

# Case study on health-promoting urban food systems in Chegutu



## Background

A number of initiatives promoting healthy urban food systems are underway in urban areas of Zimbabwe, but these promising approaches are not always systematically documented, known and shared to support exchange and learning. To address this, the Urban Councils Association of Zimbabwe in association with the Training and Research Support Centre in EQUINET, with review input from Ministry of Health and Child Care (MoHCC) is implementing work in 2022-23 to gather and share evidence on initiatives underway in Zimbabwean cities/towns to promote healthy food systems to share and promote uptake of promising practice through UCAZ in Zimbabwe and through EQUINET in east and southern Africa. Chegutu is one of the urban case studies, using a collectively developed shared framework.

## Chegutu context for urban food systems

Chegutu Municipality in Mashonaland West Province is connected by road and railway networks to cities in Zimbabwe, including Chinoyi, the provincial capital, and to cities in neighbouring countries. The municipality has a 2022 population of 66 258 rising from 50 590 in 2002, 47% of whom are male and 53% female (Zimstat, 2022). Chegutu town has no informal settlements, with all areas formally planned. There are seasonal rains between October and April, supporting urban agriculture, and the town has agricultural and mining activities in the peri-urban area. In 2020, the average level of income in Chegutu Urban was only 54% of the national Total Consumption Poverty Line (ZIMVAC, 2020). Two percent (2%) of households in urban Chegutu were food insecure in 2019 (ZIMVAC, 2019), and 12% of households had at least one person with chronic illness including HIV and AIDS, cancer, high blood pressure, diabetes and asthma (ZIMVAC, 2019).



Chegutu in Zimbabwe  
GISGeography Under CC

## Urban food systems in Chegutu

Zimbabwe Vulnerability Assessment Committee (ZIMVAC) reports between 2018 and 2021 have shown that the urban population is becoming more vulnerable and food insecure, raising attention to urban nutrition after a previous focus on rural areas (ZIMVAC 2018; 2019; 2020). In 2018, nearly half (49%) of Chegutu's urban population was food insecure, compared to the national urban average of 37%, and compared to 31% in 2016 (ZIMVAC, 2018). The situation was worsened by the impact of COVID-19, with lockdowns and interrupted economic activities undermining urban household access food and basic services. In 2020, 42% of urban households in Zimbabwe were reported to be unable to meet their cereal requirements, compared to 30% in 2019 (Njanike, 2021).

Produced March 2023. Written by Shyllette Dzivai, Director Health, Housing and Community Services, Innocent Jenje, Environment Health Officer, and Kenias Salima, Acting Community Services Officer Chegutu Municipality, with guidance, peer review and technical edit from Dr. R Loewenson, Mr. A Kadungure, TARSC; Mr T Machinda, UCAZ and Mr V Nyamandi, Ministry of Health and Child Care (MoHCC). This case study would not have been a success without the support of various stakeholders. Special mention goes to Shasha Community Group for making time for interviews and showcasing their projects. WHH is recognized for their financial support for the two livelihood projects and for reports sharing insight on the activities. The authors thank the District Development Coordinator for gathering line ministries of Women Affairs, Community, Small and Medium Enterprise Development, AGRITEX, Social Development and Veterinary Services for technical support.

## Chegutu Municipality

with Urban Councils Association of Zimbabwe (UCAZ), and Training and Research Support Centre (TARSC)



in the Regional network for Equity in health in east and southern Africa (EQUINET)



Government, local authorities and development partners in urban areas were thus tasked to enhance urban household resilience and livelihoods (ZIMVAC, 2020). In response to these trends and the impact of the COVID-19 pandemic, Welthungerhilfe (WHH) in partnership with World Food Program implemented an Urban Social Assistance Project to support access to food in vulnerable households in urban Chegutu between August 2020 and April 2021. WHH is a German non-profit organization specializing in water, sanitation, agriculture, and other development interventions. It has been implementing projects in Zimbabwe from the 1980s, then under the name German Agro-Action. WHH have been involved in Chegutu since 2008, initially with water, sanitation and hygiene projects in response to the cholera outbreak. In 2020, an Urban Social Assistance Project provided cash transfers through e-vouchers that beneficiaries redeemed at selected retailers in Chegutu for food and non-food items. Twelve thousand beneficiaries from the six most vulnerable high density wards in Chegutu were provided with USD12 /month per beneficiary in each involved household.

Towards the end of the Urban Social Assistance Project, and noting the trends in urban food insecurity and other shocks and stresses, the World Food Program through the Municipality of Chegutu and WHH initiated an Urban Resilience Building Program in November 2021 to provide 1950 households from across three wards of Chegutu (4,7 and 9 ) equitable access to community- managed assets, in the form of small livestock such as chickens and rabbits, savings and other inputs for improved livelihoods. The households were selected from those that had received cash transfers in the earlier programme, chosen for vulnerabilities as child- headed, poor households or those with elderly, chronically ill members, or with people living with HIV and AIDS or with disabilities. The wards were selected during an inception workshop in Chegutu in 2021 involving Chegutu Municipality, Chegutu Rural District Council and Norton Town Council, and their District Development Committee and Drought Relief Committee members, including different government departments at district level, viz: Agricultural, technical and extension services (Agritex), Veterinary field services, the District Development Coordinator's office, Department of Social Development , MoHCC, Office of the President, Zimbabwe Republic Police, Ministry of Women Affairs, Community, Small and Medium Enterprise Development, and the Rural Infrastructure Development Agency. The workshop shared plans for the new programme with stakeholders, and selected the wards for the interventions. This case study describes work implemented on food systems in the city, some of which has been implemented as a result of this programme.

## **Promoting food security, food safety and control of ultra-processed foods**

Households involved in the Urban Resilience Building Program were capacitated with startup and skills training in sustainable livelihood value chains in agriculture and nutrition, water and sanitation, and in financial literacy and social protection. The training also included preventing and responding to gender-based violence and emergency-related risks. Two areas of food systems, poultry production and peanut butter processing, implemented by the Shasha Community Group are detailed in this case study, although other projects involving hydroponics, poultry layers/egg production, mushroom production and rabbitry that promote food security were also implemented.

The Shasha Community Group based in ward 9 was formed in March 2022 with 16 members implementing for the first time various initiatives under the Urban Resilience Building Program, including poultry, peanut butter making and mushroom growing, in a co-operation with WHH support. The poultry group, initially comprised of 12 members (1 man and 11 women) now has 10 members (1 man and 9 women), with two women having relocated away from the wards. The peanut butter processing group has 3 members.

Both poultry rearing and peanut butter processing involve food handling, and thus involve the Public Health Section of Chegutu Municipality to ensure that they implement measures and comply with legal standards relating to food safety.

The members of the poultry and peanut butter making sub-groups under Shasha Community Group were all trained in safe food handling procedures by the Environment Health Practitioners of the local authority, so that they appreciate critical hazard points where their food can be contaminated during processing. They were also inducted on basic hygiene procedures that eliminate food contamination during processing. The members are thus aware of the behaviors and practices that must be avoided to keep the food safe. During the training the members were also trained on symptoms of infectious diseases that may affect food safety or be transmitted by food handlers, and to voluntarily avoid handling food when suffering from an infectious condition that may be transmitted through food.



Shasha Poultry Group women holding 5 week-old chickens almost ready for the market. K Salima 2023

As required in the Foods and Food Standards Act (CAP 15:04) and the Public Health Act (CAP 15:17), and regulated in the Public Health Act (Medical Examination Order) (SI 141, 1998), food handlers in the Shasha Community Group are medically examined annually, and have valid medical certificates to show when at work.

In the peanut butter project, members buy peanuts from the local Gomba fruit and vegetable market in Chegutu. The market is supplied with wholesale produce by farmers from nearby areas like Murombezi and Msengezi. The peanuts are processed into peanut butter and the product is currently sold in the local market in Chegutu. The community group also processes peanut butter for local residents, who bring in their own peanuts, and the group charges a processing fee for this. The processed peanut butter is an important contributor to healthy diets, and used in traditional and modern food preparations. A table spoon of peanut butter, equivalent to 16gms in a single serving has sodium, carbohydrates, saturated fats, protein, sugar, calcium, iron and potassium (Nutrition Value Organisation, 2023). Peanut butter is a high energy food that also helps to support energy needs in child nutrition.

Processing of peanut butter does involve the addition of salt. Such food fortification is regulated in Zimbabwe by the Food Fortification Regulation (SI 120, 2016). In this case, salt satisfactorily fortified with iodine is used in the peanut butter to prevent the occurrence of iodine deficiency. The Municipal Public Health Section thus offers free iodide testing services to ensure that the salt used in the peanut butter processing has been satisfactorily fortified with iodine, as required by law, protecting consumers from iodine deficiency disorders like goiter.



The machinery used in the peanut butter processing is both electrical and manual. The group initially had three electric power driven machines, but the ongoing national electricity load-shedding affected production of the peanut butter. Noting this challenge, the group procured two further manual machines for their project that do not require electricity.

As a further positive feature, all five machines used by the group were manufactured locally in the Chegutu Home Industrial area. This has enabled servicing and repairs of the machinery and has enabled a consistent supply of the peanut butter as a contribution to nutrition promotion in Chegutu. The Shasha project has thus emerged as an important player in ensuring a healthy, nutritious diet for the Chegutu community.



Peanut butter making machine. I. Jenje 2023

As for other food safety sampling, samples of the peanut butter are taken by environmental health officers in Chegutu. The samples are sent to the Government Analyst Laboratory to check on quality, with bacteriological analysis implemented to check for possibilities of contamination during processing. Surface swabs are also obtained by the local authority from the utensils used for dressing chickens, and these too are sent for analysis at the Government Analyst Laboratory.

There is further work to be done to promote food safety. Further tests need to be done to ascertain whether the processing has affected the nutritional value of the peanut butter, but these tests are yet to be routinely implemented. Four samples collected for bacteriological analysis in 2021 were sent for this analysis and found to be satisfactory, but this is not implemented as often as needed due to the costs of such testing. Funds permitting, the local authority also sees a need to analyze aflatoxins in the nuts processed for the peanut butter.

## Urban agriculture in Chegutu

As a result of economic hardships, a range of interventions have been initiated to support urban agriculture as a contribution to urban livelihoods.

Fifty beneficiaries of the previous urban assistance program were selected with a bias to include those who are most disadvantaged, triangulating data on potential beneficiaries from a WHH enumeration exercise and evidence from community based health workers, from the government Social Development department and the local authority database. Those included were put in groups of 8, 10, 15 or more members, and each group received a one-off starter pack comprising of 50 broiler chicks, 25kg broiler starter mash, 75kg grower crumbs and 75kg finisher crumbs, as well as sufficient veterinary medicines to support the health of the chicks through to 6 weeks, when they are ready for sale. WHH funded the project in its initial stage, but the group is now self-financing all its operations from the income it makes from sales. To support the business operations, the groups were also given training in business entrepreneurship and in technologies like hydroponics and aquaponics, as well as in social protection services, disaster risk management and in gender awareness in the Gender Action Learning Action System.

Shasha Community group has done exceptionally well in this process. To date the group has produced twelve batches of chickens. Production has increased from 100 to 150 birds per batch. The group is now self-sustaining, and has continued to purchase their own inputs after WHH funding ended in October 2022. Shasha currently sells their produce at Chegutu shopping center, in surrounding wards, butcheries and to individuals for home consumption, at a price of US\$6 per bird.

The program has a range of economic and social linkages. Members are involved in 'mukando', a revolving round-table loan scheme where members group together and contribute equal amounts of money. This provides funds for agreed loans to members to boost their earnings.

The group has also created business opportunities, employment and new income sources for other members in the community, especially those with less capital. Some of the customers of the group buy the chickens, and then slaughter and pack them in smaller units to sell at affordable cost to residents. The group also supports products used in the supply chain, boosting businesses of producers of feed and other inputs noted above. Local poultry shops in the town have been the main suppliers of the chicks, feed and chemicals used, obtaining these from weekly deliveries from Harare, the capital city. The economic benefit further contributes to nutrition and social status.

Repackaging of slaughtered chickens raises issues for the local authority to monitor how the chickens are slaughtered and packaged. The Food Labelling Regulations 2002 require specific information on all food packaging materials, including their nutritional value. Further work is thus needed to invest in and assure this for all the downstream activities generated by the poultry rearing.



Shasha Poultry Group day old chicks brooding. K Salima 2023



Only male member in Shasha Poutry Group indicating the chicken cage. K.Salima 2023



To support hygienic and safe marketing of products, including by beneficiaries of the programme, a market shed was built at Pfulajena that houses fifty traders. The Pfulajena market was designed and approved by the Chegutu local authority town planning section. Environment Health Practitioners from the local authority inspected water, sanitation and hygiene facilities met standards before occupation. The market is located where there is a piped water supply, and it has public toilets that were rehabilitated by WHH.



WHH funded Pfulajena market under construction in 2022. D. Murambadoro 2022

Despite these initiatives a number of challenges remain. Ongoing power cuts have forced the Shasha Community Group to sell live chickens at existing open markets, such as the open poultry market. Slaughtered and processed produce is sold in unlabeled packages, as noted earlier. Storage is mostly by refrigeration, roasting or salting until preserved, as methods that the community, including young people can implement. However, this too needs to be done in a manner that complies with legal standards. With the current load-shedding, the chickens are mostly sold alive to avoid losses from failure of refrigeration. There has been minimum intervention from the local authority in monitoring slaughtering and packaging, and this raises concerns on hygiene and possibilities of food poisoning. While the members involved in poultry-rearing have received the same food handling, safety and hygiene training as those in the peanut butter making group, their home-based operation makes monitoring and enforcement less easy. Formalizing such home-based businesses would make enforcement easier and enhance food safety. As a further response, the local authority has a plan to ensure that members engage the community group for certification of the product when they slaughter poultry.

## Other aspects of Chegutu's urban food system

Chegutu's urban food system includes numerous fruit, vegetable and traditional food markets. These played an important role during the COVID-19 pandemic, as they provided accessible sources of food, even when supply chains for commercial foods were interrupted by restrictions on cross-border and other movements. Markets were allowed to operate, and farmers from nearby rural areas like Msengezi and Murombedzi brought their produce into Chegutu.

During the lockdowns imposed in the COVID-19 pandemic, people also had ample time for home gardening, further increasing urban agriculture in backyards and enhancing food supply.



Food market in Chegutu. K.Salima 2023

Inspections are routinely carried out of food markets in registered businesses. Expired products or those identified as unsafe, including due to refrigeration failures, are condemned, removed from sale and disposed of in line with the law. However, the local authority faces a challenge in controlling food safety of fresh and processed foods imported from outside the country. Further, much food vending takes place in informal settings and activities, making standards difficult to enforce. Informal and small-scale retailers may repackage products into affordable small packs. While this enables access by low income consumers, it also poses the risk of unlabeled products that have no guide for consumers on ingredients, expiry dates or nutritional content.

## Dialogue and co-production in the food system

Chegutu District, covering Chegutu urban and rural councils and Norton Town Council are co-ordinated through the District Development Office and Coordinator, with key stakeholders co-ordinating through the District Development Committee. Various other mechanisms exist for dialogue and co-ordination on food related issues, including the Chegutu District Drought Relief Committee and the Food and Nutrition Subcommittee. These committees meet when necessary, such as in response to new initiatives and partners; clinic reports of increased malnutrition or other food related disease; or when there are communities in food distress that require intervention. The Food and Nutrition Subcommittee is also activated by food insufficiency in the district. Specific initiatives such as that by WHH submit monthly reports to stakeholders, with quarterly review meetings held physically to brief on and improve programming.

For the initiatives in this case study, joint monitoring visits were conducted with key stakeholders, including WHH staff, Agritex, government sectors noted earlier at district level, Chegutu Municipality and MoHCC. The monitoring was conducted to lever appreciation and support from district stakeholders of the interventions and their progress, and to provide collective feedback on areas for improvement. Direct involvement of stakeholders and ministries was also seen as important for sustainability of interventions relevant to their area of work. The monitoring visits assessed adherence to project guidelines, and reviewed skills development, gender balance, changes in economic status, viability and sustainability issues, and learned about challenges faced.

## Enablers and challenges

The local authority's community services and environmental health section, Agritex, Veterinary Services, Women and Youth affairs ministries have provided 'on-the-ground' capacities, technical and moral support for activities in the town's food system. Funding from WHH and partners, such as for starter kits for the poultry projects and building materials for market construction, have been important enablers of activities, as has been the income generated from activities enabling more sustained self-financing. Community members have themselves been enthusiastic contributors to the changes, and with relevant training have managed to generate significant improvements in the food system and in livelihoods.

District level coordination of partner activities has enhanced teamwork and minimized implementation problems, as challenges are openly discussed and solutions proffered with view to see the success of the programme. Monitoring and reporting of interventions has built shared understanding and enabled easier management of initiatives.

There are also challenges and constraints. The local authority has only three environment health practitioners for a town with 12 wards, compared to rural areas that have one per ward, and while trained they are insufficient to meet the demand. There is only one community services officer, implying an extremely high workload, and there is need for three more social workers to meet the social demand in the urban area. Staff shortages affect the ability to ensure continuous inspection, monitoring and support for community groups, exacerbated when there is an absence of clear policy at council level, such as on urban agriculture.

Home-based chicken slaughtering is an area that needs attention, with the shift from domestic consumption to supply through butcheries to the public calling for improved food quality monitoring. Through the UCAZ directors forum and health and housing forum there have been exchange visits and tours of projects, to share experiences and learn promising practices, to provide technical options to address challenges. It would also be useful for direct exchanges across small-scale poultry producers to help improve their businesses.

Peanut butter processing faces challenges in access to equipment like industrial roasters and packaging machines. There are plans to reinvest proceeds from that project into buying such equipment, but the initiative has to date mainly focused on offering processing services to clients who bring in own peanuts, given financial constraints. Council has a policy to incubate hubs for emergent small businesses, such as one provided in a Chegutu home industry area, commonly known as 'Durawall'. However, this has not realized the intended results as the emergent businesses seem to have become permanent shops, and the model needs review. There are also constraints in land availability for urban agriculture and food processing activities such as those described in this case study. A lack of operating space has, for example, been a barrier to expansion of fowl runs or cages. Organising activities as a group has helped to respond to this, with individuals with more space providing land for chicken runs/cages, and others providing labour on a rotational basis. Changing pricing as a result of wider economic shifts in market rates and limited availability of chicks has further meant cancelling orders and reengaging for better prices and timely deliveries.

## Future plans

The changing urban environment, trends in food insecurity, and activities such as poultry-rearing now representing a major source of incomes and livelihoods in the town, call for the local authority to have an urban agriculture policy and to review related policies. Council planning offices need, for example, to provide for agro-residential plots that can accommodate groups operating in backyards with capacity to expand, like Shasha Community Group. Intensified food quality monitoring calls for more environment health practitioners to be recruited by the local authority, or seconded by the District Environment Health Office. The demand and the potential for intervention noted in this case study calls for a dedicated budget for urban food systems, including for food quality monitoring and analysis by external laboratories, and for routine checks and support of activities.

## References

1. Government of Zimbabwe (1998) Public Health Act (Medical Examination Order) SI 141, Govt Printers, Harare.
2. Government of Zimbabwe. (2001). Foods and Food Standards Act (CAP 15:04). Govt Printer, Harare.
3. Government of Zimbabwe (2002) Food Labelling Regulations, Govt Printers, Harare.
4. Government of Zimbabwe (2016) Food Fortification Regulations, SI 120, Govt Printers, Harare.
5. Government of Zimbabwe (2018). Public Health Act (CAP 15:17). Government (Govt) Printer, Harare.
6. Njanike N. (2021) ZIMVAC: 2 Million Urban Dwellers Struggle for Basic Food. New Zimbabwe, online. At: New Zimbabwe-<https://www.newzimbabwe.com/zimvac-2-millions-urban-dwellers-struggle-for-basic-food/> (accessed 02/03/23)
7. Nutrition Value Organisation (2023)-<https://www.nutritionvalue.org/Peanut>
8. Urban Councils Association Of Zimbabwe (UCAZ) (2019), Local Government Investment Conference (Logic) Profile For Chegutu Municipality. UCAZ, Harare. At: <https://ucaz.org.zw/members/municipality-of-chegutu/> (accessed 02/03/23)
9. Zimbabwe Statistical Agency (ZIMSTAT) (2022), 2022 Population and Housing Census Preliminary Report on Population Figures. Zimstat, Harare
10. Zimbabwe Vulnerability Assessment Committee (ZIMVAC) (2018) Urban Livelihoods Assessment Report, Food and Nutrition Council, Harare. At: Zimbabwe -<https://fnc.org.zw/wp-content/uploads/2019/01/2018-ZimVAC-Urban-Livelihoods-Assessment-Report-1.pdf> (accessed 02/03/23)
11. ZIMVAC (2019) Urban Livelihoods Assessment Report, Food and Nutrition Council, Harare. At: Zimbabwe-<https://fnc.org.zw/wp-content/uploads/2019/12/ZimVAC-2019-Urban-Livelihoods-Assessment-Report.pdf> (accessed 02/03/23)
12. ZIMVAC (2020) Urban Livelihoods Assessment Report, Food and Nutrition Council Zimbabwe, ZIMVAC, Harare. At: <https://fscluster.org/zimbabwe/document/2020-zimbabwe-vulnerability-assessment> (accessed 02/03/23)