

Community Technology Development Organisation

2023
ANNUAL
REPORT

CELEBRATING YEAR OF THE MILLETS

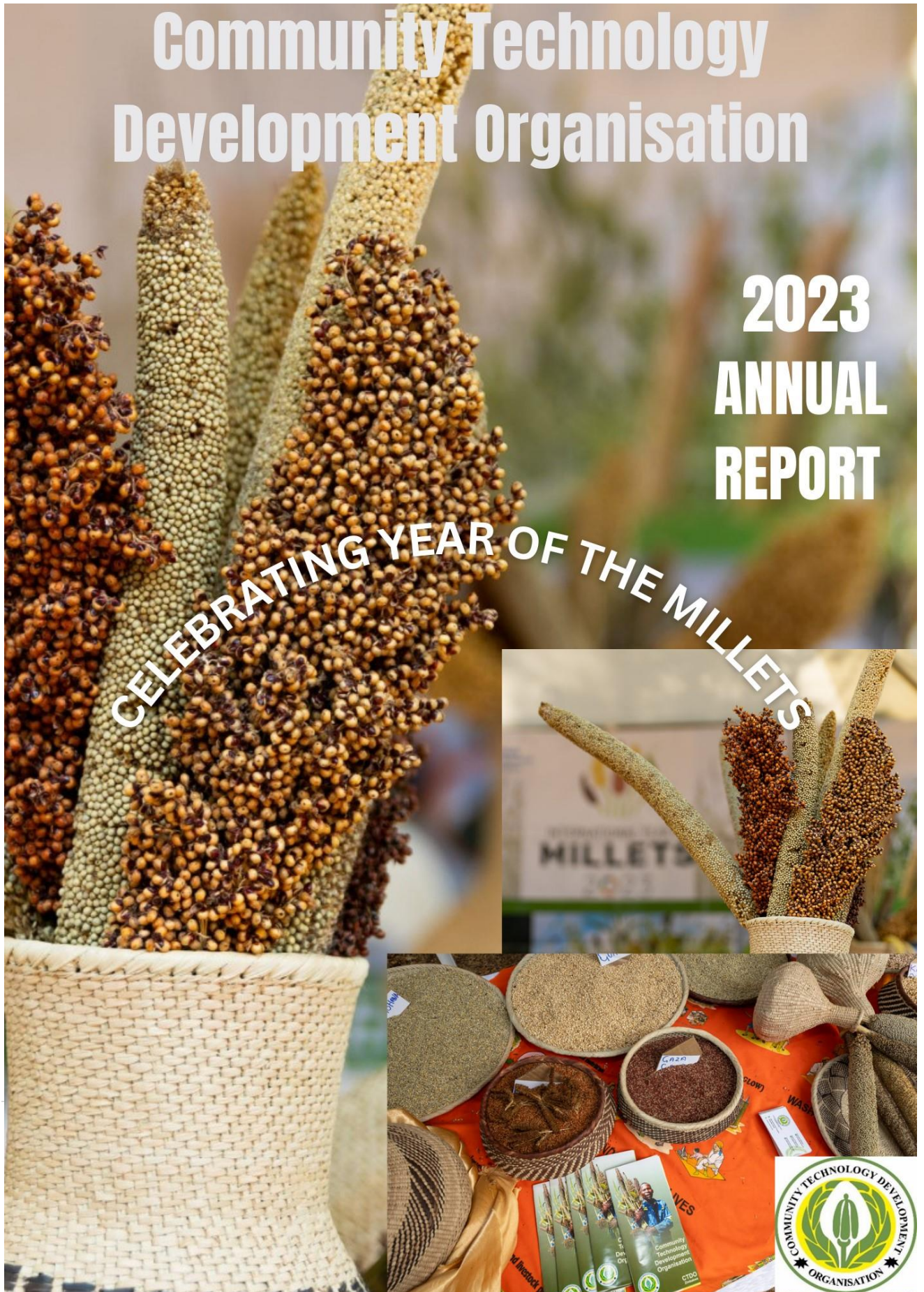


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ACRONYMS

ARDAS	Agricultural and Rural Development Advisory Services
ANCP-CLRB	Australian NGO Cooperation Project-Community Livelihoods Resilience Building
BMZ-IT	Digital Innovations for Zero Hunger
BMZ-MANA	Multisectoral Approach Towards Nutrition Adaptation
BOLD	Biodiversity for Opportunities, Livelihoods and Development
BVIP	Blair Ventilated Improved Pit
CCASE	Climate Change Adaptation and Sustainable Energy
CSB	Community Seed Bank
CSO	Civil Society Organisation
DDF	District Development Fund
DSL-IP	Dryland Sustainable Landscape Impact
ELINA	Enhanced Livelihoods Towards Nutrition Adaptation
EFASS	Ecological Farming and Small-scale mechanisation
ERASE	Enhanced Resilience, Adaptation to Shocks and Economic Strengthening
FiBL	The Research Institute of Organic Agriculture
FFA	Food for Assets
FFS	Farmer Field School
ICRISAT	International Crop Research Institute for the Semi-Arid Tropics
IGA	Income Generating Activities
ISALS	Income Savings and Lending Scheme
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
MASAP	Market and Seeds Access



MLAFWRD	Ministry of Lands, Agriculture, Fisheries, Water and Rural Development
OKACOM	Okavango River Basin Water Commission
RDC	Rural District Council
SD=HS	Sowing Diversity = Harvesting Security
SEFF	Seed For the Future
SIWI	Stockholm International Water Institute
TIARA	Transforming Investments in African Rainfed Agriculture
WHH	Welthunger Helf
ZAMCON	Zambezi Watercourse Commission
ZAMTEC	Zambezi Watercourse Commission Technical Committee
ZECOAI	Zimbabwe Ecological Organic Agriculture Initiative
ZVBP	Zambezi Valley Biodiversity Project



MESSAGE FROM THE CHAIRPERSON

DR D GARWE

The economic environment remained volatile and unpredictable in 2023 and this brought suffering to our communities. However, the Community Technology Development Organisation (CTDO) family was able to mobilise resources to support and respond to the needs of the small holder farmers (SHF).

Despite the challenging environment, CTDO still had a reason to celebrate several achievements at national, regional, and international levels.

The organisation, in partnership with the Ministry of Lands, Agriculture, Fisheries, Water and Rural Development and FAO successfully organized a series of events in Zimbabwe to celebrate the International Year of the Millet (IYM). The IYM raised awareness and direct policy attention to the nutrition and health benefits of millets and their suitability for cultivation under adverse and changing climatic conditions.

It was also a fruitful year for our organisation since we managed to influence national policy through carrying out an Agricultural Colleges curriculum review. CTDO developed and updated modules that address the real priority needs for sustainable and profitable agricultural production in Zimbabwe. The reviewed curriculum and the modules are now being used by all agricultural colleges in the country.

Furthermore, the organisation influenced national policies through drafting and approval by the Government of the Agriculture Education, Extension and Research (AEER) and the Agriculture Marketing and Trade (AMT) Plans. The AEER Plan aims to bring change from the old way of delivering agricultural services to the farmers and seeks to develop a robust agriculture capable of turning around Zimbabwe economy and achieve food and nutrition security. The AMT Plan will assist in addressing the challenges of low productivity faced by farmers, uncompetitive and inefficient agricultural marketing and trade systems thereby contributing to agricultural growth and competitiveness. The plan will facilitate the reduction in cost of doing business, increase in farmers' income, access to domestic and foreign markets, market infrastructure development, and predictability of marketing and trade policies.

As part of mitigating the effects of climate change, CTDO implemented various activities which contributed to the development of resilient agricultural production systems, improved food, nutrition, and income security in the face of climate change through promotion of ecological farming, small grain production, processing and marketing and wider adoption of small-scale mechanisation.

In our endeavour to improve cooperation and engagement at regional and international level with like-minded organisations, CTDO sent three farmers and one Officer to Italy for a month-long internship. The team received



training in selection and multiplication of seed. The knowledge gained through collaboration at the international level will enable the farmers to improve their local seed systems.

As we head into 2024, we look forward to an improved economic situation for the country.

My sincere appreciation to my colleagues on the Board, CTDO Directorate, Senior Management and Staff who have worked tirelessly to improve the livelihoods of our rural communities leaving no place and no one behind as part of our contribution to Vision 2030.



MESSAGE FROM THE EXECUTIVE DIRECTOR

MR A T MUSHITA

I take this opportunity to elucidate on the institutional accomplishments and related challenges encountered during the year under review. As an organisation we commit to our vision and mission in serving our clientele, mainly the underprivileged and marginalized through promoting participatory research, technology, and innovation systems, and advocating for policies that alleviate poverty, food, and nutrition insecurity on target communities.



In fulfillment of the provisions of the International Treaty on Plant Genetic Resources for Food and Agriculture, (ITPGRFA) CTDO hosted a delegation from the Treaty, including the Treaty Secretariat in celebrating the International Year of Millets (IYM), held in Masvingo Province. The celebrations were held in partnership with Ministry of Lands, Agriculture, Fisheries, Water and Rural Development and the Food and Agriculture Organisation (FAO) and was attended by local and international participants from the Italian Government. This was an important event as the country is promoting the cultivation of millets as they provide an affordable, nutritious option for our smallholder farmers, boosting economic growth and bringing financial gains. The IYM celebration event was officially opened by the Deputy Minister of Lands, Agriculture, Fisheries, Water and Rural Development Honourable Vangelis Haritatos (MP).

CTDO continued to engage communities through enhanced capacity building which included provision of training and resources, equipping them with the knowledge and skills needed to adopt sustainable farming techniques. To compliment the government and private sector efforts, we have promoted the use of small-scale mechanized farming equipment targeting smallholder farmers (mainly two-wheel tillage tractors). The equipment has helped in reducing labour burden on women and youths resulting in increased hectarage planted and improved yields.

The institutional program on lobbying and advocacy continued to promote policy changes and create an enabling environment for sustainable agriculture within the country. We have actively engaged with the policymakers, presenting evidence-based strategies and recommendations to shape agricultural policies and practices. We continue to lobby for the recognition of Farmers Rights. CTDO through the MASAP project successfully coordinated for the establishment of a National Seed Working Group tasked to formulate the legal framework and regulations for the registration of farmer varieties.

Our efforts to foster partnership with various stakeholders, including government agencies, research institutions, and private sector, have facilitated knowledge exchange and innovation. These collaborations have resulted in the development of accessible and sustainable solutions that address the specific needs of smallholder farmers.

The challenges faced during the year under review include the declining donor focus on the Southern countries, including Zimbabwe, attributed mainly to the focus on ongoing conflicts in Eastern Europe (Russia and Ukraine



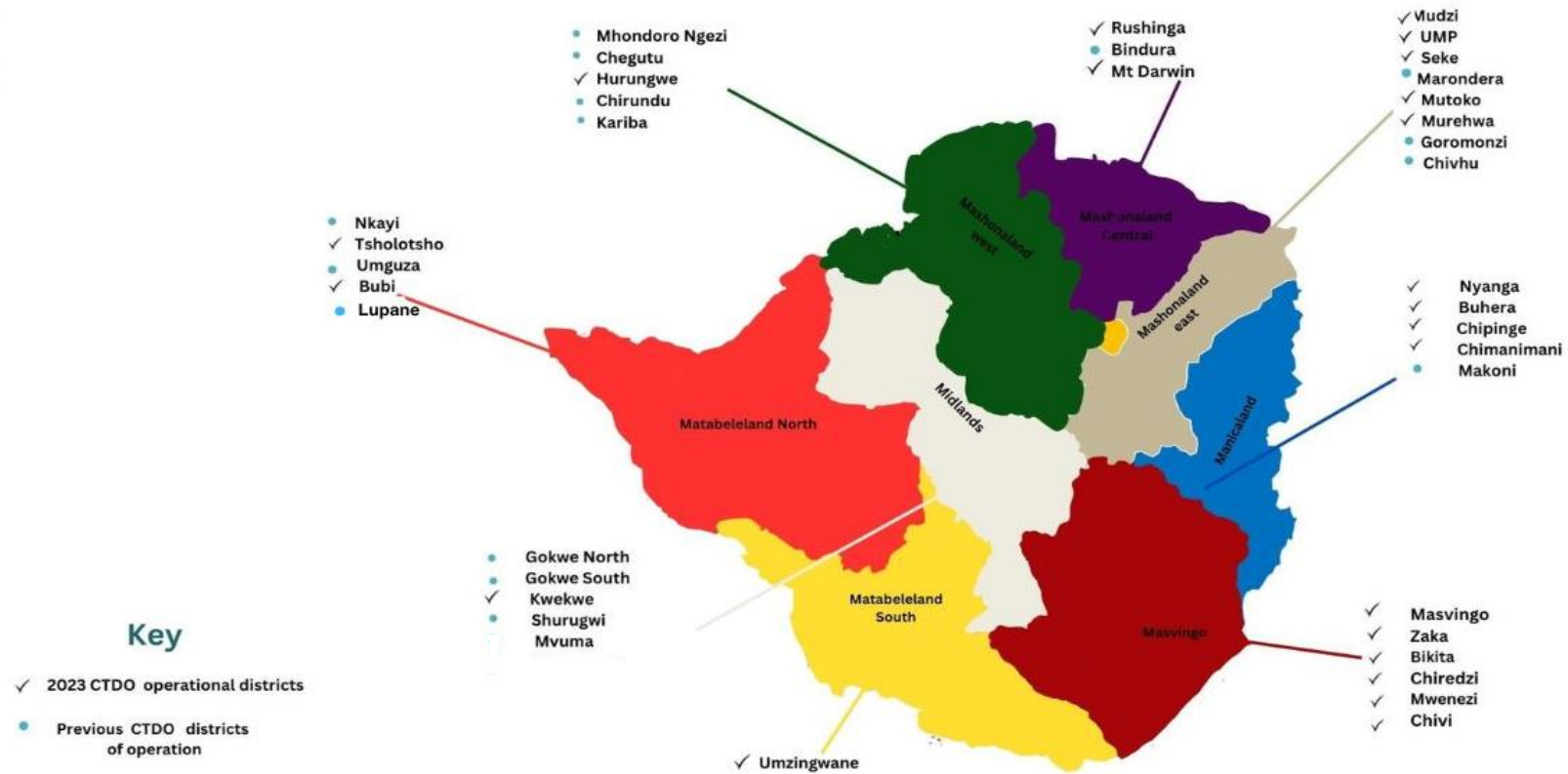
war) and the Middle East (Palestine and Israel) by funding partners. CTDO continues to strategize and has commenced a robust resource mobilization strategy (to be articulated in the 2024 to 2029 strategic document).

I would like to express my deepest gratitude to all our donors, board members, management and staff members who have contributed their time, resources, and expertise towards our cause. Our unwavering commitment and dedication to our cause has been instrumental in driving our impact forward.

Together, we can continue to build communities free of hunger, malnutrition, poverty and injustice in Zimbabwe, SADC, Africa, and the whole world.

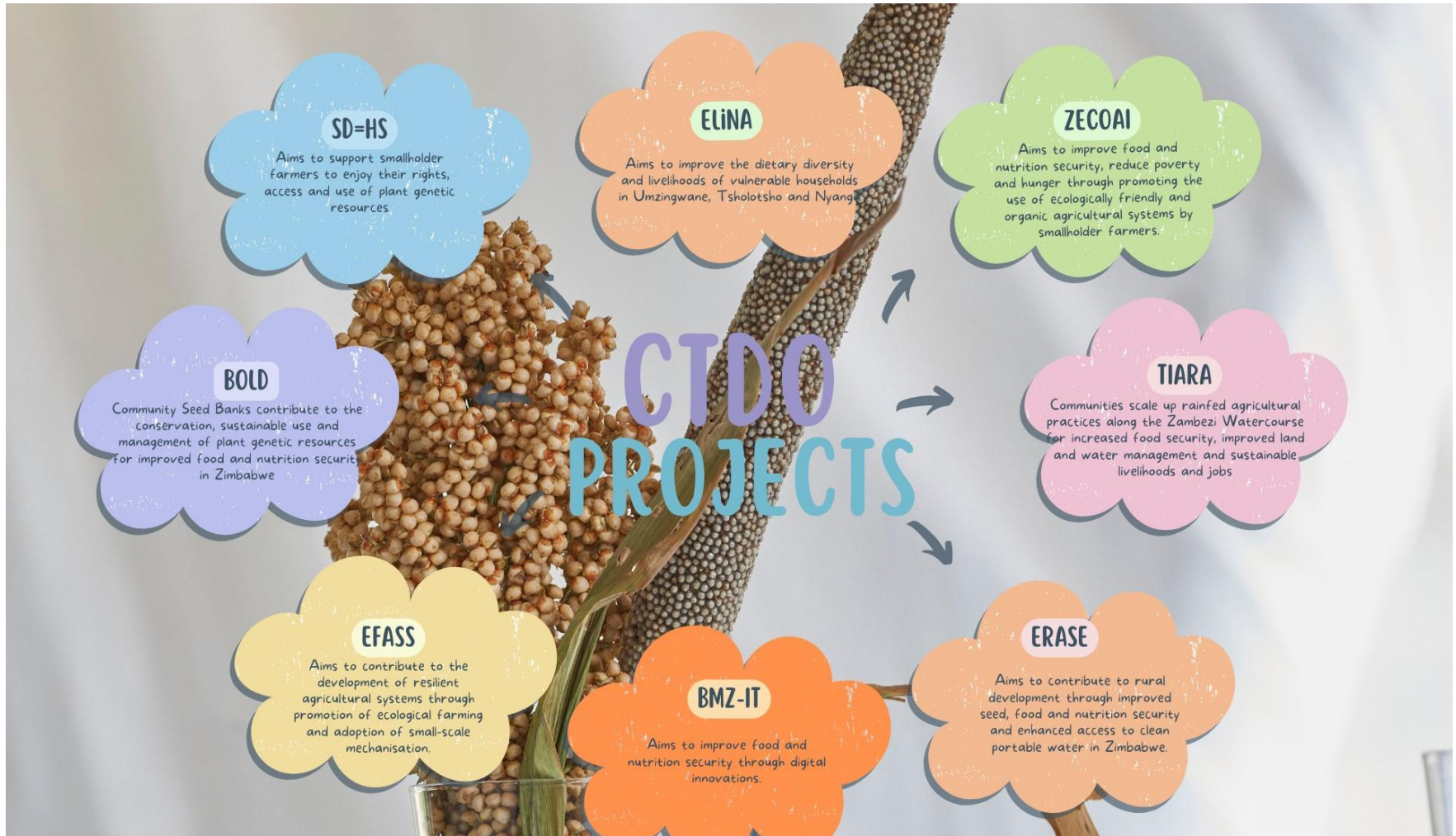


CTDO OPERATIONAL DISTRICTS



OUR VISION

Communities free of hunger, malnutrition, poverty and injustice in Zimbabwe, SADC, Africa, and the whole world.





CTDO KEY INTERVENTIONS

FARMER FIELD SCHOOL (FFS)

- Participatory Plant Breeding (PPB)
- Participatory Variety Selection (PVS)
- Participatory Variety Enhancement (PVE)
- Participatory Variety Development (PVD)

COMMUNITY SEED BANK (CSB)

- Sustainable germplasm collection
- Germplasm preservation
- Seed health tests
- Regeneration
- Germination tests
- Seed characterisation

HOUSEHOLD ECOLOGICAL FARMING

- Direct seeders
- Cultural disease control
- Conservation agriculture
- Organic fertilizers

NUTRITION

- Nutrition Gardens
- Behaviour change communication
- Traditional recipes
- Value addition
- Food systems
- Care Group Model

ENABLING POLICY ENVIRONMENT

- By-laws formulation
- Policy and Legislation formulation and reviews
- Awareness and Advocacy

WASH

- Solar powered irrigation systems
- Blair Ventilated Improved Pit (BVIP)
- Community water piped system
- Weir dams
- Behaviour change communication
- Model wash competitions



AGROBIODIVERSITY CONSERVATION AND SUSTAINABLE USE

Farmer Field Schools (FFS)



FFS demo site in Mt Darwin

CTDO continued promoting the farmer field schools (FFSs) approach across the operational districts with a total of 87 FFSs established in 2023. The FFSs have been instrumental in strengthening and improving the farmers' knowledge and skills in sustainable agriculture practices. The farmers get the opportunity to share practical experience using different learning methods which they replicate in their own field. Farmers work together in groups to learn and experiment with various farming techniques, crop management practices, pest and disease control methods, soil conservation techniques, water management strategies, and assist each other to solve social challenges either at home or in the community. Small-scale machines such as the two-wheel tractors, threshers, grinding mills and peanut butter making machines were distributed to Farmer Associations so that they are fully responsible for the operation and maintenance

costs. Equipment operators were trained on how to utilize the various machines, the safety procedures, storage, and basic maintenance. The trainees included women, youth, and men of various age groups. Communities have fully embraced mechanisation because it addresses most of the drudgery associated with traditional grains production along the value chains. The knowledge, experience gained at the FFS helps them increase their agricultural productivity, and improve the quality of their crop, reduce reliance on chemical inputs, enhance environmental sustainability and ultimately improve their livelihoods. Agriculture extension officers continue to guide the farmers, encourage discussions, and promote problem-solving and critical thinking.



Earth auger training at Kapedzanzara FFS





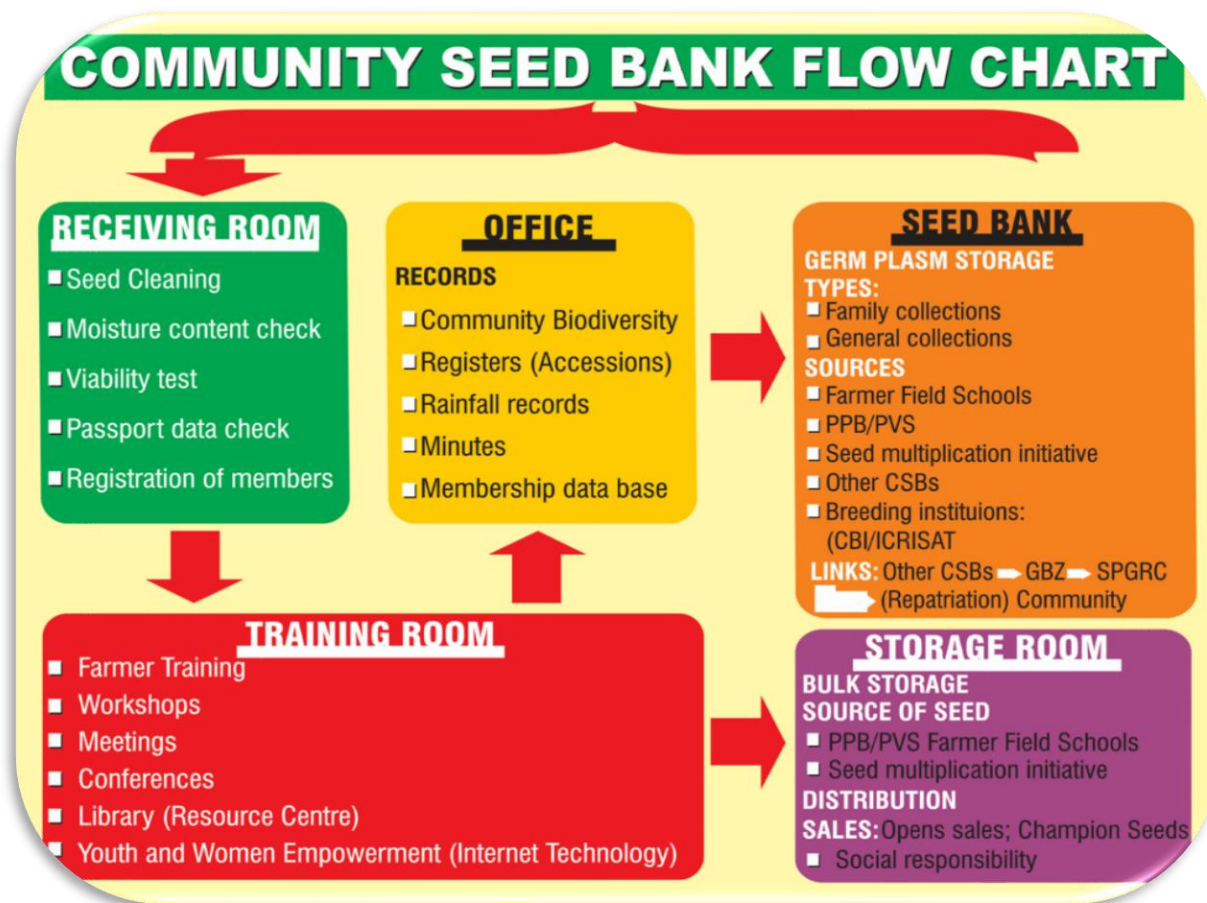
Farmer Association in UMP Ward 4 receiving peanut butter making machines

Community Seed Banking (CSB)

CTDO made a remarkable initiative that focuses on empowering local communities to build resilience and maintain seed diversity through the establishment of 21 community seed banks in 12 districts of operation. Seed banks are vital components of global food security and biodiversity conservation. They serve as repositories for traditional, locally adapted seed varieties, ensuring their availability in the face of climate change.

CSB Flow Chart

The CSB flow chart shows the flow of activities in a typical community seed bank, with five sections performing different functions as shown below.



In 2023, CTDO provided 10 training courses to educate farmers about the importance of seed banking, conservation techniques and sustainable farming practices. This empowers communities to take ownership of their agricultural systems, fosters a sense of self-reliance, enhances farmers' knowledge, skills and improves their livelihoods.

Twelve CTDO staff were capacitated on community seed banking by ICRISAT and SEFF. These training programmes were beneficial for individuals because they gained knowledge and skills in germplasm regeneration and processing, seed banking and seed systems.



The Agronomist Expert – Bettina interacted with farmers at Mupinga Seed Bank and shared experiences on seed banking and seed systems.



Training session
on seed
cleaning at
ICRISAT

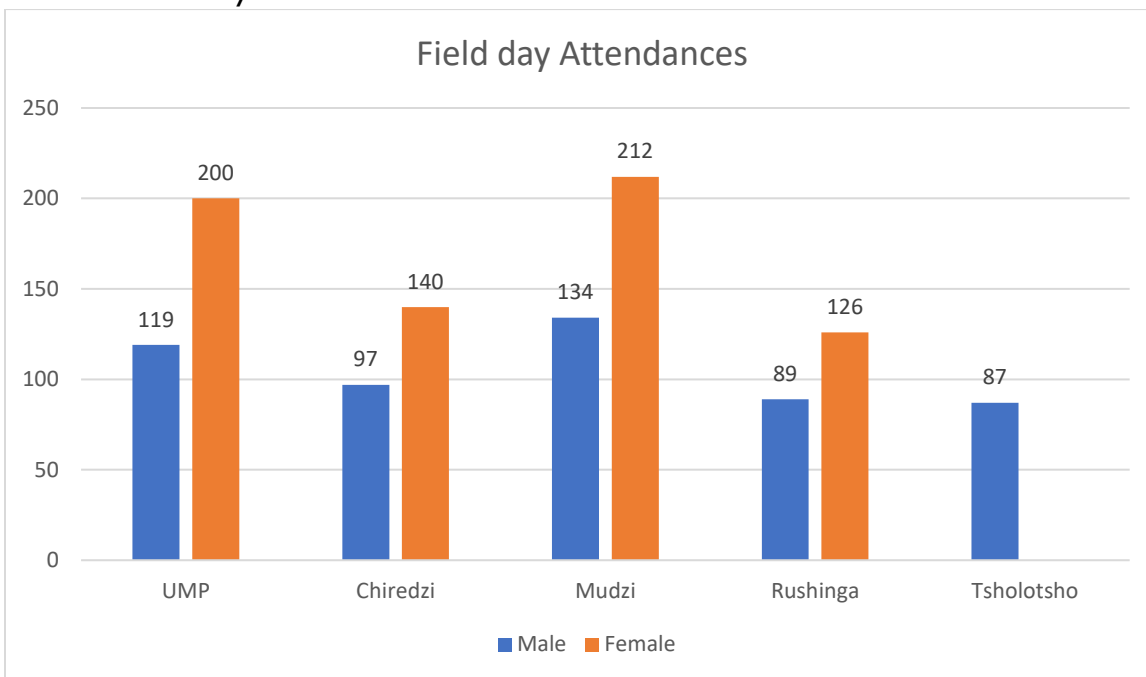


Field Days

The traditional role of field days has been to introduce farmers, agricultural professionals, and the community at large to new technologies and techniques so that the audience could see how these technologies and techniques could be practically used and applied.

As a result, farmers in CTDO operational districts organized and hosted field days in collaboration with

the department of Agricultural and Rural Development Advisory Services (ARDAS) and other stakeholders. The aims of the field days held were to demonstrate good crop management practices, use of mechanized farming equipment and showcase research results in Farmer Field Schools (FFS). Most field days were held under themes that focused on promoting small grain utilization in the face of climate change.



Field Day attendances in 2023

Women constituted most farmers who attended the field days - 678 and males 526. They constitute most people involved in farming and as primary care givers

they are responsible for making sure that families are fed well daily.



Seed and Food Fairs

To provide platforms for learning, knowledge and sharing of experiences amongst small holder farmers across Zimbabwe, CTDO, through the EFASS, MANA, MASAP, SEFF and SD=HS projects, facilitated twenty-four (24) seed and food fairs which were held in Murewa, Mudzi, UMP, Mwenenzi, Chiredzi, Masvingo, Tsholotsho, Rushinga, Bubi and Nyanga. During the seed and food fairs, farmers contributed cash and kind. A total of USD578 was raised by farmers and it was used to buy farm equipment prizes for exhibitors.

The events were held under the themes; **“Mechanizing traditional grains production, processing and value addition to enhance food, nutrition and income security”, “Supporting sustainable local seed systems”, “Utilization of small grains and legumes in the fight against Climate Change”**.

The seed and food fairs showcased diverse seeds in farming communities, promoting the production of traditional grains through education and awareness in processing and value addition of grains, indigenous vegetables, and fruits. The fairs enabled sharing and exchange of seeds among farmers and the communities at large. Discussions during the fairs



Food tasting during the seed and food fair tour at Chimukoko CSB, Mudzi

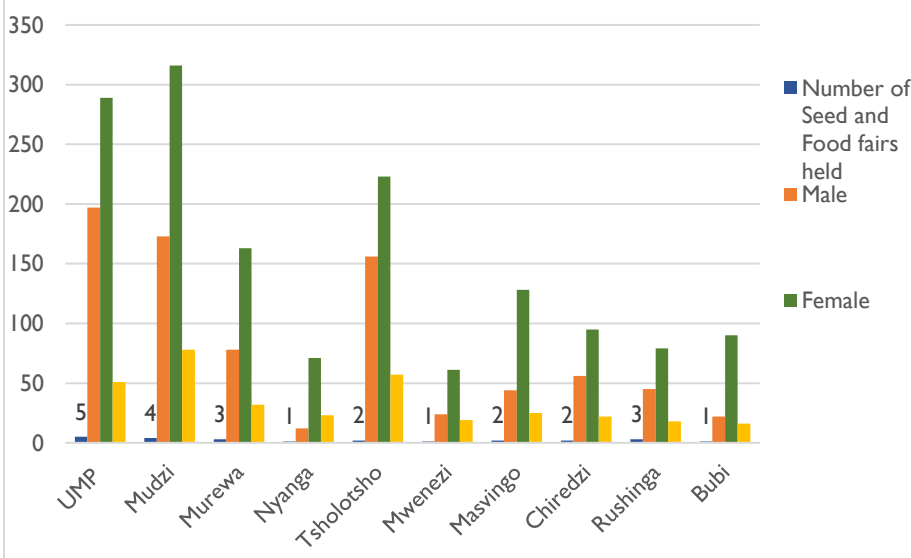
centered on nutritional benefits of millets in reducing malnutrition, knowledge sharing on seed, food preservation, appropriate storage, and financing mechanisms for scaling up small-scale mechanisation.

The extensive participation of Local Authorities, Civil Society, Government, Farmers and Private Sector Players was notable to strengthen institutional collaboration and partnerships.

People reached directly through the seed and food fairs were 2322 with 807 males and 1515 female, amongst these 7% (341) were youth.

Of the 987 exhibitors during the seed and food fairs, 80% were women, 18% were

Seed and food fair held and attendance across districts



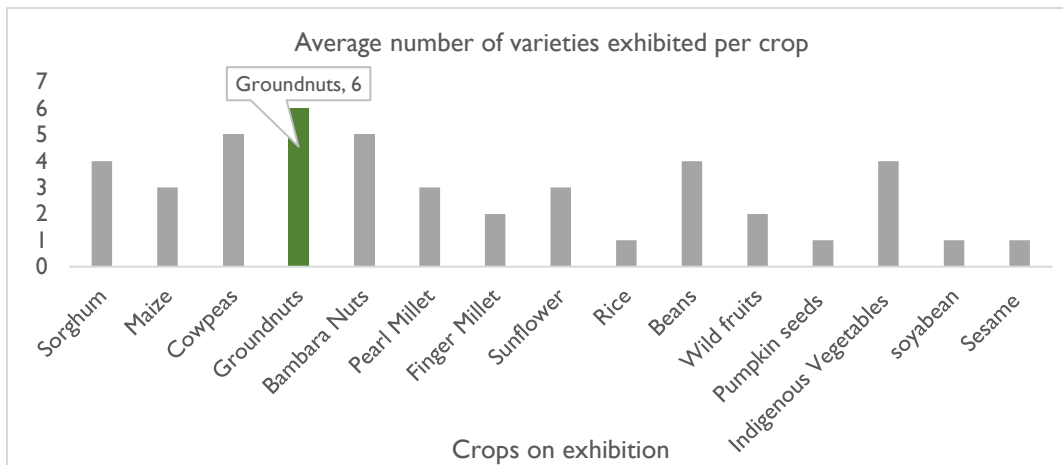
Attendees of the seed and food fairs conducted across twenty-three districts

men and only 2% youth were actively involved in the exhibitions.

Seed diversity levels exhibited during the fairs showed that legumes have the highest diversity with the least varietal diversity found amongst rice, soyabean and sesame crops.

The diversity wheel was employed to analyze community seed bases of lost crops such as brown rice, crops most grown (maize), crops grown for the market by few farmers in small acreage (sweet potatoes), crops grown mostly for

household consumption (legumes) and crops that if overlooked will become extinct especially in cases of rare or unique varieties (amongst millets) and these are the crops farmers notably need intentional reproduction or regeneration.



Average number of varieties per crop exhibited during the seed and food fairs



Cook out competitions



LIVELIHOODS, FOOD AND NUTRITION SECURITY

Nutrition Gardens

CTDO assisted communities in its operational districts to establish a total of 10 nutrition gardens in 2023. Under the Food for Assets (FFA) project in Rushinga district, the Mzika garden was successfully established. Additionally, as part of the ERASE project, CTDO established one garden each in Mt Darwin, Rushinga, and seven in Seke district. These nutrition gardens serve as crucial assets in our efforts to address food security challenges and promote sustainable livelihoods within these communities. Through the cultivation of diverse crops and the adoption of sustainable agricultural practices, CTDO aim to empower individuals and families to access a wider range of nutritious foods, thereby improving their overall well-being and resilience to nutritional deficiencies.

Within the scope of the ten established nutrition gardens, it is noteworthy that three of them were equipped with solar-powered boreholes, thereby enhancing their irrigation capabilities. Furthermore, the garden members underwent comprehensive training sessions encompassing various aspects of horticulture production, including disease and pest control techniques, Farming as a Business (FAAB)



Mandiwawarira Progress Garden Ward 17

strategies, and Individual Savings and Loan (ISALs) mechanisms, which encompass financial literacy. The establishment of the gardens was carried out in collaboration with key governmental entities such as Agritex, DDF, Women Affairs, and RDCs, highlighting the strong partnerships and synergies formed with these stakeholders. Additional collaborations were forged with other non-governmental organisations, such as SNV, further solidifying the external coherence and effectiveness of our projects.



Appropriate Small-Scale Mechanisation

The perennial challenges of climate change have seen most smallholder farmers relying more on the production of traditional grains and legumes for food provisions and household income. However, their uptake is still very low in Zimbabwe. This is because production of traditional grains and legumes is done using rudimentary methods, mostly by rural farmers who lack access to cost effective and appropriate technology. In this regard, CTDO promoted

adoption of appropriate technology which lessens the drudgery for farmers while conserving the available resources for future generations.

Smallholder farmers are not able to access mechanised equipment from such big companies like the John Deere, Belarus and William Bain and the Service Provider Model (AFC Bank). CTDO in its various intervention programmes has complemented government and private sector efforts in mechanisation targeting smallholder farmers in the rural areas.





Evidence of the transformation of smallholder farmers through the provision of various mechanized equipment



Affordable and suited mechanisation will address the labour requirements during land preparation, tilling, weeding, harvesting, threshing, shelling, grinding and transportation to increase production and farm output. To address these challenges, CTDO, with the support from partners and farmers' own contributions procured a wide range of equipment which include two-wheel tractors (with ploughs), direct seeders, threshers, peanut butter making machines and grinding mills.

Under the Ecological Farming and Small-Scale Mechanisation (EFASS) Project, with funding from

Bread for the World (BftW), 15 peanut butter making machines, 3 grinding mills and 8 multi-crop threshers were procured during the period under review. These were distributed across the wards of operation in Murewa, UMP and Mudzi. Farmers in the targeted wards now spend less time during processing, and the amount of gritty in edible products has been reduced. The availability of these machines together with the two-wheel tractors, will increase the production and consumption of traditional grains and legumes and reduces the labour burden on women and youth along the value chains.



(L) Stakeholders receiving the processing equipment in Murewa, Ward 28, (R) UMP, Ward 16



To attain participation, buy-in, support of local authorities and enable sustainability of the projects CTDO, in collaboration with other stakeholders engaged local authorities during the commissioning, distribution and siting of processing equipment procured.

Farmers Contributions

As an empowerment and sustainability strategy under the EFASS Project, farmers are expected to contribute 3% of the value of grinding mills and 5% for threshers and peanut butter making machines respectively.

Training in equipment operation, use and maintenance.

EFASS project team conducted training on the use, maintenance and operation of grinding mill, multi-crop threshers and peanut butter making machines in the wards of operation. A total of seven (7) training sessions were conducted across all districts of operation reaching out to 207 participants (113M, 94F).

In Rushinga, under the Food Assistance for Assets (FFA) Programme funded by the World Food Programme (WFP) the following equipment was distributed to wards of operation.

Equipment Type	Total
16 Hp 2-Wheel tractors	16
Double furrow plough	16
1.5T Tipper Trailer	16
Small grain seeder	16
8 Hp Multi-crop Threshers	8
8 Hp Groundnut Shellers	8
Peanut Butter Processing Machines	8

Sustainability Matrix



Successes in adoption of small-scale mechanisation

Some individual farmers have procured their own equipment because of the introduction of the technology and project awareness. For example, a farmer in Ward 28, Murewa bought a two-wheel tractor for individual use and hiring out to other farmers. More women are participating in this project and are very much confident to take up tasks like tilling, threshing, grinding, and processing of traditional grains and legumes. In addition, ward-based extension staff have benefitted through trainings on operation and maintenance. This has

motivated them to work with farmers and participate fully in the project. The equipment has created employment for some youth and other hardworking individuals in the community through providing services like tillage, threshing, grinding and transportation. The availability of equipment has reduced disparities in community for those who have and others who do not have. Both are now able to meet production targets in line with the season. Consumption of traditional foods is widespread across the project areas due to reduced gritty and clean production processes.



Livestock production

Fodder production and preservation

CTDO has played a critical role in preventing targeted households from engaging in negative coping mechanisms and sliding back to vulnerability. The organisation implemented the fodder production and preservation which benefited a total of 671 (366F/305M) farmers under ANCP project in Mutoko and 1,276 (526M/750F) MASAP beneficiaries in Mudzi and Tsholotsho districts.

These projects supported farmers to produce and use supplementary feed from local materials to protect livestock from poverty death. This activity has been implemented in collaboration with the Department of Veterinary Services (DVS), Agricultural and Rural Development Advisory Services (ARDAS) and farmer sensitization on fodder flow plan, destocking, and good cattle management.



(L) Hay training in Makosa ward 15 (R) urea treatment of stover in Tsholotsho district



Boer buck feeding on hay in Mutoko



The farmers are experiencing a scarcity of grazing pastures particularly during the lean season. As a result, farmers often rely on maize stover, which is of poor nutritional value since its protein content is relatively low and cannot support adequate

livestock production unless supplemented with a protein-rich feed. Normally, the farmer makes minimal effort to improve the quality of maize stover before feeding it to the livestock. The ANCP and MASAP projects produced a combined urea treated stover of 2.1T (1T under the ANCP and 1.1T under the MASAP) to raise the palatability and crude protein content of these residues from 0.5 - 2.5% to roughly 25%. MASAP project piloted the intervention this year and adoption was limited by concerns about urea toxicity if treatment is performed wrongly, however when done correctly most farmers tend to embrace the higher nutritional



value of urea-treated fodder/stover. The ANCP beneficiaries produced 25 480 hay bales and built 83 hay pits (hay bailers) using their own resources, proving the intervention's widespread adoption. The feed (urea treated stover and hay bales) protected an estimated 2,364 head of cattle during the lean season in three wards, ensuring that about 42% of cattle in operational wards survive poverty deaths and maintain good body condition during the lean season. The steers will therefore be strong enough for draught power whilst heifers will be in good condition for calving. The projects have prevented losses in terms of poverty deaths whilst ensuring productivity into the next season. Thus, the farmers continue to integrate disaster risk management and preparedness knowledge into adaptive practices to protect their livestock assets from poverty deaths.



Matured boer goats with the offspring sired in the goat pen in Rushinga



Enhancing community livestock breeds through the introduction of improved breeds

The organisation has introduced small new livestock breeds that farmers are using as the foundation of a small livestock production scheme in Mutoko as part of the ANCP project and in Rushinga as part of the



Rabbit doe with offsprings in Mutoko district



Rabbits in the hutch in Rushinga

Food for Assets (FFA/R4 WFP) project. The Rushinga FFA/R4 WFP project introduced 75 (24 bucks and 51 does) in three wards. Each ward has an average of eight Farmer Field Schools (FFS), where the project built a goat pen utilizing the cash for asset methodology and each FFS received one buck and two does. Each goat FFS has ten members who are regulated by a constitution that permits them to benefit individually from goat breeding intervention through pass-on when the goats have started breeding. Currently, a total of 6 offsprings were sired. The ANCP project introduced 10 Boer goats, from which 10 (5F/5M) benefited. The contribution of these goat farmers is

the pass-on of the offspring to the other ten farmers in 2024. There are currently 5 offsprings. Farmers in both projects are reporting immediate benefits of great twinning ability and fast kid growth rates.



Mr Elliot Dzamara and his family with boer goats offspring in Mutoko

Through the ANCP and FFA/R4 WFP project, the organisation has piloted rabbit production in Mutoko and Rushinga, respectively. A variety of



breeds, including New Zealand White, Flemish Giant, Californian, and Chinchilla Giganta, were distributed. The ANCP project distributed 50 rabbits (40 doe and 10 bucks) to 25 farmers (19M/6F). Among the selection criteria were proper housing and an understanding of rabbit farming. Each

farmer must pass on to two other farmers, each receiving two. Under the FFA WFP project in Rushinga, the project targeted 8 FFS with a membership of 5 farmers. The project-built rabbit housing for the FFS utilizing the cash for asset approach and supported each FFS with one buck and four does. A total of 108 offsprings were born and pass-on will commence once the offsprings have reached breeding stage.

Income Generating Activities (IGA)

CTDO's commitment towards poverty reduction and creation of a better life for local communities has seen the organisation supporting over 158 ISAL / IGA groups in the various project districts. A total of 40 groups were provided with subsidized start-up Rushinga Districts to venture into various income generating activities.

funds to boost their capital float (USD\$100 per group) under the ANCP in Mutoko.

The FFA WFP project in Rushinga provided 80 groups with labour-saving machines such as multi-grain threshers, two-wheel tractors and peanut butter making machines. The project facilitated the construction of 5 mushroom production hubs and 16 improved granaries. The ERASE Phase 2 Project supported 30 groups with start-up funds amounting to USD\$400 per group in Seke, Mt Darwin and



Two-wheeler tractor



The ISAL/IGA initiative benefitted over 3 229 households, where 70% were women-headed with at least 5% being youths. During the year, project participants embarked on various activities such as livestock rearing (poultry, goats, rabbitry, hatchery), value addition and processing activities (grain threshing, peanut butter making, baking) and field crop cultivation (horticulture and groundnut production). To guard against risk and uncertainty posed by the external environmental factors, most groups diversified their operations into 2 or more projects which are usually less risky and low-capital intensive.

Revenue inflows during the year for the 158 ISAL/IGA groups amounted to USD377 640 raised from sale of IGA products (39%), hiring out or offering equipment services (5%) as well as from ISAL savings (56%). ISAL/IGA would have performed much better if the macro-economic environment was favourable. The high input costs coupled with persistent water shortages threatened the viability of agriculture based IGAs (horticulture and crop production).

Disaster Risk Reduction

CTDO continues to take disaster risk reduction (DRR) as a vital component of sustainable development, as it aims to reduce the impact of natural and human-induced hazards on people, assets, and the environment. The concept is mainstreamed across all projects.

During the year under review, CTDO, together with other R4 partners and government technical

departments, were selected by WFP into the Technical Working group of Forecast Based Budgeting and played a pivotal role in drafting the El Nino Anticipatory Action Plan (2023) for Rushinga.



Nhunzvi group packaging butternuts for the market in Mutoko district

In September 2023, CTDO attended Disability Inclusive Disaster Risk Reduction (DiDRR) workshop organized by Regional Psychosocial Support Initiative (REPSSI) at Holiday Inn Harare. The workshop focused on how the government, development partners, and private sector players can ensure social inclusion in programming.



SUSTAINABLE WATER AND WASTE MANAGEMENT

Water harvesting as a strategic tool for drought mitigation

CTDO worked with communities in managing environmental works on tributaries feeding to established dams across districts as a way of managing soil erosion. Most of the weir dams across districts have harvested water seasonally to support livestock and horticultural production. More than 5000 livestock units are accessing water from these dams.

The weir dams are contributing towards the transformation of communities by providing a reliable source of water for improved food and nutrition security for vulnerable households. This has reduced distance and time spend fetching for water.

planting of vetiver grass, rehabilitation of leaking weir dams, storm drains, contours, and tree planting at Kasenzi and Kaponda.

The potential of water harvesting as a strategic tool for drought mitigation can be realized through a policy framework to develop institutional mechanism to water harvesting at different levels such as user, watershed, ward locality, district, and provincial level by having representatives from local level people's institutions, NGOs and concerned government departments.



Gupiti weir dam at full capacity



In Rushinga, Food Assistance for Assets Project established conservation works that include construction of cattle corridors (250m length),



Participatory Health and Hygiene Promotion (PHHE)

Water and sanitation remain a key development theme which the organisation continues to invest in. In 2023 various interventions were carried out on PHHE.

A total of 80 demonstration BVIP (Blair Ventilated Improved Pit) latrines were constructed over the period targeting vulnerable households and communities to encourage farmers to invest in individual toilet at each household. Trainings on PHHE targeting health clubs and care groups were conducted throughout the year. The trainings were complemented with messages to discourage open defecation. CTDO conducted a study in Nyanga and Tsholotsho on sanitation and hygiene practices and found a significant increase in construction and utilisation of sanitary facilities. For Tsholotsho there was an increase from 44.7% to 70% and Nyanga 81.2% to 94.2% between 2020 and 2023. A total number of 46 health clubs were supported to conduct the activities that promote health and hygiene.

Renewable energy

CTDO continues to harness renewable energy in line with international instruments supporting green initiatives across target districts. A significant investment in the utilization of solar energy was achieved in year 2023. This saw a total of 11 boreholes being drilled and powered by solar energy (pumping and local reticulation) in Rushinga, Masvingo and Zaka Districts. The technology has been extended to livestock production where solar powered hatcheries(incubators) were distributed to target farmer field schools.



BVIP toilet in Nyanga

Community chicken breeders now achieve 86% hatching rate on all eggs under incubation. Such high hatching rate has increased poultry population resulting in improved access to protein rich foods and household income in targeted communities.



Breeder taking hatched chicks from an incubator



DIGITAL INNOVATIONS FOR DEVELOPMENT

Digital Literacy Clinics (DLCs)

Digital Literacy Clinics have become a critical tool in information dissemination in small holder farming communities. A total of 90 participants (Lead

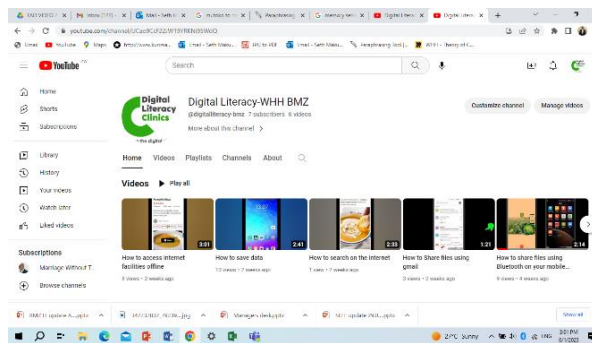
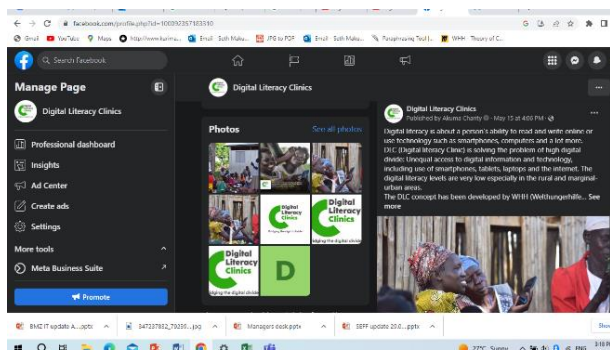
farmers and Extension officers) were trained in Mudzi, UMP and Murehwa in adopting **ICT as a tool in promoting ecological farming, traditional grains production and marketing**. Farmers have embraced virtual marketing platforms such as Agrishare, Kurima Mari and Eco-Farmer to access market prices, equipment, weather related information and government updates.



Presentation on ICT Training of Trainers in Murehwa

Online versions of DLC

CTDO with other WHH global partners created two online platforms: **Digital Literacy Facebook page** and **YouTube Channel**, which can be accessed in text, pictures and or in video form. A total of six (6) videos were submitted to the YouTube channel and seven posts to the Facebook page. Viewership reached over 1028 in 2023.



Caption: from left to right: Digital Literacy Facebook Page and Digital Literacy YouTube Channel



Nutrition Mobile Application

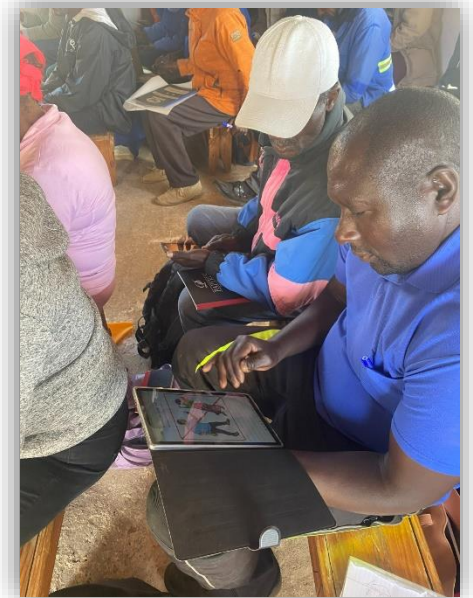
The Health and Nutrition mobile application (Nutrition App) was launched on Google Play Store by CTDO and can be downloaded by all smartphones

powered by Android software. It is an informative mobile application that provides users with information on health, nutrition, and hygiene. CTDO rolled out the Application in Nyanga and

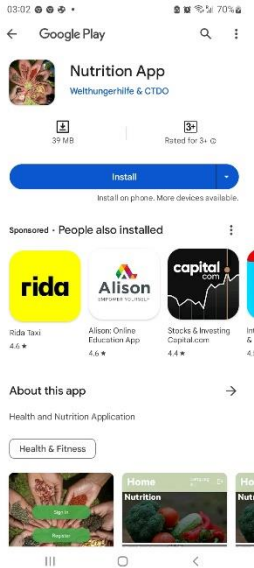
Tsholotsho. A total of 1350 people received the Application on their mobile smartphones and were taught how to navigate on the Nutrition App.



Farmers from Tsholotsho getting installations



Nyanga Lead Farmers getting installations



The link to download the app:

https://play.google.com/store/apps/details?id=com.nutrition.flutter_vision

New global modules developed

CTDO developed 2 modules for small holder farmers namely: (1) **How to use Excel for record keeping** and (2) **How to Hotspot & Connect to Wi-Fi**. These modules will help Smallholder farmers develop skills they need to live, learn and work in a society where communication and access to information is increasing through digital technologies such as



mobile Apps, internet platforms, and mobile devices.

Exercise 1 – recording production cost

Blank sheet to be filled by Farmer based on farming experience

- Multiply the quantity with the price in each line.

Preparatory cultivation

Activity	Unit	Quantity	Price	Total
Labour	No of hours			
Subtotal				

Seeds and sowing

Activity	Unit	Quantity	Price	Total
Cost of seed	Kgs			
Sowing Cost-Labour	days			
Subtotal				

LOBBY AND ADVOCACY

CTDO continues to spearhead and influence policy development within Zimbabwe, regionally and internationally through policy reviews and advocacy work. Inspired by the global call to mitigate and develop adaptive capacities to climate change, and the need to domesticate the ITPGRFA, several workshops were organized, and platforms were created to enhance further discourse.

Agricultural Colleges curriculum review

CTDO managed to influence national policy through carrying out an Agricultural Colleges curriculum review. CTDO developed and updated modules that address the real priority needs for sustainable and profitable agricultural production in Zimbabwe. The reviewed curriculum and the modules are now being used by all agricultural colleges in the country.

farmers' income, access to domestic and foreign markets, market infrastructure development, and predictability of marketing and trade policies.

Legal Framework and Regulations for the recognition and Registration of Farmer Varieties in Zambia and Zimbabwe.

CTDO has for several years been lobbying for the recognition of Farmers Varieties through

Agriculture Education, Extension and Research (AEER) and the Agriculture Marketing and Trade (AMT) Plans.

The organisation influenced national policies through drafting and approval by the Government of the Agriculture Education, Extension and Research (AEER) and the Agriculture Marketing and Trade (AMT) Plans. The AEER Plan aims to bring change from the old way of delivering agricultural services to the farmers and seeks to develop a robust agriculture capable of turning around Zimbabwe's economy and achieve food and nutrition security. The AMT Plan will assist in addressing the challenges of low productivity faced by farmers, uncompetitive, inefficient agricultural marketing and trade systems thereby contributing to agricultural growth and competitiveness. The plan will facilitate the reduction in cost of doing business, increase in establishment of appropriate policies and legislation. Under the Markets and Seeds Access Project (MASAP), the organisation is collaborating with government in formulation of the Legal Framework on Farmer Varieties. CTDO in partnership with FiBL and NIRAS is implementing the project in Mudzi and Tsholotsho districts. Consultations were held to deliberate on farmer varieties, and relevance to achieving national food and nutrition security.



Research has been carried out to establish what farmer varieties are and policy review.

For effective implementation of the project a National Seed Analysis Working Group (NSAWG) consisting of government, CSO, farmer unions and seed traders was established to spearhead the policy work towards producing a government issues paper on the importance of establishing policy and legislation on seed matters.

In line with the progress achieved within the implementation of the MASAP seed policy project in Zimbabwe, CTDO was awarded a contract to

oversee the implementation of the MASAP seed project in Zambia.

Formulation of by-laws on Natural Resources Management in Seke, Mt Darwin and Rushinga Districts

Natural Resources Management for the benefit of local communities is critical in sustainable use and conservation at local authorities' level. In this regard, CTDO under the ERASE Project facilitated consultative meetings in Mt Darwin, Seke and Rushinga districts with the aim of capacitating local authorities to formulate local by-laws on natural resources management.

TRAINING/WORKSHOPS

GEF-7 Dryland Sustainable Landscapes Impact Programme: First Southern African Regional workshop

CTDO participated at the FAO organized Regional Dryland Sustainable Landscapes Impact Program workshop to review, plan and share strategies for effective project implementation. During the workshop, CTDO held a side event to showcase best practices in community seed banking and how

they contribute to sustainable management of landscapes. The event was attended by participants from Zimbabwe, Malawi, Angola, Namibia, Tanzania, Botswana, Burkina Faso, Mozambique, Kenya, Zambia, and Italy.





John Tigere explains the diversity wheel concept as an important tool in Community Seed Banking that provide the visual representation of the different seed varieties grown by farmers at community level



Simulation of a CSB during the FAO side event



Seed display by Mercy Faro a farmer from Murehwa at the FAO side event.



International internship

To transform local seed systems in a participatory manner, three farmers and one CTDO officer attended a one-month internship programme in Italy under the SEFF project. The internship program covered the following areas: **practical sessions on seed systems like field selection for multiplication purposes, plot pegging, harvesting, threshing, cleaning, and storage.**



CTDO Officer and farmers in Italy

Seed selection, cleaning, and storage techniques



Field observation techniques



Seed harvesting





Roles and organisations of CSBs





National Consultative Workshop on Traditional Grains and Groundnuts Production, Processing, Marketing and Small-Scale Mechanisation

In promoting small-scale mechanisation within the production of traditional grains and legumes, CTDO held a national consultative workshop under the Brot Funded EFASS project. The consultations were

conducted under the theme **‘Traditional grains and groundnut production, processing, marketing, and small-scale mechanisation.** A total of 43 people (28 males; 15 women) from government, CSO, farmers and private sector participated during the workshop. The consultative meeting provided an opportunity for CTDO to lobby government to review policies on traditional grains production and marketing processes to



Head of Institute of Agricultural Engineering, Engineer Khoza presenting on constraints of small-scale mechanisation during the national consultative workshop in Murewa



address the current constraints as deliberated in the meeting. The meeting recommended that there was an urgent need for the country to have a clear policy or strategy towards mechanisation for smallholder

farmers to facilitate adoption and investment in the manufacturing and research and development of appropriate machinery.



KEY EVENTS

International Year of Millets (IYM) 2023

The United Nations General Assembly (UNGA)



declared the year 2023 as the National Year of Millets with the objective of generating more production and demand. IYM 2023 was an opportunity to raise awareness and direct policy attention to the nutritional

and health benefits of millets and their suitability for

cultivation under adverse and changing climatic conditions.

CTDO in partnership with MLAFWRD and FAO organized a series of events in Zimbabwe from the 21st to the 26th of March 2023 to celebrate the International Year of the Millets. Activities included meetings with government departments, CSOs and media where the importance of millets was highlighted to policy makers. A millet field day, seed fair and a one-day Symposium were part of the organized events. The event was officiated by the Deputy Minister of MLAFWRD, Honorable Vangelis Haritatos and attended by the Permanent Secretary for Provincial Affairs and Devolution (Hon C Chingwaru), Secretary of the ITPGRFA (Kent Nnadozie), the FAO Sub Regional Coordinator for Southern Africa (Dr. Patrice Talla), Head of Agriculture Private Sector and Trade of the EU (Bernard De Schrevel) and the CTDO Executive Director (Andrew Mushita), among other dignitaries.





Masvingo field visit during IYM event 2023



Delegates at IYM2023 event in Masvingo



Graduation of the SD=HS Master trainers

CTDO trained and awarded certificates of competency to 21 dedicated Farmer Field School Master Trainers who went through an intensive nine-year on-the-job training on the FFS Extension

Methodology. The graduation ceremony was held in Harare and was graced by the Permanent Secretary in the Ministry of Lands, Agriculture, Fishers, Water and Rural Development (MLAFWRD), Professor O. Jiri.



The Permanent Secretary in the MLAFWRD, Prof. O Jiri (right), CTDO Executive Director (second left) and Mr Dhlodhlo (far left) congratulates Ms Makaza one of the Master Trainers during the Master trainer graduation ceremony in Harare.



Global Digital Literacy Exchange (UGANDA)

The main objective of the Global DLC Exchange held in Uganda was to facilitate knowledge sharing,

capacity building, and collaboration among DLC Officers. The exchange aimed at fostering best practices, enhancing product effectiveness, and strengthening networking to improve Digital Literacy for underserved and vulnerable communities.



Digital Literacy Global Exchange in Uganda

Australian Award

CTDO was awarded the Australian Fellowship Award by the Australian Department of Foreign Affairs and Trade (DFAT) as part of the capacity building programme for Community Based Organisations (CBOs) in developing countries. Thamsanqa Khanye took part in the 6-month long fellowship program hosted by Action on Poverty (AoP) Australia.

The fellowship program included the following activities mentorship and training from AOP technical experts; completion of the 'Emerging Leaders Program' at the University of New South Wales- UNSW, participation in the Australian Council for International Development (ACFID) 2023 conference, ACFID Courses, donor events and various field visits.



Breastfeeding Week Commemoration

CTDO participated at the 2023 WHH World Breastfeeding Week (1 to 7 August) Eastern and Southern Africa Oscars competition showcasing their work in promoting, protecting, and supporting breastfeeding across the communities, colleagues, and peers. The 2023 WBW was commemorated under the theme 'Supporting working mothers.' CTDO scooped 3 best digital/ social media promotion and best role play prizes namely 'most fun';



The National Good Food and Seed Festival

CTDO participated at the Annual National Good Food and Seed Festival at the Botanical Gardens under the theme **UN 2023 Year of the Millets: Special Focus on Svoboda (Barnyard Millet). “Celebrating the Wonder of Zimbabwean Millets.”**

The Good Food and Seed Festival brought together smallholder farmers from Zimbabwe, Zambia, ESwatini, Uganda, Kenya, and Malawi to learn, share and exchange ideas innovations in farmer managed seed systems. The festival aims to increase the consumption of nutritious traditional and organic foods. Farmers interacted with researchers, private sector, CSO, media, and public on critical issues affecting them. During the two-day event exhibiting farmers and organisations had opportunities to sell a wide range of local produce, legumes, herbs, teas, farmer saved seeds, diverse cuisines made with indigenous or local ingredients.



CTDO staff exhibiting at the Good Food Festival



Edna Sande and Mercy Faro interacting with the Head of Institute for the Southern Africa Plant Genetic Resources Centre (SPGRC) in Zambia, Dr Shava



Zambezi Rainfed Agriculture Investment Forum

CTDO team attended a two-day forum in Botswana organised by the Stockholm International Water Institute (SIWI) under the auspices of Transforming Investments in African Rainfed Agriculture (TIARA) Project. The TIARA project is an initiative that aims to unlock the potential of enhanced rainfed agriculture in Africa. The project is premised on the fact that water availability and soil moisture management are key determinants of crop yields and agricultural productivity. Participants were drawn from SADC government representatives mainly from the ministries of Agriculture, ZAMCOM,

ZAMTEC, OKACOM, SIWI, development partners (CTDO, FACHIG), private sector, international corporations, and university researchers.

There are many untapped rainfed agricultural financing opportunities. Parties signed the statement of intent towards promoting policies which support the attraction of multiple channels of finance, shared experiences and acquired knowledge of successful business strategies.



*Attracting finance to Africa's rainfed agriculture to build climate resilience.
Gaborone International Conference Centre (GICC),
Gaborone, (08 – 09 August 2023)*



ZAMBIA- Learning and Exchange Visit - 19-22 April 2023

Learning and Exchange (LE) visits are an ideal and valuable way of sharing knowledge and experiences between farmers. CTDO under the EFASS Project facilitated a learning and exchange visit to Zambia.

The delegation comprised of 6 farmers and 6 CTDO Staff.

The learning and exchange visit provided an opportunity for Zambian and Zimbabwean farmers to share more information on **climate change, conservation farming, weed management, crop rotation, pest and diseases control, land preparation, crop spacing for various crops, and manure application.**



The participants also attended the Zambia Agritech Expo at GART (Golden Valley Agricultural Research Trust) Farm in Chisamba District where they had an opportunity to witness various renewable energy equipment, products from seeds, small scale mechanisation, drone technology, apiculture, diverse tree nurseries and irrigation equipment. The latest technology, new products and best agronomic practices were exhibited at the live crop demonstration plots and equipment demonstrations respectively. At the mechanisation stands on display were multi-purpose shellers, threshers, two-wheel tractors, oil pressing machines, peanut butter making machines and tine ripper. The adventure broadened the understanding of farmers on existing technologies and how they can also apply the skills and knowledge gained in their local context.

Outcome of the Zambia visit

- Enhanced confidence and self-esteem of smallholder farmers.
- Created inspiration to keep working on traditional grains.
- It increased awareness and knowledge of farmers on agricultural mechanisation.
- It fostered mutual learning, future networking opportunities and practical examples.

The ITPGRFA Conference in Rome

CTDO attended the 10th session of the Governing Body of the ITPGRFA held in Rome – Italy – from the 20th to the 24th of November 2023, under the theme; **“From seeds to innovative solutions, safeguarding our future: contributing to the**

implementation of the Global Biodiversity Framework for sustainable food systems.”

The major issues discussed at the conference included the Multilateral System (MLS), Farmers’ Rights (FRs) and the funding mechanisms for the effective implementation of the Treaty.

Key messages from the Treaty included the need to ensure close collaboration with the CBD particularly in the context of the negotiations to enhance the functioning of the Treaty’s MLS of Access and Benefit Sharing (ABS), the continuation of FRs through setting up an *Ad Hoc*



Delegates at the ITPGRFA in Italy



Technical Expert Group tasked with advancing how FRs should be implemented. There was also a call for State Parties to expeditiously honour their funding pledges so that provisions of the Treaty are quickly implemented. CTDO made presentations at two side events; one convened by the International Seed Federation on Building Seed Resilience and the BSF Side Event on 'CTDT experiences and achievements in PGR conservation'.



PUBLICATIONS

- ❖ Policy Brief on Access and benefits sharing to empower local communities.
- ❖ Rights to Food and Water pamphlet
- ❖ Access and benefit-sharing pamphlet

NEW PROJECTS

Enhanced Livelihoods and Nutrition Adaptation Project (ELINA Project)

Duration: November 2023- July 2027

Target Districts: Nyanga, Tsholotsho, Umzingwane

Target: 9500 households

Project Objective: Improve the dietary diversity and livelihoods of 9,500 vulnerable households in 18 wards of Umzingwane, Tsholotsho and Nyanga district by the July 2027 through improved agricultural and livestock production, sustainable natural resource management, improved access to safe water, community-based enterprises (business hubs), seed banks, ISALs and appropriate nutrition practices.

Climate Change and Sustainable Energy Project (CCASE Project)

Target Districts: Nyanga and Chipinge

Target: 5000 farmers

Project Objective: The Zimbabwe Climate Change and Sustainable Energy project (Zim-CCASE) seeks to address the gaps in climate policy and programming as well as limited adaptive resilience capacity by the poor.

(EINino) Project

Target Districts: Rushinga

Duration: 1 November 2023 – 15 March 2024

Project Objective: To build community resilience through provision of non rainfed cropping interventions within the Smallholder Horticultural Empowerment and Promotion (SHEP) framework



Other Workshops Attended

Workshop	Venue	Month	Remarks
Farmers' Variety Registration System, A Global South-South Learning Workshop	Ethiopia	March	CTDO made a presentation on Farmers' variety registration System in Zimbabwe
GEF-7 Sustainable Forest Management Impact Programme on Dryland Sustainable landscape: First Southern African Regional workshop	Harare	May	CTDO made a presentation on the on evolution of CSB in Zimbabwe
Women in Agroecology Expo	Uganda	November	CTDO show cased the agroecology practices through a poster
Supporting and Enhancing Seed System through Integrated in Zimbabwe	Netherlands	January	CTDO shared practical experience on the integrated approach SD=HS in Zimbabwe has been used to support and enhance farmer seed system
Tenth Session of the ITPGRFA	Rome	November	CTDO invited to take part as observers.



CTDO

Organizational Chart





Regis Mafuratidze
Policy and Advocacy Manager

Simba Gwati

Kingsone Kadzungura

Tatenda Matsikure

Sibongile Moyo

Masimba
Nyamukondiwa



Patrick Kasasa
Agricultural Biodiversity Manager

John Tigere

Thadeus Mhute

Obey Mugwira

Pardon Sithole



Thamsanqua Khanye
Food Security and Livelihoods
Manager

Seth Makumbiza

Tafadzwa Moliba

Bonface Mugova

Nkosinathi Ncube

Rapelang Noko

Elton Sanangura

Pius Sedze

Carvantry Muzaradope

Sibonginkosi Msebele

Sisindiswa Tirivangasi

Benjamin Joseph

Sharon Kubalela

Robert Marenya

Liseli Mathe



Precious Matiya
Finance and Admin Manager

Support Staff

Tawanda Makuva

George Museve

Sibongile Zimunya

Luke Musikazwi

Tellmore Nyamukapa

Luke Musikazwi

Albert Nyakudanga

Andrew Matsvimbo

Lorraine Marufu

Lilian Hororo

Munashe Chibvongodze

Students

Nyasha Chiwaridzo

Kudzai Mhlanga

Surprise Kapadza

Praise Kasasa

Michael Marongwe

Kiesha Chidavaenzi

Tanaka Wachenuka

Blessed Mango

Felistas Madondoro

Gavin Gapara



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Thamsanqa Khanye
Food Security and Livelihoods
Manager

Benhildah Chipiwa

Brighton Bhanzi

Kudzanai Ndemere

Verina Karuwo

Dawson Ngandu

Wimbai Nyamukasira

Tosetafadzwa Mukuta

Bradley Kudakwashe

Tonderai Mangezi

Tafadzwa Gundani

Mavugara Mavengano



