Gender Integration in SIMLESA

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Addis Ababa, Ethiopia

Overview

1. Lessons learned from farmers in the field

2. How to achieve gender, nutrition- and climate smart-agriculture (GNCSA)

3. Looking ahead

4. Conclusion

Dorothy and Peter’s story from Bungoma, W. Kenya

How to achieve Gender, Nutrition- and Climate Smart Agriculture (GNCSA)?

- **Planning and design:** to enhance nutrition benefits, CA can be introduced together with legumes or biofortified crop varieties to increase protein or micro-nutrient

- **Implementation:** Gender transformative and NCSA in Zambia

❖ Gender-Oriented Participatory Extension Approach

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- Klos, S. (2000). Lessons learned from the Gender Oriented Participatory ExtensionApproach (GPEA) in Zambia. Newsletter of the emerging platform on services within Division “Rural Development” (45) of gtz (4): 20–23.
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- M&E

MICHIGAN
STATE

Benefits, Level of Attainment and Estimated Attribution Among Mudende AIP Membership

AIP type of Activity (specify)	List of main benefits reported/observed (by 2016) related to AIP	Level of direct attribution to					% sharing	
		Levels of benefits	Partnerships	Donor funds	Marketing	Trainings/visits	AIP Men	AIP Women
Crop related: Potato (for consumption and for seeds)	Yield increase	3	3	3	2	3	50	50
	Drought tolerance	3	3	3	2	3	50	50
	H20 use Efficiency	X					50	50
	Crop diversity	3	3	3	2	3	50	50
	Disesase/pest tolerance	3	3	3	2	3	50	50
Business related	Higher income (%)	3	3		2	3	50	50
	Market access (Potato)	2	0	0	2	3	50	50
	Milk volume increase (%)	3	3	3	2	3	50	50
	Market access (milk)	1	0	3	3	0	50	50
	Better agribusiness (es)	2	3	3	3	0	50	50
	Lower input costs	1	0	0	0	2	50	50
	More capital (e.g. credit)	2	3	3	0	0	50	50

Crop Related Benefits:

- Production volume: (i) potato=10 tons/hectare in 2008 to 25 tons/hectare in 2016; and (ii) Yield of milk=1 litre/cow in 2008 to 7 liters/cow in 2016 (local breed).
- Men and women benefit equally
- Germplasm was provided by RAB

Business Related Benefits:

- Investments in AIP partnerships, infrastructure, equipment, produce marketing networks, training skills, led to:

(a) Credit access; (b) High income; (c) Better market access ; (d) Atract agribusiness farm inputs

Benefits, Level of Attainment and Estimated Attribution Among Mudende AIP membership

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		Levels of benefits	Partnerships	Donor funds	Marketing	Trainings/visits	AIP Men	AIP Women
Social (e.g. Table banking, labor sharing)	Youth participation	3	0	3	0	3	50	50
	Women participation	3	3	0	0	0	50	50
	Better nutrition	3	3	0	0	0	50	50
	Better societal harmony	3	3	0	0	0	50	50
	Reduced drudgery	1		0	0	0	50	50
Environment related	Reduced soil erosion	3	3	3	0	3	50	50
	Reduced weeds	0		0	0	0	50	50
	Better soil health	3	3	0	0	3	50	50
	Better water retention	3		3	0	0	50	50
	More soil organic C	3	3	0	0	2	50	50
Infrastructural	New business building/s	3	3	3	0	0	50	50
	Better storage (potato/milk)	3	3	3	0	2	50	50
Sum of score in each category		60	48	39	23	39		
Maximum possible success score		81	Key: 0=None. 1=Weak. 2=Average. 3=Strong. X=Unknown					

- Social benefits: (i) youth and women participation was highly valued; (ii) societal harmony: AIPs brought together diverse actors at household and other levels to collaborate and rely on complementarity and reduce competition (increased yield, incomes, etc).

- Environment related benefits: (i) cow loans through URWEGO bank was able to get more quality farm manure; (ii) Agronomic and soil fertility trainings from RAB.

Infrastructural Benefits of Mudende

- A potato green house
- Storage center for potato seed
- Small storage center for parallel household-through MINAGRI investments
- Land for farming, rented from the Cooperative
- Milk collection center, land provided by the government
- Local government constructed feeder road
- A local SACCO provided the AIP with a loan buy electric cables for milk collection center facility
- MINAGRI donated milk containers to Mudende

Infrastructural Benefits for Mudende AIP

Green house gas

Preparing to killing microbes in the soil

Potato pre-seed in the basin

Rented farm land used by members of Mudende to farm

Infrastructural Benefits for Mudende AIP

Mudende milk collection Center

Youth?

Areas of Further Research

- Qualitative studies on the impacts of CA to the farmers
- Evaluation of crop livestock interactions, with a perspective of gender integration
- Expanding maize utilization through nixtamalization
- Understanding nutritional knowledge of farmers by gender
- Cultural underlying the differences within the community responses in gender work
- Impacts the gender training has on the NARS work

NIXTAMALIZATION PROCESS TO AFRICA

Food security > Nixtamalisation cuts aflatoxin exposure

Mexicans show Kenya 300 ways to eat maize

Programme expands uses of staple via grain processing technology

BY ELIZABETH MERAB

The government intends to diversify the use of maize with a view to producing more than 300 products from the country's staple.

To achieve this, it has launched a programme that will see it expand the uses of maize through a grain processing technology adopted from Mexico.

According to the Ministry of Agriculture, Livestock and Fisheries, the technology, referred to as "nixtamalisation", which is borrowed from the Central American country, will enable the government to diversify use of maize.

Speaking at the launch of the programme, Agriculture Cabinet Secretary Willy Bett said the technology can be adopted as a post-harvest method of reducing exposure to aflatoxin, a toxin produced by certain fungi found on agricultural crops such as maize and groundnuts.

"We have noticed that the technology has enabled Mexicans to significantly reduce the amount of aflatoxin in tortillas (Mexican bread) by about 30-50 per cent," said Mr Bett.

The value addition, Mr Bett added, is also an incentive that will attract and improve the relevance of the Kenyan youth in agribusiness.

Nixtamalisation refers to a process for the preparation of maize in which the grain is soaked and cooked in an alkaline solution, usually limewater, and then hulled.

The process is used to not only reduce the amount of toxins in the maize but also increase shelf life of food products.

The project to oversee the value addition was awarded to the Eastern Africa Grain Council (EAGC) in partnership with the Mexican Agency for Cooperation for Development through a workshop held three years ago.

"The experts in nixtamalisation are already in the country and will be training our teams on for the next one week at KALRO Katumani Centre," said Mr Bett.

Last year, Kenya produced about 42 million 90 kilogramme bags of maize. It also has a per capita consumption rate of about 103kg per year.

Mr Bett said the ministry will also involve the private sector in the project, saying: "While the government is a facilitator, the private sector will be the major driver in the commercialisation of the nixtamalised products."

Other than Kenya, Tanzania are also keen on the technology

Willy Bett, Cabinet Secretary, Ministry of Agriculture, Livestock and Fisheries

Workshop Nixtamalization at Machakos, Kenya. April, 2016

Embamex-Kenya, AMEXCID, KALRO, CIMMYT (S.Mugo&N.Palacios)

Dried maize, nixtamal maize and nixtamal flour on the left. Nixtamal crisps and nixtamal ugali are top right. Nixtamal githeri and nixtamal mukimo at bottom right. All these food products prepared at Kamungai Village on August 8, 2016.

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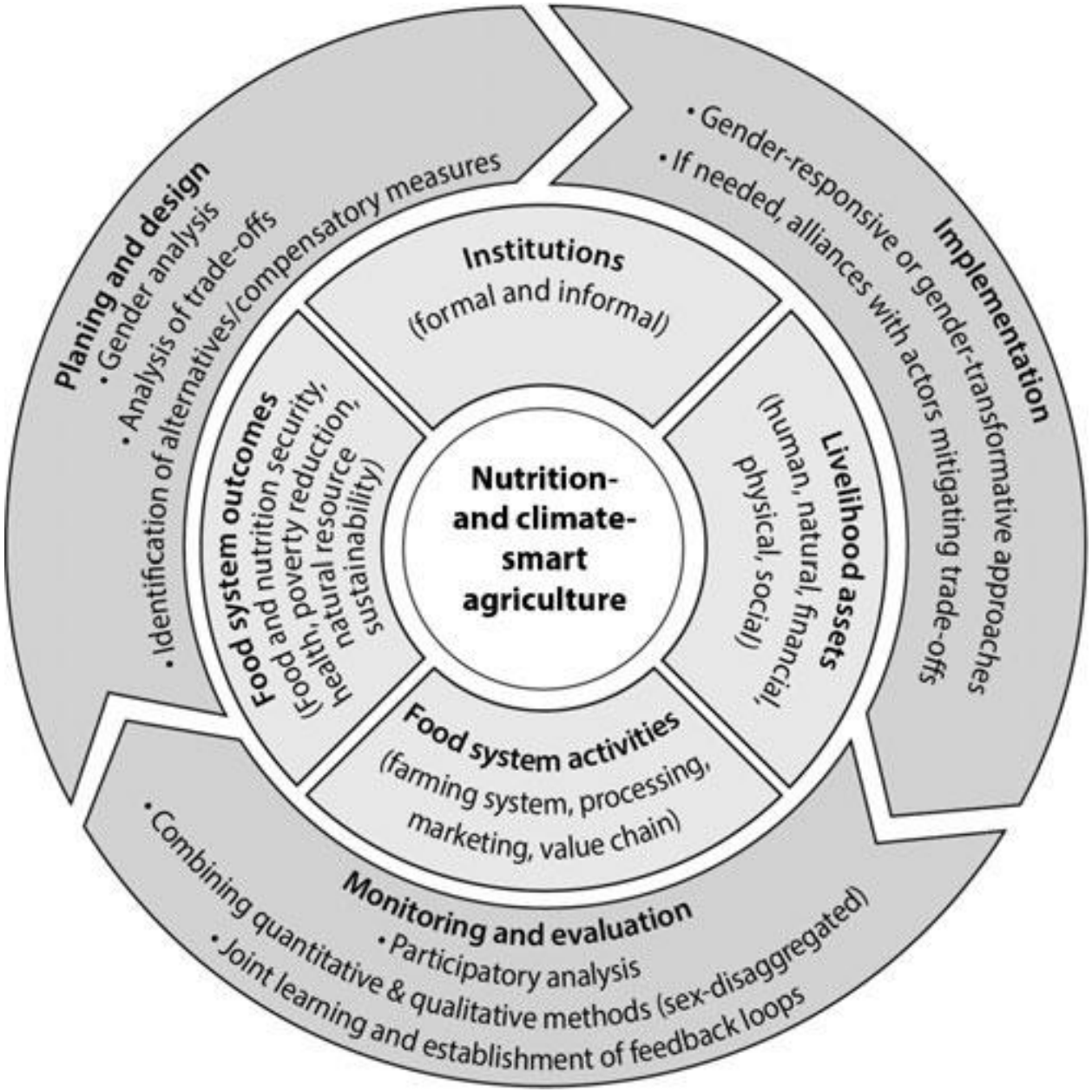
- SIMLESA Review Team

CIMMYT
International Maize and Wheat Improvement Center

SIMLESA
Sustainable Intensification of Maize - Legume Cropping Systems for Eastern and Southern Africa

Thank you!

Australian Government
Australian Centre for International Agricultural Research


Planing and design
• Gender analysis
• Analysis of trade-offs
• Identification of alternatives/compensatory measures
Implementation
• Gender-responsive or gender-transformative approaches
• If needed, alliances with actors mitigating trade-offs
Institutions
(formal and informal)
Food system outcomes
(Food and nutrition security, health, poverty reduction, natural resource sustainability)
Nutrition- and climate-smart agriculture
Livelihood assets
(human, natural, financial, physical, social)
Food system activities
(farming system, processing, marketing, value chain)
Monitoring and evaluation
• Participatory analysis
• Combining quantitative & qualitative methods (sex-disaggregated)
• Joint learning and establishment of feedback loops