household levels hence the need to carry out this gender survey. It is in the light of this background that the following objectives of women in urban agriculture were studied.

Statement of the problem

One of the challenges facing women in Zimbabwe in urban areas is poverty, land degradation and ensuring that there is food security for the family. The major challenge facing women is to provide a meal to the family in an economy that collapsed in 2008 and is still operating at below 35% of its capacity. The focus of the study in the Bulawayo urban agriculture was to show how women were contributing to urban poverty reduction, provision of urban food security and improved urban environmental management through the empowerment of urban women farmers. The questions that needed answers included what activities women performed leading to the reduction of poverty in urban centers? Analysis of the responsibilities of women in urban agriculture was discussed in order to highlight their needs, challenges and problems. What are the political, socio- economic and technological factors that affect women farmers?

Objectives

1. To define the tasks and activities carried out by women practicing urban agriculture in the City of Bulawayo.
2. To identify the responsibilities that women in urban agriculture carry out.
3. To outline the decision-making processes practiced by Bulawayo farmers and their impact on the development of agriculture.
4. To explain women's role in the control and distribution of agricultural resources.
5. To highlight the needs, challenges and problems faced by Bulawayo women farmers.
6. To recommend strategies that could be implemented to solve the problems facing farmers in Bulawayo, women in particular.
7. To analyze some of the political, socio-economic and technological factors that affect women farmers in urban agriculture.

AREA OF STUDY: BULAWAYO URBAN

The City of Bulawayo is Zimbabwe's second largest city. The municipality of Bulawayo has a population of about 1.3 million residents located in 29 wards. Residential areas are divided into low density suburbs, high density suburbs and peri-urban. In Bulawayo, the low density suburbs are usually referred to as the eastern suburbs;

this is because of their location in the eastern side of the city's central business area. In these eastern suburbs residential areas of more than 300 m², plots and commercial farms are found. The high density suburbs, referred to as western suburbs, have residential areas of usually between 50 to 300 m². The peri-urban centres consist of plots, unoccupied municipal land as well as commercial farms.

Political, economic, social and technological (PEST) external factors

The City of Bulawayo does not exist in a vacuum. As a result, it is directly or indirectly affected by the economic, political, social and technological developments of Zimbabwe. It gets to be important therefore, to note that this survey was carried out at a time when:

- (a) The isolation of Zimbabwe as a trading partner because of ideologies that are perceived by the international community to be politically skewed was affecting the sourcing of vital agricultural inputs and foreign currency.
- (b) Policies that had been put in place, for example, the agrarian reforms, had resulted in loss of food security which in turn has resulted in the erosion of disposable incomes as food had become expensive and is taking proportionally larger portion of peoples' incomes.
- (c) Price controls widely believed to be instituted for political survival by the government had resulted in shortages of basic commodities and their reappearance in the black market at exorbitant prices. This has eroded people's incomes leaving little if anything for development for urban farming.
- (d) High inflation had diminished the spending power of consumers thus reducing demand for goods. High inflation reported by the United Nations to be about 231,000,000% had eroded people's incomes and savings, resulting in Bulawayo residents who are still working demanding higher wages.
- (e) Zimbabwe's imports of food, fuel and electricity had exerted a strain on the exchange rate, making it more expensive to import the vital inputs. High unemployment levels had forced most vulnerable groups to resort to urban agriculture in order to sustain families.
- (f) HIV/AIDS had resulted in increased financial burdens and cost of medical care on customers and has further eroded incomes. A substantial number of parents have succumbed to the disease leaving a lot of orphans who need support.
- (g) Migration of the young people to the neighboring countries was rampant resulting in them leaving or sending their offspring home to be taken care of by the aged and mostly the unemployed, for example, Njube community.

METHODOLOGY

The research used both qualitative and quantitative approaches

and because the research involved an assessment of public opinion of a relatively large group, a survey method was used to conduct this research (Best and Kahn, 1993). A cross-sectional identification of respondents was done resulting in generalized statistics of opinion and descriptions and interpretations of conditions, behaviors and events that existed and occurred at the time the research was carried out. Instruments used to collect data were questionnaires, interviews, focus group discussions and observations.

Bulawayo residents like most urban residents practice urban agriculture at varying levels and for varying reasons. The UA activities are usually done in the backyards or front yards, in allotment fields or gardens, in plots and farms or in municipality vacant spaces. The population of the study, therefore, was any resident of Bulawayo practicing urban agriculture to any level and in any land space within the municipality of Bulawayo. Due to the large size of the population and the difficulty in getting the actual list of the whole population members, a cluster sample was used in the collection of data (Best and Kahn, 1993). From the list of 29 wards, simple random sampling of 10 wards was first conducted giving a percentage population of 34%. Twelve households from each ward, practicing agriculture at varying levels and on varying sites were then identified giving a total sample of 120 respondents. The sample size was established in consideration of the limited variations in responses expected from the whole target population. As a result a non-probability judgmental sampling technique was used to identify the respondents. In this technique, the researchers used their judgment to select population members who had good prospects for accurate information (Kotler, 1996). Apart from this sample, views of resident farmers were tapped through structured interviews, observations and group discussions with residents and agricultural officials (Appendix 6 and 7). SPSS package was used to analyze the data.

Data collection procedures

Questionnaire

The questionnaire used had both closed and open-ended questions. This was to ensure that both factual information and opinions were gathered from the respondents. Both the research assistants and the consultants administered the questionnaires personally to the group of individuals. This enabled the researchers an opportunity to create relationships and explain the purpose of the study to the respondents. The researchers also explained meanings of terms not clear to the respondents. The questionnaire that was administered to respondents included closed and open-ended questions related to:

1. Division of labor tasks and responsibilities in order to reveal women's roles in both the household reproductive activities and the productive activities as well as women's roles in the community concerning provision of nutrition and health education.
2. The role and bargaining power of women in decision making within the farm household and within the community and its organizations
3. Access to and control over resources and distribution of benefits so as to assess women's level of control over productive resources (water, credit, technology, labor, seeds chemical inputs and equipment), women's level of access to and benefits from political and institutional linkages and networks their control over time and their access and control over benefits of production.
4. Differential needs emanating from gender division of roles with regards to challenges and obstacles encountered, knowledge gaps and both men and women's preferences and priorities.
5. The external determining factors so as to analyze the existing inheritance and land laws and regulations, the socio-economic conditions that remain at the root of women's involvement in urban agriculture and the social cultural norms advocated for by the Bulawayo community. A total of 101 questionnaires were collected

in the end giving 84% return rate (Appendix 1).

Focus groups, interviews and observations

Western residential visits

The consultants joined the World Vision team that was conducting a comprehensive consultative tour of the City of Bulawayo with the view to inform the residents of Phase II DFID PRP II Urban programme to be implemented between 2008 and 2011. Phase II programme was an extension of the initial Phase I programme. For the researchers, this was an opportune moment to evaluate Phase I program. The researchers managed to interview and conduct focus group discussions with the residents who were involved in urban agriculture and specifically those who had participated in the gardening project and to conduct focus group discussions. Over a period of two weeks the researchers made visits on a daily basis to the Western residential areas that include Njube, Entumbane, New Lobengula, Pumula, Nketa, Nkulumane. It was not possible to visit all the residential areas due to lack of resources and manpower limitations. The researchers captured notes as the World Vision personnel addressed the residents. After the address residents involved in urban agriculture were invited to remain for panel discussion. 300 to 1000 residents would attend these consultative meetings per session [Appendix 7].

Eastern suburbs visits

Farm household in the Eastern suburbs were visited and interviewed regarding their agricultural activities. The researchers also attended a meeting held by the Zimbabwean Indigenous Commercial Farmers Union. The researchers had a panel discussion with the thirty farmers who attended the meeting (Appendix 1).

Management interviews

Primary data collection involved interviews with officers who monitor and supervise the urban agricultural activities resident in Bulawayo urban. Key management personnel involved in the Municipal Development Partnership East and Southern Africa were interviewed. Key informants identified were from the following organizations and associations:

1. Urban Agriculture (UA) Multi-stakeholder committee members
2. ZFU management
3. World Vision - Bulawayo Urban Agriculture Livelihood
4. AGRITEX
5. Municipality Councilors
6. Ministry of Women's Affairs (Appendix 6)

RESEARCH FINDINGS

Management of urban agriculture activities

The Engineering Services Department through its Town Planning branch managed AU activities and it is that planning department which coordinated a Multi Stakeholder Forum that managed urban agricultural activities in the City of Bulawayo. The Department of Housing monitored the cultivation areas through its Parks Section. The Multi Stakeholder forum comprised representatives of Bulawayo community such as, City Council personnel, Agritex personnel, Agribank, ZFU,

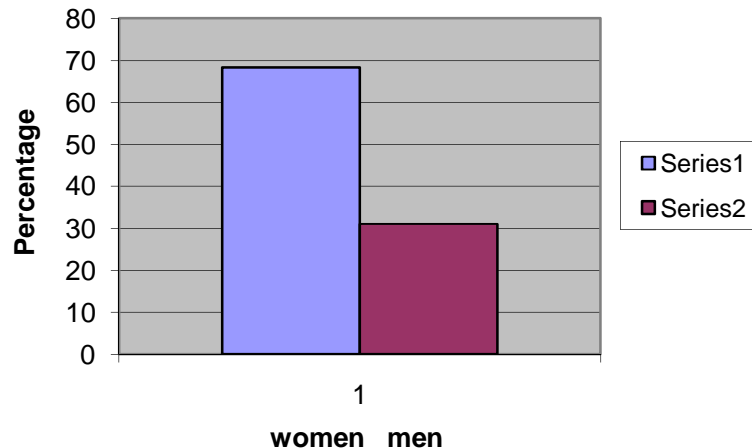


Figure 1. Gender division of labour.

Universities, non-governmental groups, Ward councilors, Zinwa, Local and Central government representatives. Although rules of operations for the Multi Stakeholder forum structure had been set, the operational structure was found wanting in coherence in as far as day to day running, supervision, monitoring and evaluation of UA activities was concerned.

Gender division of labor

From the questionnaires, it was found out that 68.3% of the respondents who were involved in urban agriculture were women whilst 31% are men as shown on the graph. 54% women stated that they made decisions on what should be planted in the garden, whilst 21% respondents argued that the family made the decision (Figure 1). The major tasks that were practiced by the women in urban agriculture included planting (65%), weeding (63%), watering (66%) and cultivation (69%) (Appendix 8). From the responses of the women, it was evident that agricultural activities are dominated by women, a view supported by other studies cited in Bulawayo UA Policy, van Veenhuizen (2006) and McFadden (1996). The fact that women were mainly involved in UA activities affected the crop choices to be grown in the garden. Women in Africa are traditionally viewed as being the ones responsible for providing and distributing food to the family. Women would thus opt to grow crops that enhance household food security than purchase food items for their family needs. As a result of this, crop choices from the most common to the least were as follows: green vegetables, grain crops, sweet potatoes, groundnuts/round nuts and beans. From the responses, 76.2% agreed that their agricultural activities had resulted in improved nutrition for their families, 4% were neutral and 7% disagreed.

On the other hand, it was noted that whilst men also did engage in agriculture, they preferred cattle ranching, sheep and goat rearing and poultry projects or any cash agricultural activities. In the western suburbs, in most

cases, men would be formally employed elsewhere whilst the woman practiced urban agriculture. In low density suburbs, men would be practicing agriculture as a full time activity. There was more emphasis on cash in the men's world. The researchers interviewed some of these men engaged in cooperative gardens. Whilst women in allotment gardens were happy that because of the support they were able to feed their families, men were dissatisfied with the size and level of production in their gardens. This is because of the traditional role of the man as the breadwinner of the household who has to pay rent and school fees for the children among other things. These agricultural activities men hope for are however, only practiced in areas where there is adequate land; in this case, the eastern suburbs (Appendix 3). Households with land between 500 to above 2000 m² are allowed by the City of Bulawayo by-laws to keep livestock. Less than 10% of the respondents stated that they keep livestock. In some cases, the men would point at some spaces and premises they had applied for, from the City Council to no avail. The AU officers interviewed informed the researchers that approval by council would depend on the type of project against the space available. Projects would be disapproved if they did not suit the available space and that was usually communicated to the applicant.

The other challenge that faced the men was the provision of garden security, guarding gardens from thieves who vandalized and stole their produce. Because of the traditional role stereotyping the task of providing security fell on the shoulders of the few men who were members of the cooperative gardens. Some of these men were complaining that the strain of guarding the gardens on a daily basis is affecting them negatively.

The marketing of the produce from the gardens is another task done by one involved in UA activities. As shown in the graphic above, 42% of the questionnaire respondents stated that they participated in urban agriculture in order to augment family income. 17% argued that they were unemployed as a result they participate in agriculture, 20.8% did it as a hobby and

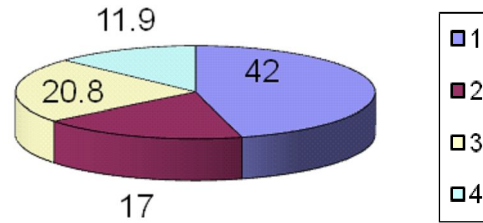


Figure 2. Purpose of agricultural activity. Key: 1. Participated in agriculture to augment family income. 2. Practiced agriculture because they are unemployed. 3. Hobby 4. Utilize an available support system.

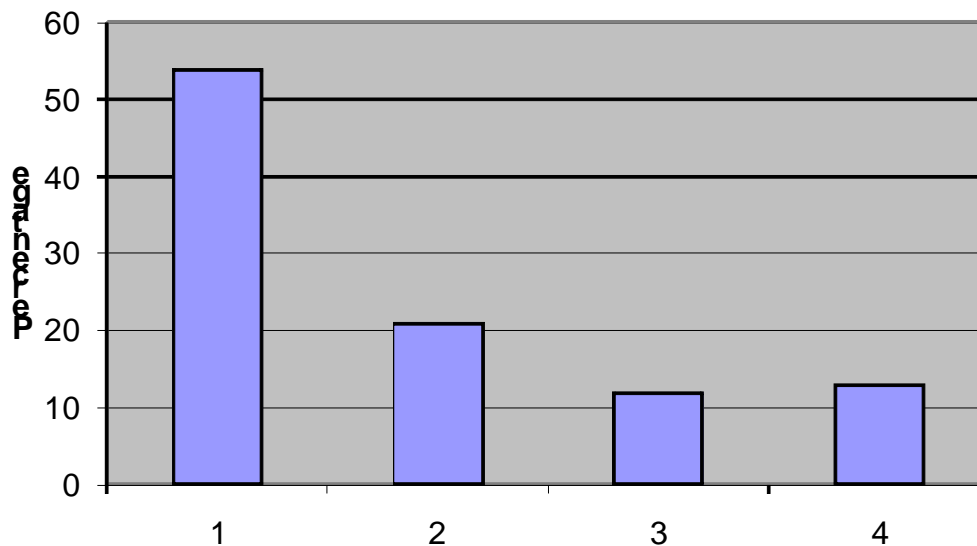


Figure 3. Decision making and distribution of benefits. 1 - Women; 2 - Husband and wife; 3 - Men; 4) No response.

11.9% to utilize an available support system (Figure 2).

A discussion with most farmers from Bulawayo high density areas revealed that they did not sell the produce they acquire from the cooperative gardens because they just get enough food for their consumption.

Farmers, whose gardens provided surplus produce, claimed that they had a ready market for their produce through other household members who bought for their daily consumption. Commercial farmers expressed a need for transport in the form of ZFU trucks so as to be able to carry their produce to the market. At the time the study was carried out, vendors traveled to the farms to purchase the farm produce for resale in town or individual farmers secured own transport for their produce. All the farmers were reluctant to estimate the amount of money they make per week. Women who were unemployed stated that they sold some of the agricultural produce and used the money to buy daily household requirements.

It should be noted, however, that urban farmers with adequate land and water earned a living through selling vegetables and keeping poultry. A certain lady who used to be a secondary school teacher left teaching and

started farming in her plot with the help of a gardener. She stated that every week she was able to sell vegetables worth \$150 000 per week (amount subject to inflation rates). The responsibility of supervising the gardener and selling the vegetables and chickens is done by the wife whilst the husband is employed elsewhere (Appendix 7).

Decision-making and distribution of benefits

Fifty five percent of the women respondents stated that they decided on what agricultural activities to be engaged in. Twenty one percent argued that both husband and wife consulted each other before making a joint decision. Only 12% stated that the man decided on what is grown in the urban agriculture (Figure 3). There are a number of factors that influence the decision making process. On one hand, single and widowed family members decided what to grow, when to grow it and whether to sell the produce and on the other hand those who were married and are living together joint decision making is an option

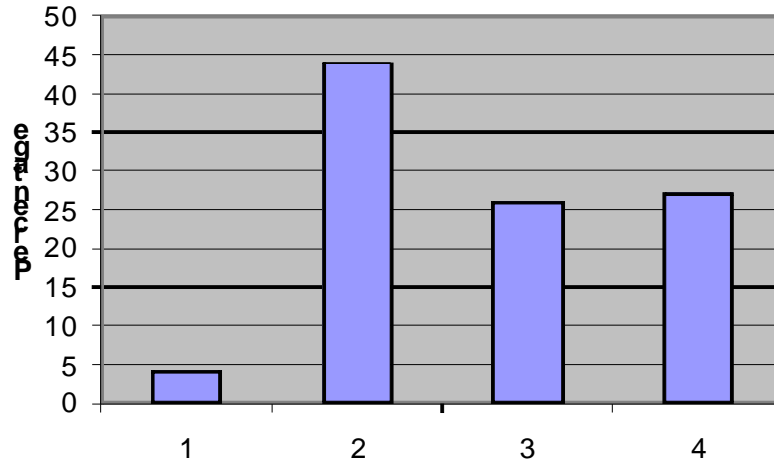


Figure 4. Decision on disposal of produce. 1 – Men; 2 – Women; 3 - Family; 4 - No response.

if there is adequate land to practice urban agriculture. Where there was between 0 and 360 m² of land, women grew vegetables on the limited land available. The farmers who practiced urban agriculture in the Eastern suburbs, in more than 500 to 2000 m² of land, decision making tended to be made jointly by husband and wife or by the husband. In one case, however the wife told researchers that the family had divided the farm into two parts so that the wife supervised one portion whilst the husband supervised the other. This would be a rare case of radical feminism or extreme traditionalism where no party was prepared to compromise. Specialization was the trend in the Eastern suburbs with men keen to grow crops that gave them cash income. Chomolier was grown in Western and Eastern suburbs partly because in order to increase production a farmer only needs to grow the shoots and they grew the same crop for security reasons.

For management purposes cooperative members, select the committee members who run the cooperative activities. What was observed was that there were a few women in the management committees. Women seemed to have accepted that men should lead them all the time. Most key informants in management positions expressed these sentiments. Dr Cynthia Chaibva expressed the need for more women to take up leadership positions in UA especially considering the high percentage of women practicing UA. A female member of the ZFU was heard saying; 'Lina bobabaelisikhokhelayo' (You men leading us). This was a sign of acceptance that men should lead. As a result, women would always be victims because any new development aimed at assisting the vulnerable groups, the development would be interpreted from the men's world. To be noted is the fact that the different wards selected the committee members who then worked as a team in deciding on the activities of the cooperative. Very few women were elected like the Bulawayo Branch ZFU vice chairperson and the Chairlady who was leading the Luveve Gum Urban project when the consultant visited the site on the 16 of October 2008 (Appendix 7).

Forty four percent of the farmers stated that their wife

decided on what to do with the produce whilst 26% stated that the family decided. 27% of the respondents did not answer this question as shown in the graph (Figure 4). There are a number of factors that are at play in decision making. Where the family produce was for consumption, the wife tended to decide on what would be consumed. In cases where the urban agricultural activity was done at a commercial level, the men tended to dominate the decision making process. The married women consult the husband before taking loans from the bank or any other source. In case where a loan had to be secured and collateral of title deed was required a joint decision by husband and wife is recommended.

Access and control over resources

Water

The success of any agricultural activity is based on the availability of adequate water supply. Of the 21 cooperative gardens that had been implemented in and around the Mzilikazi District, all of them had been sited where there are boreholes or adequate water supply. According to the 2002 census provincial profile of Bulawayo District, 97% of the households had their main source of water on their premises, while 3% had their main source of water within 500 m. It should however be noted that Bulawayo province stretches beyond the City of Bulawayo boundaries. One can therefore safely conclude that almost all residents in Bulawayo had access to water for their household usage. The major challenge however, is that the Bulawayo City Council had been facing serious problems of supplying drinking water to the residents. At the time of conducting the research water cuts were being experienced in some suburbs. Entumbane, Emakhandeni, part of Njube and Lobengula had not had water for two weeks. The Bulawayo City Council states that it may provide water for agricultural purposes only when water is available and the council

has means to do so [Statutory instrument of 2008]. As a result, the farmers would find themselves faced with the dilemma of either watering their plants or letting residents get water from the boreholes for drinking water.

At one meeting in ward 12 the issue was raised by residents who were experiencing water cuts and the meeting resolved that souls could not perish at the expense of vegetables. This meant that gardeners could only water their gardens when everyone who needed water for household consumption had been served. Backyard and front yard gardens had been seriously affected by the water shortage hence Mr. Masotsha in one of the interviews advocated for water harnessing at house hold level. "Pouring any drop of water that is to be thrown away, into a bucket, would lead to watering at least one bed of vegetables at the end of the day." he said.

City council garden allotments relied on reclaimed water. The manager of the Parks informed the consultants that the blockage of sewage pipes was making it difficult for the Council to process reclaimed water that could be used for urban agriculture. 55% of the respondents stated that their water was not adequate. Some of the gardens in Luveve and Old and New Lobengula withered due to poor water supply. Water supply could only be restored through the fixing of sewer stations and pipes and that is beyond the gardeners' power. At that moment all what residents could do was to report to their immediate City Council authorities and watch helplessly as their crops withered and perished. It was also observed as a sad fact that some residents were actually harnessing the flowing sewage water into their vacant space gardens to keep them wet. An old woman in Lobengula was found harvesting her sweet potatoes from such a garden to feed her aged husband and grandchildren oblivious of the health hazard. Education was thus needed because even where Bulawayo council provides partially treated water, the statutory instrument clearly states that such water would be for irrigation of non tuber vegetables and crops (Statutory Instrument Part IV 19 ii).

The boreholes used as water sources were drilled by Bulawayo City Council during the 1992 drought. The City Council merely sunk the bore holes without fitting the needed equipment to get the bore holes to be functional. The World Vision, through its Department of Water and Sanitation, fitted the equipment onto these bore holes in order to facilitate their Phase 1 programme of UA. In each water point, water-point user committees were identified and trained in order to facilitate day to day maintenance of the bore holes. In each water point, a borehole minder would also be identified. In case of serious problems, the bore hole minder would then notify the Department of Water and Sanitation through their councilor or through World Vision Personnel. This was all as a move to facilitate smooth running of these boreholes. However, theft has been experienced in some bore holes and major parts stolen as in the case in Luveve and Nketa 6. According to World Vision personnel the stolen parts could only be replaced after

close assessment. Where elements of negligence were detected, the parts would only be replaced after security measures had been put in place. This then got to be a challenge to gardeners who had to ensure that borehole security was provided. In cases where the few men took turns to guard these gardens, the men expressed the feeling that they were then tired and in cases where money contributions were made to hire personnel as guards the farmers felt that the contributions were then eating into their little sales.

The situation was however different in low density areas because a farmer can actually drill a borehole in his/her plot, farm or household. The issue of lack of capital to drill the bore holes was raised in a ZFU meeting and the vice chairperson, Mr. Masotsha informed the farmers about a scheme available to them to assist them drill bore holes. Farmers were encouraged to apply for the scheme through the ZFU office. Women farmers, however, raised the issue of lack of collateral in the form of title deeds as a hindrance to them as individuals. One resident in the western suburbs quizzed the City Council representatives as to why they were not allowed to drill bore holes in their yards too. The resident was referred to the Council by laws on bore holes and yard sizes. Water remains a major resource in urban agriculture and its non-availability affects the type and level of produce.

Inputs and chemicals

The major problem facing farmers was that seeds were not available and wherever they were available they would be sold at exorbitant prices. As a result, most farmers grew chomoliar. Farmers wished that organizations like ZFU, World Vision and the Council could provide them with inputs and seeds. Council and ZFU stated that they may only assist farmers acquire inputs and if assisted the farmer would be required to pay for the inputs. At the time the study was conducted, there were no seeds in the market thus it was difficult to measure both the Council's and the ZFU's commitment to their statements. At the ZFU meeting attended to on 17/10/08, registered farmers were asked to register their names towards sourcing of maize seeds. The researcher due to time limit was not able to make any follow up on the issue but it is hoped that farmers did get the seed they needed. Farmers under the World Vision Phase I scheme had been initially supplied with seeds to grow beans, carrots, tomatoes, rape and spinach. Farmers stated that this had gone a long way towards improving their family nutrition and health. The farmers were therefore requesting World Vision to continue supplying them with seed. According to the World Vision personnel, unavailability of seed in the local market was making the seed provision scheme difficult to meet (Appendix 6).

Land and finance

Land is another critical resource in urban agriculture.

Without land it would be impossible to produce food for the populace. 68% of the questionnaire respondents stated that they own the properties where they stay, whilst 25% stated that they rented. It is also critical for residents to have tenure of their property if they are to use it in accessing loans in the development of their agricultural activities. A number of property owners argued that they failed to access loans from the banks because they did not have collateral. In order to access loans from the Agricultural Development Bank the following requirements were to be met:

- i) Completed Reserve Bank application form
- ii) Proforma invoice /quotations (for capital expenditure and imports)
- iii) Cash flow projections for the tenor of the loan
- iv) Balance sheet for the past three years
- v) Letter of undertaking to supply a registered processor
- vi) Evidence that the farmer is a supplier to a registered processor
- vii) Letter of recommendation from a district Arex official.
- viii) Title Deed of your home
- ix) Photo-copy of the ID
- x) Operate a current account with Agri-Bank

The major challenge facing women is that they found it difficult to meet the requirements of the bank. Where the title deed of the house was in the name of the husband and where the husband is not keen to support the agricultural project it became difficult to implement the project. Of notable interest was the fact that some men vehemently felt that the woman had no authority over the farm as the property belonged to the man. This was observed where commercial farms were concerned but in allotment gardens the women participants informed the researchers that these were registered using the active participants' name and in most cases it was the women.

On the 21st of October 2008, the consultant met the farmers who have been allocated land for agricultural activities in the Gum plantation in Luveve. About 110 farmers assembled at the gum site. However, it was evident that the land that these farmers have been allocated is quite a long distance from the residential areas where these farmers live. All of these farmers had to walk long distances to get to the land site, Major challenges these farmers face are that their agricultural activities are at the mercy of domestic animals and thieves who steal their produce. The other challenge is scarcity of water. Ever since the project was initiated, it has been affected by the economic meltdown affecting the City of Bulawayo and Zimbabwe in general. The Bulawayo City official Mr Panesu explained that of the 15 gangs who had cleared the sewage pipes that got blocked only 3 gangs were still operational. The rest of the gangs have left City of Bulawayo employment. The key personnel in the Engineering department had also resigned leaving a depleted workforce who had failed to clear the clogged sewage system. Very little water was flowing to the sewerage works as a result very little reclaimed water was available for the farmers.

Knowledge and skills

33.7% of the questionnaire respondents agreed that they had sufficient knowledge of the chemical inputs they use in their gardens, 12.9% were neutral, and 41.6% disagreed. 29.8% agreed that they had attended an agricultural skills training course, 4% were neutral and 56.1% disagreed. This showed that most farmers lack the needed farm skills that would assist them improve their farm production. It was gathered from the discussions that some organizations like World Vision provided training sessions to farmers in their programmes. As a new development, the Department of Agricultural Technical and Extension Services [AGRITEX] of the Ministry of Agriculture posts officers into all the council wards. This came as a result of major cities Harare and Bulawayo being given metropolitan governance status in 2007. Prior to this development the City of Bulawayo was under Matabeleland North Province. Before this development, AGRITEX services were mainly directed to rural areas and peri-urban centres. However, at the time of carrying out the research not many interactions had occurred between the AGRITEX officers and the farmers. The officers interviewed were however aware of the challenges that lay ahead of them. The office was also aware that most of the farmers that they would be working with would be women. Its wish was that these women, especially the married, would have the confidence to stand up and face the agricultural challenges through full ownership of programmes and quest for knowledge. Most gardeners interviewed said they did not know that there was such an office at their service. It was surprising that 5.9% rated their produce as excellent, 19.8% very good, 34.7% good, 20.8% average, 3.0% below average and 1% poor. This was in contradiction with the claim by 72.3% that they still needed a community food provision scheme to augment their food supplies. This could be because of the limited level to which the agricultural activities are practiced (Appendix 8).

Differential needs, problems and opportunities

From the research findings, it was evident that men and women had different needs. As previously stated, men focused on cash whilst women's focus was on household nutrition. Because of that, it was observed that when the World Vision introduced its Phase II Programme, men's questions were directed towards the micro finance scheme whilst women's questions were directed towards community gardens and kitchens. This was in line with traditional roles both men and women are socialized into when they are young. As a result of the above, the skills requests and deficiencies varied according to gender. The majority of women farmers did not consider farming as a commercial activity. They viewed farming either as a hobby or as an activity to augment family income. Such perceptions need to be changed so that both men and women can practice urban agriculture as a commercial

activity. The role of the AGRITEX officers could be utilized to train farmers on more innovative ways of growing a variety of crops that could be sold or used in the provision of a nutritious diet for the family.

The next critical challenge facing the urban agriculture was security. Farmers argued that when their crops were maturing thieves break into their gardens and steal the vegetables. Apart from stealing the produce, thieves also stole the fence and borehole equipment. One of the gardens in Luveve had been abandoned because the equipment was vandalized and stolen. Men took it upon themselves to guard the places whilst women only wished something could be done to provide them with the needed security. It is unfortunate that some male cooperative members intimated that they wanted to abandon the project because they were tired of guarding the gardens on a daily basis. As a result of lack of security, it was stated earlier on in the document that farmers now preferred to grow chomoulier because of its ability to grow further shoots after having its leaves being stolen. One lady went to the extent of suggesting that the public should be educated on the correct way of plucking off vegetables with the hope that thieves would desist from removing the main shoot of the vegetable plant.

Shortage of inputs such as seeds, pesticides and chemicals has also affected the operations of farmers. Farmers were of the opinion that the reason why they grew chomoulier throughout their gardens was because they were unable to buy any other seed varieties.

CONCLUSIONS

Elderly women, widows and orphaned children face a lot of challenges in providing basics needs to the family. Since the majority are unemployed, they need to pay rents, pay electricity bills and buy food staff. The urban agricultural activities have empowered the women by providing them with cash that enables them to pay rates, electricity bills and buy food. Though the amount is not adequate, it is a starting point that helps these vulnerable members of society to survive.

RECOMMENDATIONS

In order for the City of Bulawayo to improve urban agriculture, there is need for a department or unit to be established that has full time staff whose main task would be to plan, organize, supervise and evaluate agricultural activities in the City. This department would in liaison with Multi-stakeholders be responsible for designing Agricultural policies. Structured and well streamlined policies would then ensure the formulation of a Bulawayo City Urban Agriculture gender policy to guide the City UA activities. The Municipal Development Partnership East and Southern Africa (MDPESA) will provide support to their farmers (women in particular) by financing water projects so that farmers could provide plenty of agricultural products to the Bulawayo residents. There is

need to monitor accessibility of finance to women by financial institutions so that women friendly agricultural financial support schemes are put in place.

These financial institutions will then provide inputs that are militating against agriculture in general and women agriculture in particular. Financial schemes that would assist women to access seeds, fertilizers, insecticides and other agricultural inputs would be put in place. Without inputs it is very difficult for farmers to develop their skills in urban agriculture. Urban farmers should be trained in preparing their own seeds, so that the shortage of seeds can be translated into an opportunity. Instead of using chemicals in controlling aphids and other diseases, farmers could be trained in using organic means of farming in the control of aphids.

Though some women have been chosen to take leadership positions in urban agriculture, there is need for training in management and leadership skills so that the elected women are confident to administer and manage urban agriculture activities. More women need to be elected to higher management positions. If more women are appointed it would be possible for them to influence the formulation of urban agricultural policies. Stereotypes of the traditional role of women are still prevalent in society. The established units would ensure that schools, media and churches instill values of equality between sexes concerning agricultural activities.

There is need to educate women in the diversity in the farm projects so that both water and food nutrition challenges are met. It is gratifying that in the light of the challenges facing the farmers in the Luveve Gum project, management and the cooperative committee are working together to start other projects that do not require a lot of water. Such projects include mushroom farming and bee keeping. Although the project is still in its infant stage it is a step in the right direction. Farmers could also be trained in the use of drip irrigation so that they could utilize the little water they have for their benefit.

Another critical challenge facing the urban agriculture is security. Farmers argued that when their crops are maturing thieves break into their gardens and steal the vegetables. Apart from stealing the produce, thieves also steal the fence and borehole equipment. One of the gardens in Luveve has been abandoned because the equipment was vandalized and stolen. There is need to educate farmers to view the projects they are involved in as their own rather than expect the City of Bulawayo to be responsible for the upkeep of their gardens. Where farmers own the project they are involved in, the members would come up with creative ways of safeguarding their garden produce.

It is unfortunate that some male cooperative members intimated that they wanted to abandon the project because they were tired of guarding the gardens on a daily basis. There is need to liaise with Agritex officers so that the expertise from Agritex officers is utilized to train farmers on more innovative ways of growing a variety of crops that could be sold or used in the provision of a nutritious diet for the family. The majority of women farmers do not consider farming as a commercial activity.

They view farming either as a hobby or as an activity to augment family income. Such perceptions through education and training could be changed so that both men and women can practice urban agriculture as a commercial activity.

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APPENDIX**FOOD SECURITY DEVELOPMENT AND WOMEN EMPOWERMENT: A GENDER SURVEY IN BULAWAYO URBAN AGRICULTURE IN 2008****Introduction**

This is a questionnaire of a gender survey in Bulawayo whose objective is to determine the role women play in urban agriculture and to what extent food security has been developed. Your responses will be kept in the strictest confidence and will only be used for this research.

QUESTIONNAIRE FOR HOUSEHOLD OWNERS

1. Gender Male Age
 Female

2. Residential area

3. Status of the household

Owned
 Rented
 Leased

4. Employment status

Employed
 Self employed
 Unemployed

5. Size of residential area

0 - 200 m²
 201 - 300 m²
 401 - 500 m²
 501 – 1000 m²
 1001 - 2000m²
 Above 2000 m²

6. Number of people in household

Adults
 Children

7. How long have you lived in this household? _____

8. What is your special skill in the agricultural activity practiced?

9. Agricultural activities practiced at my family property (Tick all the agricultural activities you are doing)

Fruit growing	<input type="checkbox"/>
Flowers	<input type="checkbox"/>
Grain crops	<input type="checkbox"/>
Sweet potatoes	<input type="checkbox"/>
Mushroom	<input type="checkbox"/>
Groundnuts and round nuts	<input type="checkbox"/>

Cassava	
Jatrofa	
Beans Sunflower	
Fodder production	
Green vegetables	
Cattle rearing	
Dairy farming	
Sheep and goats	
Horse farming	
Poultry for eggs and meat	
Fishery	
Piggery	
Bee keeping	

10. Who decides on what agricultural activities to be engaged in?

Husband
 Wife

11. I practice these agricultural activities:

As a hobby because I am unemployed
 To augment family income
 To utilize the available support system
 Identify the support system.

12. I practice these agricultural activities at:

My backyard
 Plot municipal
 Vacant pieces of land
 Front yard
 Any comment on the location of agricultural activities...

13. Who decides what to do with the produce?

14. The cash income is

Banked
 Invested
 Converted to household use

15. How would you rate your produce?

Excellent
 Very good
 Good
 Average
 Below average
 Poor

Tick the appropriate response

SA - Strongly agree, A - Agree, N - Neutral, D – Disagreed, SD - Strongly disagree

	SA	A	N	D	SD
16. The City Council is supportive of women groups in accessing land for agricultural purposes					

17. My spouse is supportive of my agricultural activities					
18. I still need a community food provision scheme to augment my food supplies					
19. I have employees in the garden/plot /garden					
20. In my garden/plot/farm women perform administrative tasks.					
21. I am a member of a cooperative					
22. I am a member of a women's club					
23. Political groups provide the needed equipment for UA activities					
24. I have sufficient knowledge of chemical inputs I use in the agricultural plot/garden					
25. In purchasing the chemicals inputs I rely on family income					
26. In purchasing the chemicals inputs I rely on credit					
27. My water source is reliable					
28. I have attended an agricultural skills training course					
29. My agricultural activities have improved my food security					
30. My agricultural activities have resulted in improved nutrition for my family					
30. My agricultural activities have resulted in improved nutrition for my family					
31. Due to my agricultural activities I now get useful herbs from my garden					
32. I always have ready market for my produce					
33. The press has encouraging comments on women in urban agriculture					
34. My religion supports women in urban agriculture					
35. Schools educate women towards urban agricultural activities					
36. The cultural inheritance laws do not make me a secure land owner					
37. Other means that I use to supplement family income:					
Trading food surpluses					
Dress making					
Peanut butter making					
Hiring out technical equipment					
Construction services					
Any other					

38. The post that I hold in the agricultural club is:

Chairperson

Vice Chairperson

Vice treasurer

Secretary

Member

39. Complete the table below showing your agricultural activities during the year

Season	Activities
Summer	December - February
Autumn	March - May
Winter	June- August
Spring	September -November

40. Which of these roles are mainly performed by women in your plot/farm/household?

- a Weeding
- a Watering

- Q Cleaning
- a Planting
- Q Cultivation
- Q Other, Specify.....

41 I consider my agricultural schedule

Light

Strenuous

Time consuming

42. Specify any training or development plans you need to improve your performance in your agricultural practice.

43. Any additional comments