



mahlathini
development foundation

WATER RESEARCH COMMISSION PROJECT: C2022/2023-00746

DISSEMINATION AND SCALING OF A DECISION SUPPORT FRAMEWORK FOR CCA FOR SMALLHOLDER FARMERS IN SOUTH AFRICA

3RD REF GROUP MEETING

AUGUST 2024

PROJECT TEAM

PROJECT TEAM

MAHLATHINI DEVELOPMENT FOUNDATION

(MDF): ERNA KRUGER, TEMAKHOLO
MATHEBULA, BETTY MAIMELA

STRATACT: NQE DLAMINI

ENVIRONMENTAL AND RURAL SOLUTIONS(ERS):

NICKY MCCLEOD, SISSIE MATHELA

ASSOCIATION FOR WATER AND RURAL DEVELOPMENT(AWARD):

DERRICK DU TOIT

INSTITUTE FOR NATURAL RESOURCES (INR):

BRIGID LETTY

MERL SPECIALIST: KAREN KOTSCHY

COMMUNICATIONS SUPPORT: ANNA
KOTSCHY



ROLES AND RESPONSIBILITIES

There are a number of distinct outputs in this process with different members contributing to those:

- Local level CoP's: CRA learning groups – expansion, new practices, refinement **(MDF and MPhil students)**
- Monitoring tool for multi stakeholder implementation platforms in CCA **(ERS, AWARD, MDF, MREL specialist)**
- Guidelines for implementation of local food systems and marketing strategies **(MDF)**
- Handbook for implementation of smallholder financial services **(Stratact)**
- Refined CbCCA decision support framework with updated databases and CRA practices **(MDF +)**
- Case studies: CbCCA implementation and community ownership for water access and management **(MPhil students, MDF)**
- Manual for implementation of successful multi stakeholder platforms in CbCCA **(ERS, INR, MDF)**



1. Scaling out and scaling up of the Climate Resilient Agriculture (CRA) frameworks and implementation strategies lead to greater resilience and food security for smallholder farmers in their locality.
2. Incorporation of the smallholder decision support framework and CRA implementation into a range of programmatic and institutional processes
3. Improved awareness and implementation of appropriate agricultural and water management practices and Community based Climate Change Adaptation (CbCCA) in a range of bioclimatic and institutional settings
4. Contribution of a robust Climate Change (CC) resilience impact measurement tool for local, regional and national monitoring processes.
4. Concrete examples and models for ownership and management of local group-based water access and infrastructure

OUTCOMES AND IMPACTS

Vertical and horizontal integration of this community- based climate change adaptation (CbCCA) model and process lead to

- **improved water and environmental resources management,**
- **improved rural livelihoods and**
- **improved climate resilience for smallholder farmers in communal tenure areas of South Africa**

CONTRIBUTION OF 4 RESEARCH THEMATIC AREAS TO THE OVERALL RESEARCH PURPOSE OF MEASURING IMPROVED CLIMATE RESILIENCE IN CBCCA.

Community based climate
change adaptation (CbCCA)
-climate resilience



Development of COPs and
multistakeholder platforms and
MERL for climate resilience



Local water and resources
management



Microfinance and local
livelihoods



Climate resilient agriculture
and local food systems



NEW KNOWLEDGE CREATION REPORT



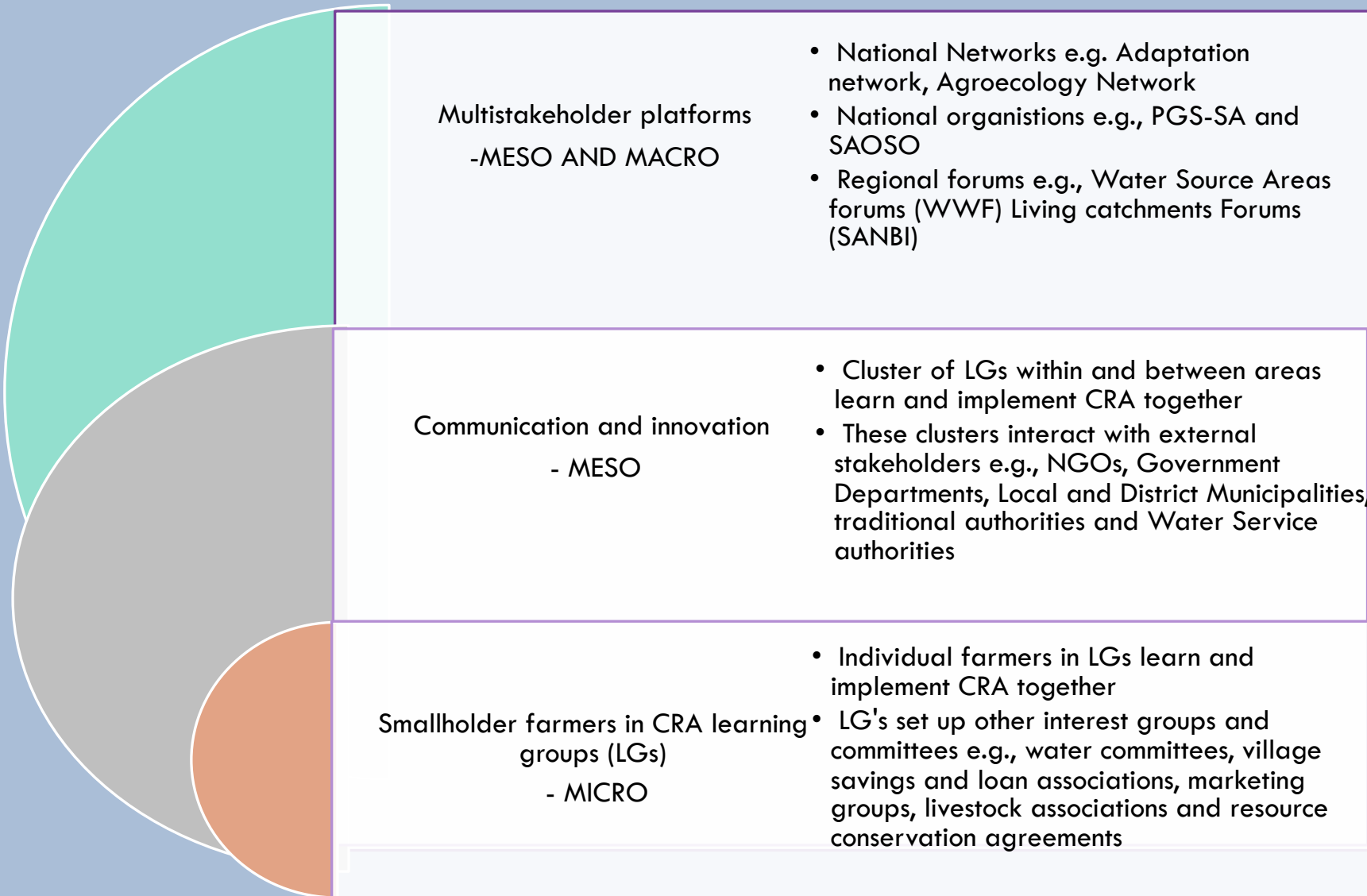
ITEMS	DESCRIPTION
1. (a) New knowledge to be created by the project	<ol style="list-style-type: none"> 1. Development and dissemination of a bespoke model for CbCCA across multiple stakeholders including communities, civil society and government. 2. Development of evidence-based indicators for monitoring resilience impact. 3. Development and promotion of new models and processes for community ownership of water access 4. Provision of guidelines and handbooks for programming in local food systems development and effective smallholder microfinance and enterprise development support.
(b) gap(s) to be filled by the new knowledge?	Design and implementation of an overarching framework for CbCCA in South Africa
2. What product(s) will be produced?	<ol style="list-style-type: none"> 1. Desk top review of South African policy, implementation frameworks and stakeholder platforms for CCA (Dec22, Aug23) 2. Monitoring tool for multi stakeholder implementation platforms in CCA (Draft Dec23 to be finalized by August25) 3. Guidelines for implementation of local food systems and marketing strategies 9draft Aug24 to be finalized Aug25) 4. Handbook for implementation of smallholder financial services (Feb23) 5. Refined CbCCA decision support framework with updated databases and CRA practices 6. Case studies: CbCCA implementation and community ownership for water access and management (Feb24) 7. Manual for implementation of successful multi stakeholder platforms in CbCCA (Draft Dec23 to be finalized by Aug25)
3. How innovative is the new product	The first coherent process of this kind focused on smallholder farmers in South Africa
1. Who are the users and beneficiaries?	multiple stakeholders (Government, Academic Institutions, NGOs, CSOs and community-based CoPs)
1. How do you know that the users need the products of this project?	There is a dire need for coherent implementation of CC adaptation strategies and programs, whether this has been clearly articulated or not. South Africa has excellent policy documents and processes but lack coherent implementation approaches.

DELIVERABLES 2022-2025



DELIVERABLES				
No.	Deliverable Title	Description	Target Date	Amount
1	Desk top review for CbCCA in South Africa	Desk top review of South African policy, implementation frameworks and stakeholder platforms for CCA.	01/Aug/2022	R100 000,00
2	Report: Monitoring framework, ratified by multiple stakeholders	Exploration of appropriate monitoring tools to suite the contextual needs for evidence-based planning and implementation.	02/Dec/2022	R100 000,00
3	Handbook on scenarios and options for successful smallholder financial services within the South Africa	Summarize VSLA interventions in SA, Govt and Non-Govt and design best bet implementation process for smallholder microfinance options.	28/Feb/2022	R100 000,00
4	Development of CoPs and multi stakeholder platforms	Design development parameters, roles and implementation frameworks for CoPs at all levels, CRA learning groups, Innovation and multi stakeholder platforms; within the CbCCA framework.	04/Aug/2023	R133 000,00
5	Report: Local food systems and marketing strategies contextualized - Guidelines for implementation	Guidelines and case studies for building resilience in local food systems and local marketing strategies towards sustainable local food systems (local value chain)	08/Dec/2023	R133 000,00
6	Case studies: encouraging community ownership of water and natural resources access and management	Case studies (x3) towards providing an evidence base for encouraging community ownership of natural resource management through bottom-up approaches	28/Feb/2024	R134 000,00
7	Case studies: CbCCA implementation in 3 different agroecological zones in SA	CbCCA implementation case studies in 3 different agroecological zones within South Africa	12/Aug/2024	R133 000,00
8	Refined CbCCA decision support framework with updated databases and CRA practices	Refined CbCCA DSS database and methodology with inclusion of further viable and appropriate CRA practices	13/Dec/2024	R133 000,00
9	Manual for implementation of successful multistakeholder platforms in CbCCA	Methodology and process manual for successful multi stakeholder platform development in CbCCA	28/Feb/2025	R134 000,00
10	Final Report	Final report: Summary of all findings, guidelines and case studies, learning and recommendations	18/Aug/2025 (Feb 2026)	R400 000,00

PROGRESS

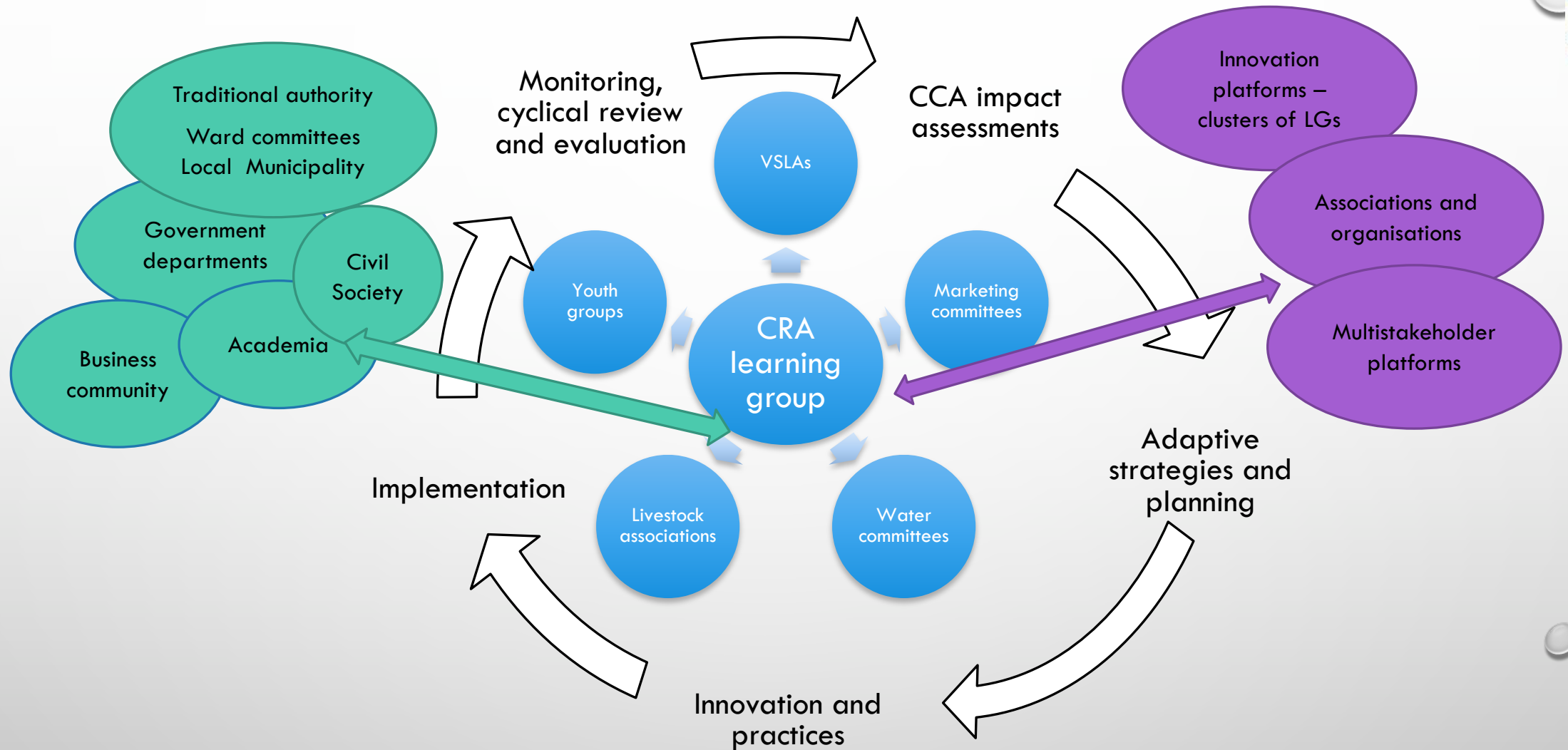


1 Multi stakeholder forum development,
2 National networks

3 IP events (farmers' days),
3 cross visits,
5 organisational training events

3 Provinces,
6 areas,
25 learning groups,
515 participants

CRA learning groups: Process for development of social agency





LOCAL FOOD SYSTEMS

DELIVERABLE 5:

FRAMEWORK FOR STUDY

RESILIENCE SNAPSHOTS AND CASE STUDY

VSLAS AND LIVELIHOODS

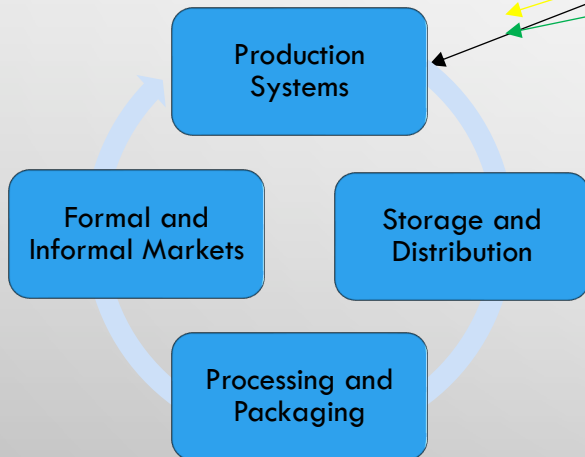


MDF FOOD SYSTEMS FRAMEWORK

FOOD SYSTEM DRIVERS



FOOD VALUE CHAIN



Consumption

Food Availability and Access

OUTCOMES

- Food Security and Nutrition
- Socio Economic Stability
- Environmental Sustainability
- Livelihood Creation
- Resilience and Climate Change Adaptation
- Social justice and Equality

IMPACTS: Renewability, resilience, health, equity, diversity, inclusion and interconnectedness,

ACTIVITY: Climate Resilient Agriculture and innovation system development for sustainable and productive use of land and water

- **Conservation/ Regenerative Agriculture:** (LEI) Quantitative research support to the Smallholder Farmer Innovation Programme; intercropping, crop rotation, cover crops, fodder production
- **Livestock integration:** Winter fodder supplementation, hay baling, conservation agreements, local livestock auctions
- **Intensive homestead food production:** Agroecology; tunnels, trench beds, crop diversification, mulching, greywater management, fruit production
- **Village savings and loan associations:** Village based savings groups for savings and small loans for productive activities
- **Local marketing and food systems:** Monthly produce market stalls organised per village, exploration of further marketing options, small

mills for maize

48 villages in EC, KZN
and Limpopo



850 small holder
farmers



3500
beneficiaries



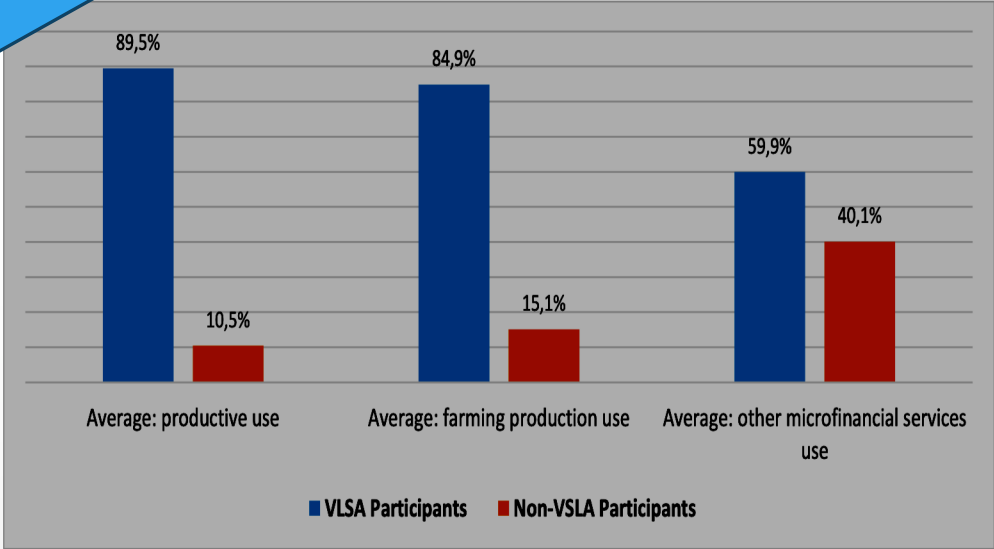
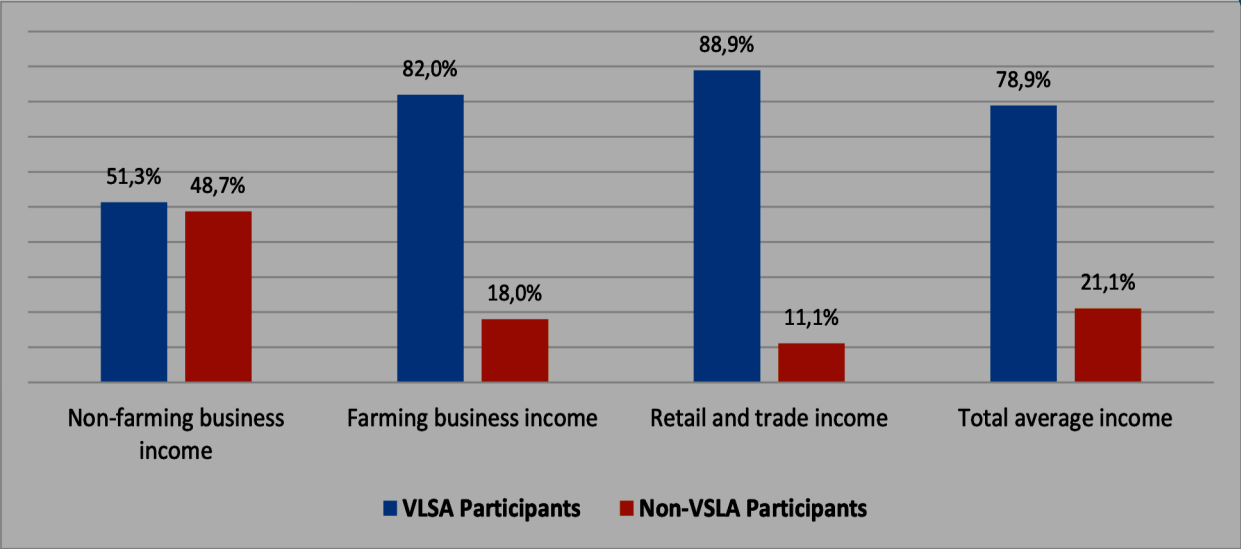
RESULTS: LOCAL MIXED FARMING PRODUCTION AND INCOME POTENTIAL (KZN, EC 2021-2023)



Commodity	Average monthly income per participant	Annual income potential
Broilers	R1 024,50	R12 294,00
Layers (eggs)	R641,00	R7 692,00
Field crops:		
Maize	R209,41	R3 713,00
Beans	R237,50	R2 850,00
Vegetables	R247,00	R2 964,00
	Average monthly value of food per participant	
All commodities: This is an estimate only (further corroborated in resilience snapshots)*	R700,00	R8 400,00
Commodity for a selection of participants only	Average monthly income per participant	Annual income potential
Green Maize	R1 300,00	R15 600,00 (up to R24 000)
Stall fed calves	R750,00	R9 000,00 (up to R50 000)
Total value of production (incl. all commodities but excl. the selection)	R3 060 – R5 160	R36 710- R 61 920




VSLA participants were more active in income generation and have considerably higher incomes than non-VSLA participants. They also use these incomes for productive uses and farming to a much larger extent than those not in VSLA groups



Above: Incomes made for participants in and not in VSLAs as well as use of these incomes

Name of Respondent	Non-farming business income	Farming business income	Retail and trade income	Manufacturing and services income	Total average income
Annual average non-VSLA participants (n=14)	R20 658,00	R8 598,00	R3 000,00	R142,86	R32 398,86
Annual average VSLA participants (n=16)	R19 042,50	R34 242,50	R21 000,00	R6 825,00	R81 110,00



COMMUNITY MANAGED WATER SUPPLY SCHEMES

DELIVERABLE 6

- MODELS AND APPROACHES
- GUIDELINES
- EXAMPLES

- SUPPORT AND STRENGTHEN THE PARTICIPATION OF LOCAL COMMUNITIES IN IMPROVING WATER AND SANITATION MANAGEMENT

- SELF-SUPPLY OPTIONS (NEW WATER SERVICES ACT)
- COLLABORATION WITH MANDATED ENTITIES

Problem 1: Reluctance of municipalities to view community organizations as partners in delivering water services

Problem 2: Break down of rural supply schemes for extended periods, denying communities their constitutional right to safe and reliable water

No process in place for this

- VARIOUS LEVELS OF SELF-SUPPLY-INDIVIDUALS AND GROUPS

- SPRINGS
- BOREHOLES
- PIPES FROM MOUNTAIN STREAMS/SPRINGS

Experiences from Giyani, Sekororo, Bergville, Creighton included



PARTICIPATORY APPROACH IN WATER SERVICE DELIVERY.

- THE APPROACH INTEGRATES THE PRINCIPLES OF PARTICIPATION, SUSTAINABLE DEVELOPMENT, AND COMMUNITY-BASED MANAGEMENT TO ADDRESS WATER SERVICE DELIVERY. THE FOCUS ON COLLABORATION, LOCAL EMPOWERMENT, AND SUSTAINABLE PRACTICES IS CRUCIAL FOR CREATING EFFECTIVE AND LASTING SOLUTIONS IN THE WATER SECTOR



Village water dialogues is a non-confrontational advocacy approach that empowers communities to engage directly with the representatives of public organisations to improve the quality of water and related services. They are action and solution oriented where all parties agree on ways for improving water services and social accountability indicators

- PHASE 1: EDUCATION AND DEVELOPMENT OF LOCAL STRUCTURE
- PHASE 2: PROJECT AND ACTION PLAN WITH SOCIAL ROLES AND RESPONSIBILITIES
- PHASE 3: IMPLEMENTATION AND SUSTAINABILITY PLANS

GUIDELINES DEVELOPED THROUGH INVOLVEMENT IN LIMPOPO AND KZN.

What we know from experiences in self-supply projects

- COMMUNITY MEMBERS ARE WILLING AND ABLE TO PARTICIPATE.
- COMMUNITY MEMBERS ARE WILLING TO VOLUNTEER THEIR TIME, LABOUR, AND MONEY TOWARDS ENSURING A FUNCTIONAL WATER SYSTEM.
- COMMUNITY MEMBERS ARE COMMITTED TO ENSURING THAT THEIR WATER SUPPLY SYSTEM IS OPERATIONAL AND LOOKED AFTER.
- COMMUNITY MEMBERS ARE WILLING AND ABLE TO MAKE RATIONAL AND CONSIDERED DECISIONS AROUND WATER USE AND MANAGEMENT IF PROVIDED WITH APPROPRIATE INFORMATION (SCENARIOS) ON WHICH TO BASE SUCH DECISIONS.
- THE ACTUAL LEVEL OF INVOLVEMENT IN THE OPERATION AND MAINTENANCE OF THE SYSTEM IS A CHOICE FOR COMMUNITY MEMBERS. SOME MEMBERS PARTICIPATE BY VOLUNTARILY FOLLOWING THE RULES AND OTHERS ARE MORE INVOLVED IN THE MANAGEMENT OF THE SYSTEM.
- LEVELS OF WATER ACCESS NEED TO BE EQUITABLE AND TRANSPARENT.



GUIDELINES DEVELOPED THROUGH INVOLVEMENT IN LIMPOPO AND KZN.



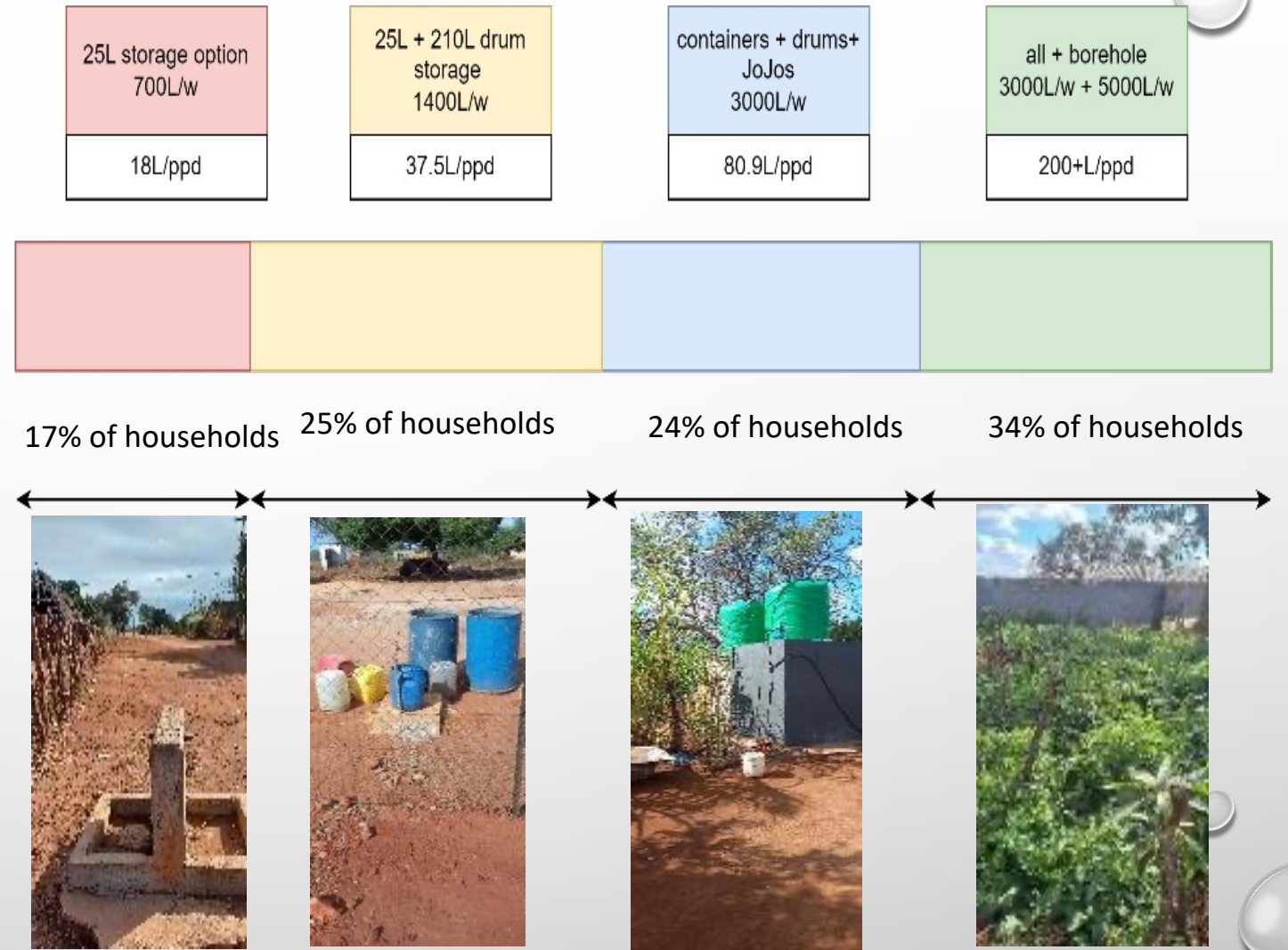
Recommendations for service providers and authorities

- FOCUS ON CREATING AN ENABLING ENVIRONMENT FOR COMMUNITIES TO ENGAGE WITH MUNICIPALITIES ON NON-CONFRONTATIONAL TERMS
- ALIGNING MUNICIPAL AND WATER SERVICES POLICIES WITH COMMUNITY-BASED MANAGEMENT APPROACHES
- SIMPLIFYING THE ROLE AND RESPONSIBILITIES OF COMMUNITY-BASED WATER INSTITUTIONS
- PROVISION OF INCENTIVES AND DESIGNING FINANCING MECHANISMS BY MUNICIPALITIES TO PROMOTE COMMUNITY-BASED MANAGEMENT
- DEVELOPMENT OF COMMUNITY EDUCATIONAL MATERIALS ON WATER AND SANITATION, RESOURCE MANAGEMENT, WATER PROTECTION AND CONSERVATION, DEMAND MANAGEMENT, WATER QUALITY MANAGEMENT, ETC.
- NON-PUNITIVE POLICIES THAT WOULD SUPPORT COMMUNITY-MANAGED WATER SERVICE PROVISION

GLSCRIP: CASE STUDY

Du Toit D ¹, Kruger E ², Maimela B ², Mabunda
 1-AWARD, 2-MDF
 WISA: Turn the Tide 12-14 June

- STORAGE, OF ANY DESCRIPTION, IS AN IMPORTANT IN RURAL SETTINGS BUT OFTEN UNDER CONSIDERED
- STORAGE MAKES IT POSSIBLE FOR PEOPLE TO BE INVOLVED IN PRODUCTIVE USES AND CONTRIBUTE TO FOOD SECURITY
- STORAGE IS A RELATIVELY CHEAP OPTION FOR RURAL PROJECTS
- STORAGE NEEDS MONITORING (MOSTLY NOT DONE) AND MANAGEMENT
- WATER QUALITY AND STORAGE ARE FREQUENTLY NOT CONSIDERED IN RURAL PROGRAMMES
- RAINWATER HARVESTING IS UNDER-DEVELOPED





CBCCA CASE STUDIES

DELIVERABLE 7

- RESILIENCE SNAPSHOTS
- PARTICIPATORY IMPACT ASSESSMENTS
- DATABASE AND DASHBOARDS

RESILIENCE IMPACT MONITORING

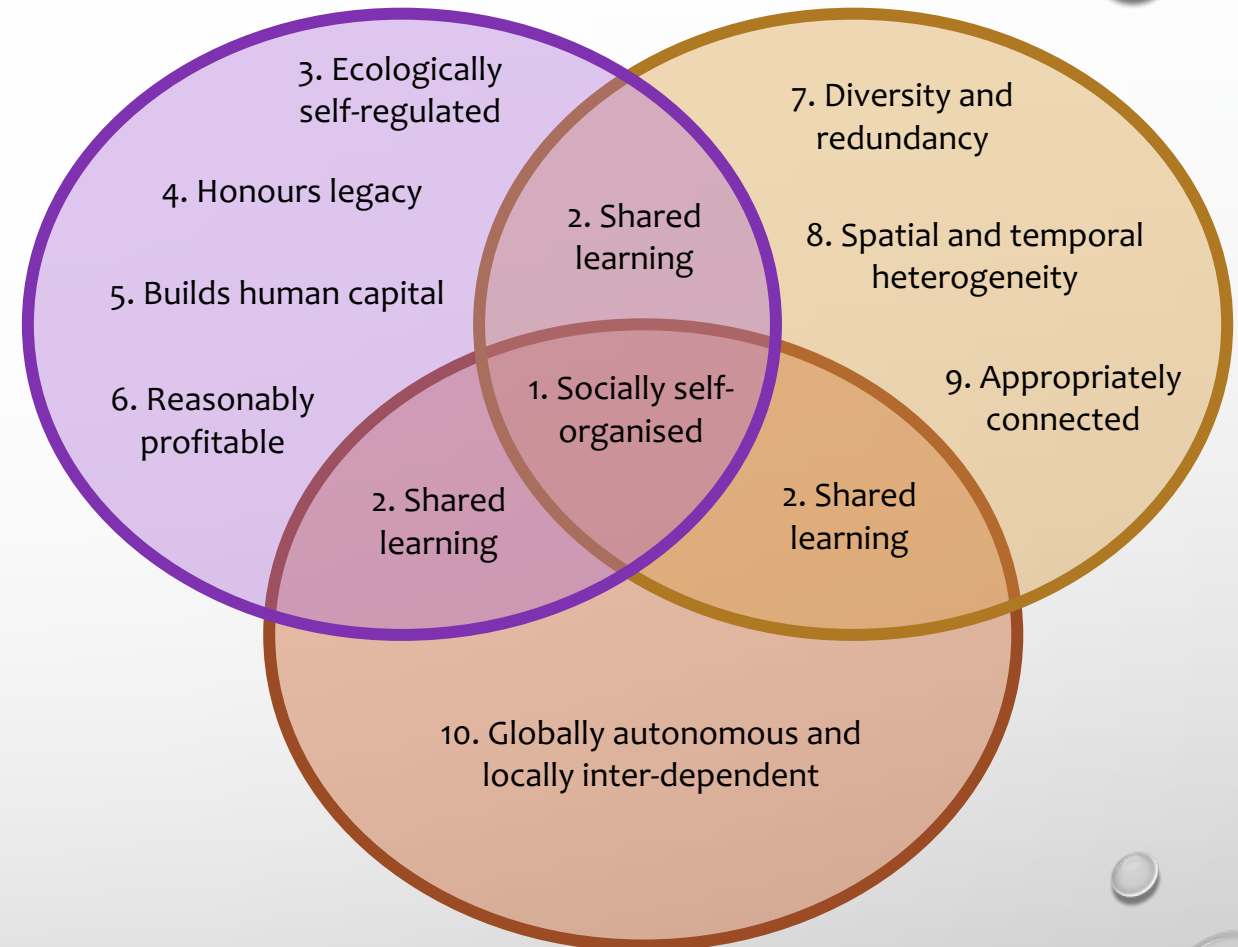
RESILIENCE SNAPSHOTS- Individual Interviews

PARTICIPATORY IMPACT ASSESSMENTS- Focus
Group Discussions

Province/area	Agroecological zone (HarvestChoice; International Food Policy Research Institute (IFPRI), 2015)	Villages	Number of individual Interviews	PIAs (focus group discussions)
Limpopo- Mame-tja-Sekororo	Tropic – warm -semi-arid	Willows, Sedawa, Santeng, Worcester, Turkey	20	Willows(33) Sedawa (19)
Eastern Cape – Matatiele	Sup tropic-cool- semi-arid	Nchodu, Ned, Nkau, Rashule	17	Nchodu (18) Ned (22)
KwaZulu Natal – Northern Drakensberg	Sup tropic-cool- Subhumid	Eqeleni, Ezibomvini, Stulwane, Vimbukhalo, Ezinyonyane	20	Eqeleni(13) Ezibomvini (15) Stulwane (35)
KwaZulu Natal – Southern region	Sub tropic cool subhumid	Mahhehle, Ngongonini, Centocow, Matirathal	20	Mahhehle (36) Centocow (32)
KwaZulu Natal – Midlands	Sub tropic warm subhumid	Ozwothini, Mayizekanye	13	Ozwothini(22) Mayizekanye (26)
TOTALS		20	90	271

Absorptive capacity

Adaptive capacity



Transformative capacity

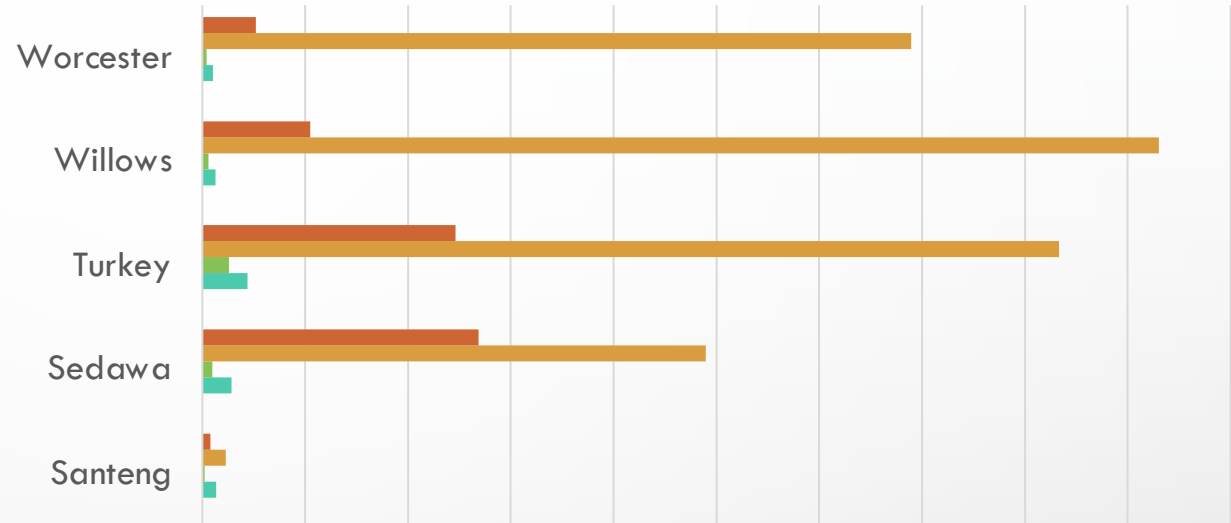
SNAPSHOTS EXAMPLE

INDICATORS:

- Increased Income
- Increased Productivity

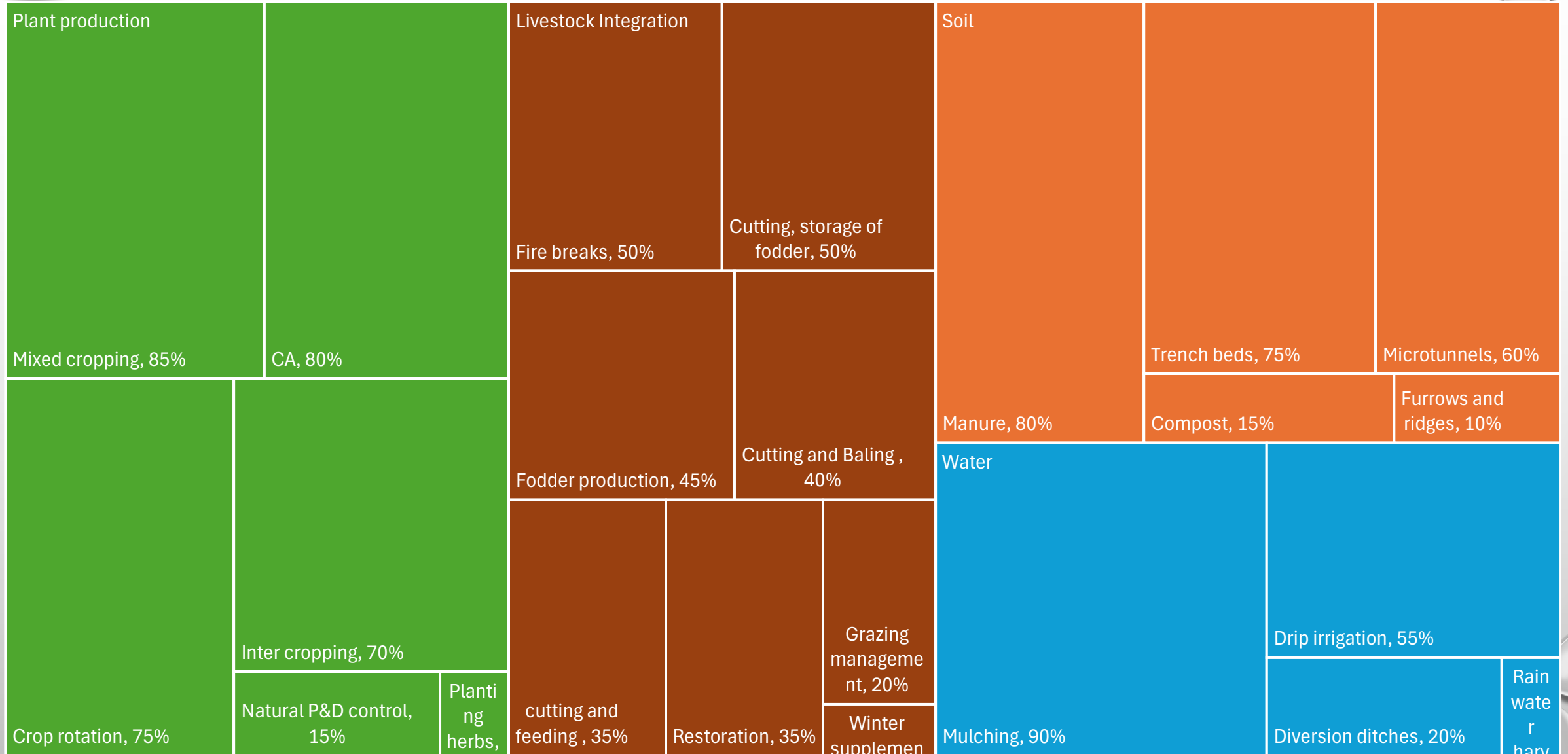


Average annual village level production and income figures in Limpopo, 2024 (n=20)



	Santeng	Sedawa	Turkey	Willows	Worcester
Average of increase in income	R 385.50	R13 438.30	R12 304.74	R5 251.88	R2 604.00
Average of Income	R1 152.50	R24 470.00	R41 659.00	R46 515.00	R34 476.50
Average of Inc in amount	115.0	474.3	1301.9	284.4	193.0
Average of Amount in kg	675.0	1430.5	2200.5	650.4	523.8
Average of Eaten	75%	59%	62%	73%	82%

PERCENTAGE IMPLEMENTATION OF CRA PRACTICES IN BERGVILLE, KZN, JULY 2024.



DASHBOARD

VISUALISATION OF INTERACTIVE DATA FROM ADAPTIVE, ABSORPTIVE AND TRANSFORMATIVE INDICATOR SETS

Smallholder farmer climate resilience in South Africa

Community based climate change adaptation

The CbCCA approach and methodology used in all three provinces has relied on village level learning groups and clusters of learning groups undertaking cyclical analysis, implementation and review processes to explore adaptive strategies and processes for adaptation to climate change.

Incorporation of aspects from different themes within the smallholder farming system and the natural landscape has been undertaken to allow for implementation across a wide range of activities including climate resilient agriculture, water and natural resources management and stewardship and local governance.

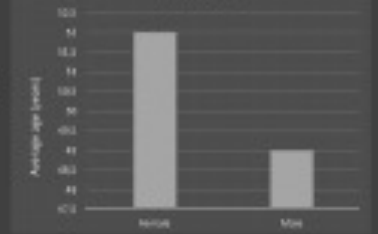
The broad aim of these programmes, supported by SODI-BMZ, the WRC and WWF among others is for improvement of livelihoods for the rural poor and significantly increase climate resilience of individuals, households and communities



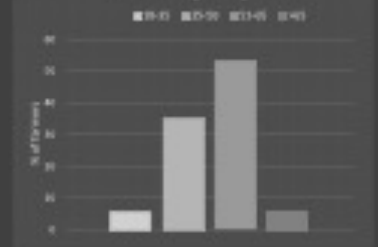
Farmer gender



Farmer age



Farmer age categories



Matatiele, EC

This area falls within the Unaluvaba catchment of the Southern Drakensberg, bordering on Lesotho. It falls within the cool sub-tropical semi-arid agricultural zone, with average annual temperatures of around 15°C, with summer rainfall averaging ~1000mm and relatively winter, with potential for snow. Rainfall variability has increased significantly in the last 10 years as has occurrence of extreme weather patterns (wind, hail and drought).

A key vulnerability is increasing food insecurity, with very high levels of unemployment and poverty. Over-cultivation and mismanagement of natural resources has led to erosion and reduction of water availability, leading to water stress in these



Midlands and Southern, KZN

This area falls within the grassy highveld and Unaluvaba catchments, they fall within the warm and cool sub-tropical agricultural zones and have moderate climate, with average annual temperatures of around 18°C, with good summer rainfall (up to 1200mm) and cool dry winters. Rainfall variability has increased significantly in the last 10 years as has temperature and heatwaves. Key vulnerabilities in these areas are urban migration, the increase in erosion and reduction of water in the landscape linked to increased food insecurity and high unemployment rates.



Bergville, KZN

This area falls within the upper A-Thukela river basin in the Northern Drakensberg. It falls within the cool sub-tropical sub-humid, wetland and alpine grassland zones, with average annual temperatures of around 15°C, with good summer rains (up to 1200mm) and cold dry winters. Rainfall variability has increased significantly in the last 10 years as has temperature and heatwaves. A key vulnerability is increasing food insecurity, with very high levels of unemployment and poverty. Over-cultivation and mismanagement of natural resources has led to erosion and reduction of water availability, leading to water stress in these villages.



Mametja-Sekororo, Limpopo

This area falls within the Lower Olifants' river basin. It falls within the warm sub-tropical, dry savanna agricultural zone, with average annual temperatures of 18°C, extremely hot conditions prevailing in summer, and more winters. Average annual rainfall is around 1000mm. Evaporation potential is around 1000mm and far exceeds rainfall. A key vulnerability identified for the region is that of the potential for increasing food insecurity under changing climatic conditions, especially for the poor in former





INTERACTIVE DASHBOARD

ANNA KOTSCHY



RESEARCH STUDY REPORT

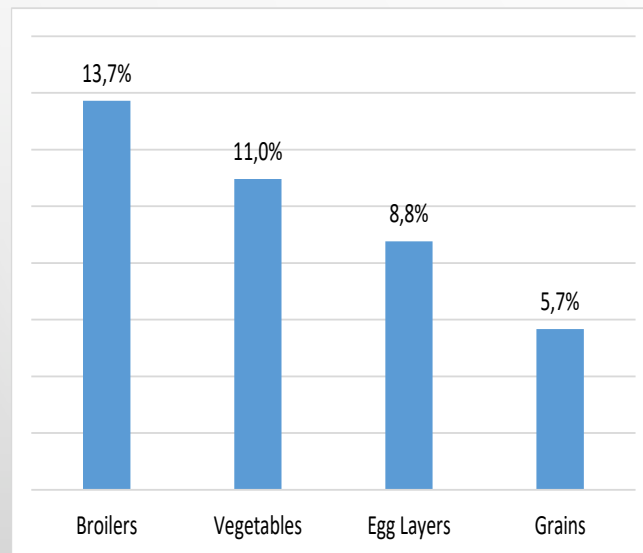
Exploration of factors that contribute towards greater success and sustainability of farming business enterprises participating in the MDF programmes: A case study

SUMMARY

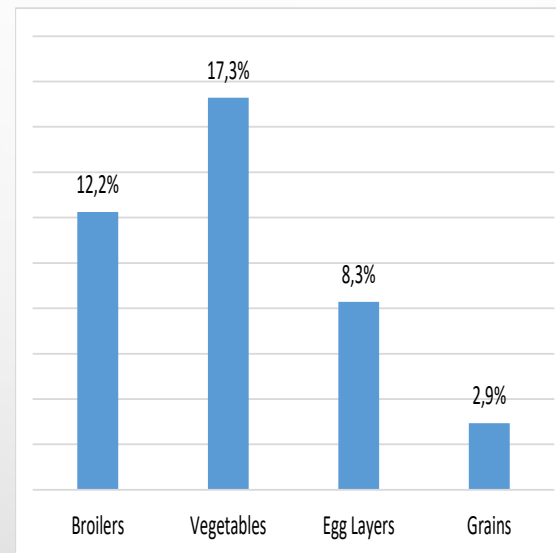
- This case study reports on factors that contribute towards greater success of farm-based enterprises that are operated by participants in the CRA programme
- Used resource-based view (**RBV**), resource dependency theory (**RDT**) and sustainable livelihoods framework (**SLF**) as theoretical framework
- Qualitative, exploratory case study, purposively selected 18 respondents
- The study concludes that focused savings groups provide a springboard for participants to improve/supplement their incomes through farm-based microenterprises

RESULTS (7 THEMES)

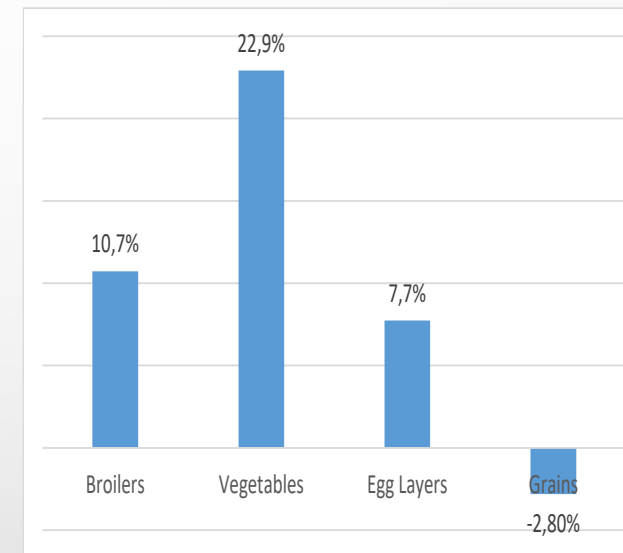
Responsive Small-scale Farming Enterprise: Average supplementary income of R1 300 per month



Capital outlay



Income earned



Profit earned

RESULTS CONT ...

- **NON-FARMING IGAS:** SUSTAIN INCOMES WHILE WAITING TO HARVEST; AND USED TO BUILD LOYALTY WITH REGULAR THEIR CUSTOMERS

Farm Enterprises			Non-Farm Enterprises		
Vegetables	11.0%	65 050	Tuck shops	26.8%	158 880
Grains	5.7%	33 600	Selling household items	3.5%	21 000
Broilers	13.7%	81 400	Grass mat making	1.2%	7 000
Egg layers	8.8%	51 970	Baking	5.1%	30 000
Goats	1.6%	9 600	Garment making	9.2%	54 600
Cattle	0.2%	1 000	Miscellaneous businesses	13.3%	79 200
Sub-total	40,9%	242 620		59,1%	350 680
Total capital outlay for both farm and non-farm enterprises					R593 300

RESULTS CONT ...

1. **VSLAS AS ALTERNATIVE FINANCIAL RESOURCES:** ABOUT 35% OF OPERATING CAPITAL WAS SOURCED FROM THE VSLAS; HELPS WITH RE-PURPOSING/RECYCLING INCOMES
2. **USEFUL KNOWLEDGE ACQUISITION:** INFORMATIONS SESSIONS, TRAINING EVENTS AND FIELD SUPERVISION; A KEY RESOURCE FOR STRATEGIC DECISION MAKING IN ALL ASPECTS OF DEVELOPMENT
3. **ADOPTION OF CRA PRACTICES:** CRA ADD VALUE TO THE PERFORMANCE OF SMALL FARMS BY IMPROVING QUALITY AND YIELDS
4. **SUCCESS FACTORS OF SMALL-SCALE FARMING ENTERPRISES:** BUSINESS PLANNING, CAPITAL ACQUISITION, FINANCING, CROP DIVERSIFICATION, PRODUCTION SCHEDULING, MARKETING PLANNING, SUPPLEMENTARY ENTERPRISES, FINANCIAL MANAGEMENT AND RECORDKEEPING
5. **SOCIAL NETWORKS:** BUILDING AND MAINTAINING SOCIAL RELATIONS AND BUSINESS PARTNERSHIPS THROUGH FLGS, VSLAS, EXTERNAL ORGANISATIONS, GOVERNMENT

KEY RECOMMENDATIONS

- INSTITUTIONALISED AND COHERENT SUPPORT IS THEREFORE KEY FOR FARMING MICROENTERPRISES JUST AS ESTABLISHED BUSINESSES
- PROMOTION OF VSLAS MUST INCLUDE INTENSIVE COMPONENT OF FINANCIAL EDUCATION AND SPENDING TIME ON BUDGETING, RECORDING OF INCOME AND EXPENSES, CREATING EMERGENCY FUNDS AND MAKING INCOME AND EXPENDITURE PROJECTIONS
- FOCUS ON BULKING OF SAVINGS FOR VSLAS TO AFFORD GRANTING OF BIGGER BUSINESS LOANS
- SUPPORT FARM-BASED ENTERPRISES SHOULD COMMENCE BY PROFESSIONALLY-CONDUCTED PVCAS TO HELP PARTICIPANTS TO UNDERSTAND THE CONCEPT OF SUPPLY AND DEMAND SO THAT THEY CAN IDENTIFY MOST PROFITABLE COMMODITIES AND/OR SERVICES
- FARMERS TO TAKE CONSISTENT ACTIONS AND CHAMPION COMMUNITY-BASED SOCIAL ENTERPRISES, E.G. COMMUNAL WATER MANAGEMENT (INCLUDING SPRINGS AND WETLANDS PROTECTION), CONSERVATION RESTORATION, PREVENTION OF SOIL EROSION AND DONGAS, RANGELAND MANAGEMENT, ETC.

CAPACITY BUILDING

NQE DLAMINI- PHD

Learning values through participation in savings groups in Kwazulu-Natal: An afrocentric case study. UKZN_Dept of Education (reg:Feb 2022)

TEMAKHOLO MATHEBULA –MPHIL

The Role of the Social and Solidarity Economy in Strengthening Climate Resilient Agriculture (CRA) Adoption in Smallholder Farming Systems in KwaZulu-Natal. UKZN-Dept of Food Security (reg: Still in progress)

PROGRESS – PH.D STUDY

TITLE: LEARNING VALUES THROUGH PARTICIPATION IN SAVINGS GROUPS
IN KWAZULU-NATAL: AN AFROCENTRIC CASE STUDY

N.J. DLAMINI | SCHOOL OF EDUCATION | UKZN | PMB CAMPUS

Study Location: Emmaus in Bergville, KwaZulu-Natal
22 August 2024

OVERVIEW OF THE STUDY



- **PROBLEM STATEMENT:** USERS OF SAVINGS GROUPS MAY NOT BE AWARE THAT THEY LEARN WHILE THEY PARTICIPATE IN THEIR GROUPS AND MAY BE UNKNOWINGLY RESOLVING **POSSIBLE TENSIONS** BETWEEN EUROCENTRIC VALUES AND AFROCENTRIC VALUES
- **PURPOSE:** TO EXPLORE VALUES PEOPLE LEARN THROUGH PARTICIPATING IN SAVINGS GROUPS AND **HOW PEOPLE NAVIGATE TENSIONS** THAT MAY EXIST BETWEEN EUROCENTRIC VALUES AND AFROCENTRIC VALUES
- **MAIN RESEARCH QUESTION:** HOW DO **PEOPLE NAVIGATE POSSIBLE TENSIONS** BETWEEN EUROCENTRIC VALUES AND AFROCENTRIC VALUES WHILE THEY PARTICIPATE IN SAVINGS GROUPS?

RESEARCH OBJECTIVES

- TO EXPLORE WHAT VALUES PEOPLE LEARN THROUGH PARTICIPATING IN SAVINGS GROUPS
- TO UNDERSTAND HOW PEOPLE LEARN THESE VALUES
- TO UNDERSTAND HOW PEOPLE NAVIGATE POSSIBLE TENSIONS BETWEEN EUROCENTRIC VALUES AND AFROCENTRIC VALUES
- [**CONTRIBUTION:** IDENTIFY GAPS IN THE LITERATURE REGARDING AFRICAN WAYS OF LEARNING WITHIN THE MICROFINANCE DISCOURSE (*IN THIS SECTOR, THE GROWING BODY OF LITERATURE TEND TO FOCUS ON SKILLS AND KNOWLEDGE, RATHER THAN VALUES*)]

PROGRESS

- DEFENDED THE RESEARCH PROPOSAL SUCCESSFULLY IN SEPTEMBER 2023
- ETHICAL CLEARANCE APPLICATION LODGED IN DEC 2023 AND GRANTED IN MAY 2024
- SUBMITTED THE FIRST 3 CHAPTERS TO SUPERVISORS – AND CURRENTLY WAITING FOR THE FEEDBACK

NEXT ACTIONS:

- GET CHAPTER 4 AND DATA COLLECTION TOOLS ACCEPTED BY OCT 2024
- COMMENCE DATA COLLECTION THIS NOV THROUGH TO JUNE 2025 (*PARTICIPANTS WILL TAKE ACTIVE ROLE IN PRELIMINARY DATA ANALYSIS DURING THIS TIME*)
- SUBMIT THESIS FOR EXAMINATION BY OCT 2025
- ATTEND TO CORRECTIONS IN JAN/FEB 2026

THANK YOU VERY MUCH



UNIVERSITY of the
WESTERN CAPE



THE SOCIO-POLITICAL DYNAMICS INFLUENCING FARMER ADAPTATION TO CLIMATE CHANGE IN OZWATHINI, KWAZULU-NATAL

TN MATHEBULA, STUDENT NO: 4481656

SUMMARY OF RESEARCH PROBLEM

- ❑ HISTORICALLY, MAJOR CLIMATIC SHIFTS WERE DRIVEN BY GEOPHYSICAL FORCES, HOWEVER, WE HAVE ENTERED WHAT SOME AUTHORS TERM, THE ‘ANTHROPOCENE’ AGE WHERE COLLECTIVE HUMAN ACTIVITIES HAVE RISEN TO BE THE ‘DEFINING GEOLOGICAL FORCE OF CLIMATIC TRANSFORMATION.’ (RUDDIMAN, 2005).
- ❑ HUMAN ACTIVITIES SUCH AS LAND DEMARCATION FOR PRIVATIZATION, THE RISE OF AGRICULTURAL PRODUCTION, LARGE-SCALE DEFORESTATION, INDUSTRIALIZATION, SLAVERY, MECHANIZATION AND ENGINEERING HAVE ALL CONTRIBUTED TO LANDSCAPE TRANSFORMATION AND CLIMATE PRODUCTION. STUDIES SUGGEST THAT SMALLHOLDER RAIN-FED AGRICULTURE HAS BEEN THE MOST IMPACTED BY CLIMATE CHANGE (THORNTON *ET AL*, 2014). PREDICTIONS FROM THE FOURTH ASSESSMENT REPORT OF THE IPCC REVEAL THAT BY THE YEAR 2050, YIELDS FROM RAIN-FED AGRICULTURE IN SUB-SAHARAN AFRICAN COUNTRIES WILL BE REDUCED BY UP TO 50% (IPCC, 2007).
- ❑ **THIS STUDY AIMS TO PROVIDE INSIGHT INTO HOW UNEQUAL DISTRIBUTION OF POWER AND POLITICAL PROCESSES UNDERMINE THE ABILITY OF SMALLHOLDER FARMERS TO COPE WITH CLIMATE CHANGE.**

THEORETICAL FRAMEWORK

- ❑ THE THEORETICAL FRAMEWORK FOR THIS STUDY IS THE POLITICAL ECOLOGY THEORY TO UNDERSTAND THE SOCIO-POLITICAL PROCESSES THAT INFLUENCE SMALLHOLDER FARMERS' ADAPTATION TO CLIMATE CHANGE.
- ❑ *“POLITICAL ECOLOGY IS A CRITICAL THEORY APPLIED IN ANTHROPOLOGY, ENVIRONMENTAL SOCIOLOGY, GEOGRAPHY, AND OTHER SOCIAL SCIENCES. IT HELPS TO ANALYSE UNEVEN DISTRIBUTIONS OF POWER CAUSED BY STATE-BASED AND MARKET-RELATED POLICY INTERVENTIONS TO ENVIRONMENTAL PROBLEMS.” (COOK, 2023).*
- ❑ POLITICAL ECOLOGY ELUCIDATES HOW SOCIAL AND POLITICAL FACTORS INFLUENCE SMALLHOLDER FARMER VULNERABILITY. IT IS PREMISED ON THE REALITY THAT CLIMATE CHANGE IS A PRODUCT OF POLITICS. IT ALSO INTERROGATES THE EXISTING POLICY FRAMEWORKS AND UNEVEN POWER DISTRIBUTION WHICH AFFECTS FARMER RESILIENCE TO CLIMATE CHANGE (MOORE, 2019).

RESEARCH QUESTIONS

MAIN RESEARCH QUESTION

WHAT ARE THE EXISTING SOCIO-POLITICAL DYNAMICS THAT INFLUENCE SMALLHOLDER FARMER ADAPTATION TO CLIMATE CHANGE?

SUB QUESTIONS

1. WHAT DO FARMERS UNDERSTAND ABOUT CLIMATE CHANGE AND ITS INFLUENCE ON THEIR FARMING ACTIVITIES?
2. WHAT ARE THE EXISTING INSTITUTIONAL STRUCTURES FOR SMALLHOLDER FARMERS AND HOW DO THESE INFLUENCE ADAPTATION TO CLIMATE CHANGE?
3. WHAT ARE THE CORE VALUES, NORMS AND BELIEF SYSTEMS AND HOW DO THEY SHAPE THE ALLOCATION AND DISTRIBUTION OF RESOURCES?
4. WHAT ARE THE MAJOR CAUSES OF INEQUALITY, POWER IMBALANCES AND SOCIAL INJUSTICE IN THE AGRICULTURAL SECTOR AND HOW DO THESE ENTRENCH VULNERABILITY?

METHODOLOGY

- ❑ DESKTOP ANALYSIS OF CURRENT TRENDS IN CLIMATE CHANGE ADAPTATION AND SOCIAL-POLITICAL PROCESSES IN COMMUNITIES
- ❑ QUALITATIVE RESEARCH FOR DATA COLLECTION AND ANALYSIS USING A POST-STRUCTURALIST HERMENEUTIC APPROACH.
- ❑ NON-PROBABILITY PURPOSIVE SAMPLING TECHNIQUES TO IDENTIFY INDIVIDUAL AND GROUP PARTICIPANTS.
- ❑ KEY INFORMANT INTERVIEWS, GENDER-SPECIFIC FOCUS GROUPS, AND HOUSEHOLD SURVEYS

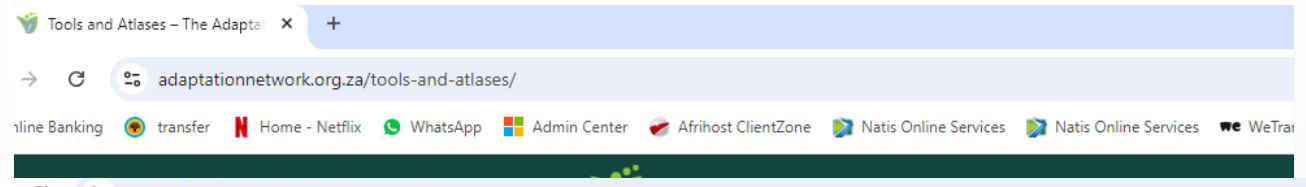
KNOWLEDGE DISSEMINATION

EVENTS, SEMINARS, CONFERENCES

- NDC stakeholder meeting (20 March 2024)
- WISA (12-14 June 2024)
- AN colloquium (14-17 July 2024)
- 9WCCA (22-25 July 2024)
- WITS RURAL 2nd Science Symposium (2 August 2024)
- EWT, SAEON, WWF, INR-Farmer x visit – resource management (8 August 2024)

WEBSITE LINKS

- Adaptation Network – dss
- Amanzi for Food (Rhodes University) – CCA and resources



DETAILED WORK PLAN- SEPT-DEC 2024



Overall workplan: 2024-2025

- CONTINUATION OF IMPLEMENTATION FOR THE CRA LEARNING GROUPS ACROSS THREE PROVINCES
- ONGOING INVOLVEMENT IN COPS: AN-CAPACITY BUILDING AND LEARNING, PGS-SA, NORTHERN DRAKENSBERG COLLABORATIVE
- UPDATE ON POSTGRADUATE STUDENTS' PROGRESS: NQE DLAMINI (PHD) _UKZN AND TEMAKHOLO MATHEBULA (MPHIL)_UWC.
- FINALIZATION OF CLIMATE RESILIENCE MONITORING FRAMEWORK AND INDICATOR SETS, ANALYSIS FRAMEWORKS AND DASHBOARDS.
- DISCUSS POTENTIAL COLLABORATION WITH THE CLIMATE SYSTEMS ACTION GROUP (DR PETER JOHNSTON) FROM UCT, TO PROVIDE DATASETS FOR THE DECISION SUPPORT (DSS) PLATFORM THAT INCORPORATE CLIMATE CHANGE ASPECTS MORE DIRECTLY THAN THE PRESENT SETS AND UPDATE THE TOOL ACCORDINGLY.
- UPDATING PRACTICES AND ONLINE DSS PLATFORM AND FORMALIZE COLLABORATION WITH THE AMANZI FOR FOOD PLATFORM FOR DISSEMINATION
- FINALIZE MANUAL FOR A FRAMEWORK FOR SUCCESSFUL IMPLEMENTATION OF MULTI STAKEHOLDER PLATFORMS AND
- PREPARE THE FINAL REPORT

Work plan	Team	Activities	Sept-Oct 24	Nov-Dec 24	Submission
Refined CbCCA decision support framework with updated databases and CRA practices	MDF: Erna Kruger, Matthew Evans, Anna Kotschy	Update CRA practices and expand agroecological zones			2024/12/13
	MDF and ELRC (Rhodes) Wilma van Staden	Finalise sharing of Amanzi for Food platform and including of dss			
	MDF and CSAG (UCT- Dr Peter Johnston	Discuss collaboration in updating modelling data for the dss platform to incorporate climate change and more accurate regional climate data into the model			
	MDF: Erna Kruger INR: Brigid Letty	COPs: Northern Drakensberg Collaborative continuation Proposal development through Lewis Foundation			
	MDF; Erna Kruger and Karen Kotschy	Finalise climate resilience MERL framework and develop online tool with dashboards			



THANK YOU