

An Ex-Post Evaluation of Conservation Agriculture Promotion in Zimbabwe



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Background

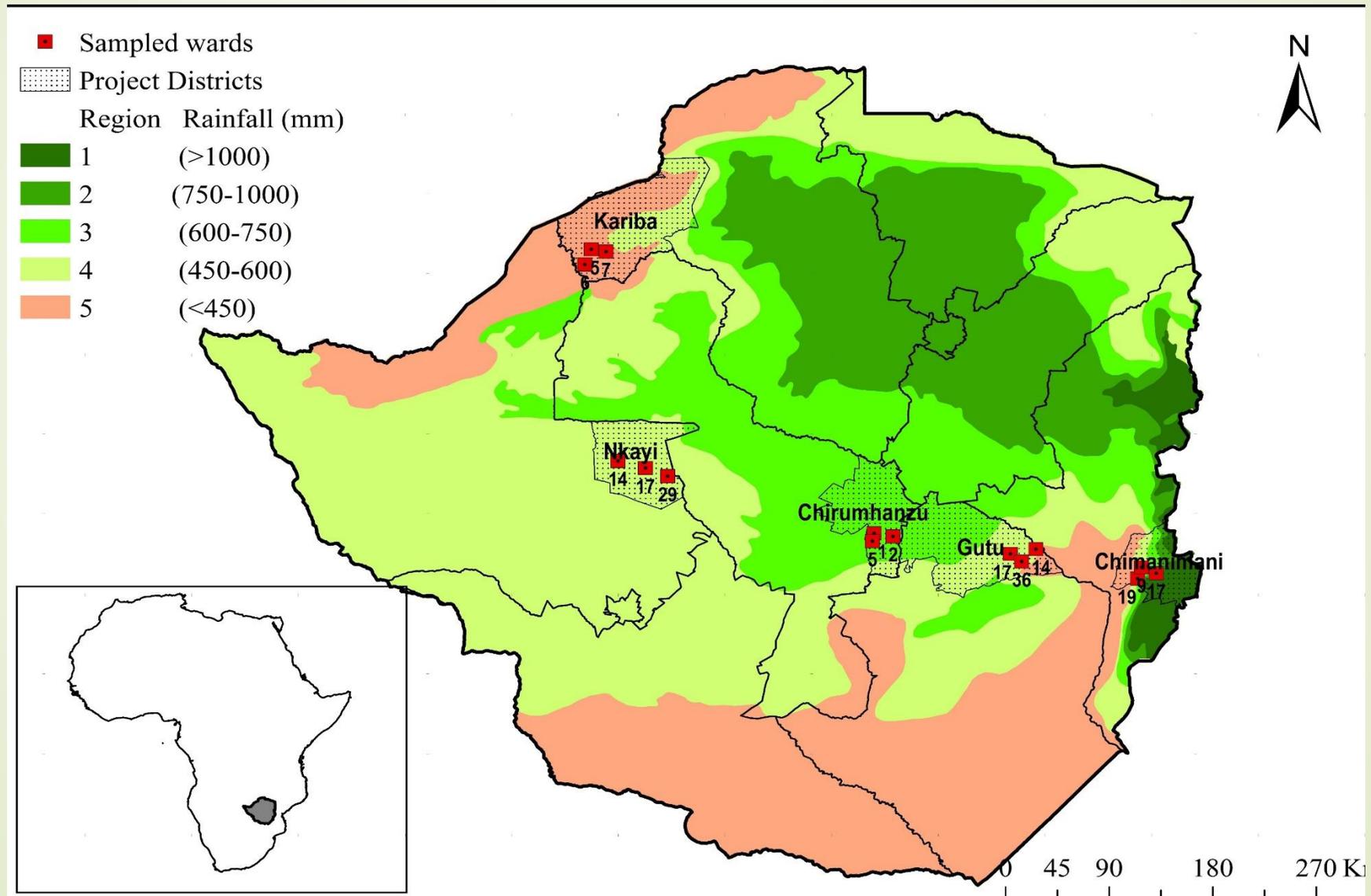
- ▶ Canadian food grains bank- 15 member organization
 - ▶ Works through partnership with both local and international organizations
 - ▶ Started first CA programming in Africa in Zimbabwe-2006
 - ▶ United Church of Canada and Christian Care funded projects
 - ▶ Projects ended in 2014
 - ▶ Supported seed banks, cover crops and use of lead farmers in addition to CA
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Background

- Hiring of CA technical officers
- More networking among CFGB partners
- Capacity building
- Information sharing



Christian Care Project Districts



Rationale for CC Interventions



Reliance on Food Aid



Photo by Christian Care

Poor Access to Markets

Availability on time

Cost

Distance to markets

Availability of Cash



Christian Care Promoted Conservation
Agriculture to Address Some of the Challenges in
the Districts



What is Conservation Agriculture?

CF is an approach to managing agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the resource base and the environment (FAO, 2012).

Achieved through 3 principles

Minimum tillage



Minimum Tillage



Soil Cover



Crop Rotation/Associations



Photo by Christian Care



Other Components Promoted with CA



Photo by Christian care

Other Components Promoted with CA



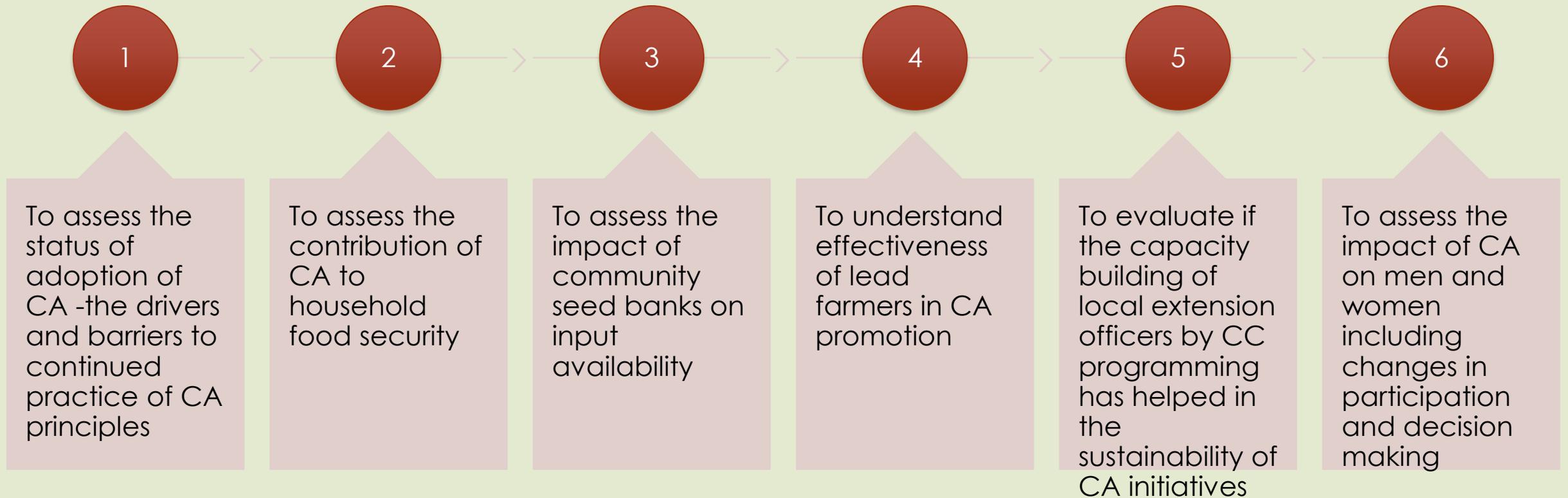
Other Components Promoted with CA



Extension Approaches



Objectives of the Evaluation



Methodology

- Household interviews- implementers and non implementers
- Focus group discussions- implementers and non implementers
- Key informant interviews- Govt extension, lead farmers, traditional leaders
- Some field visits



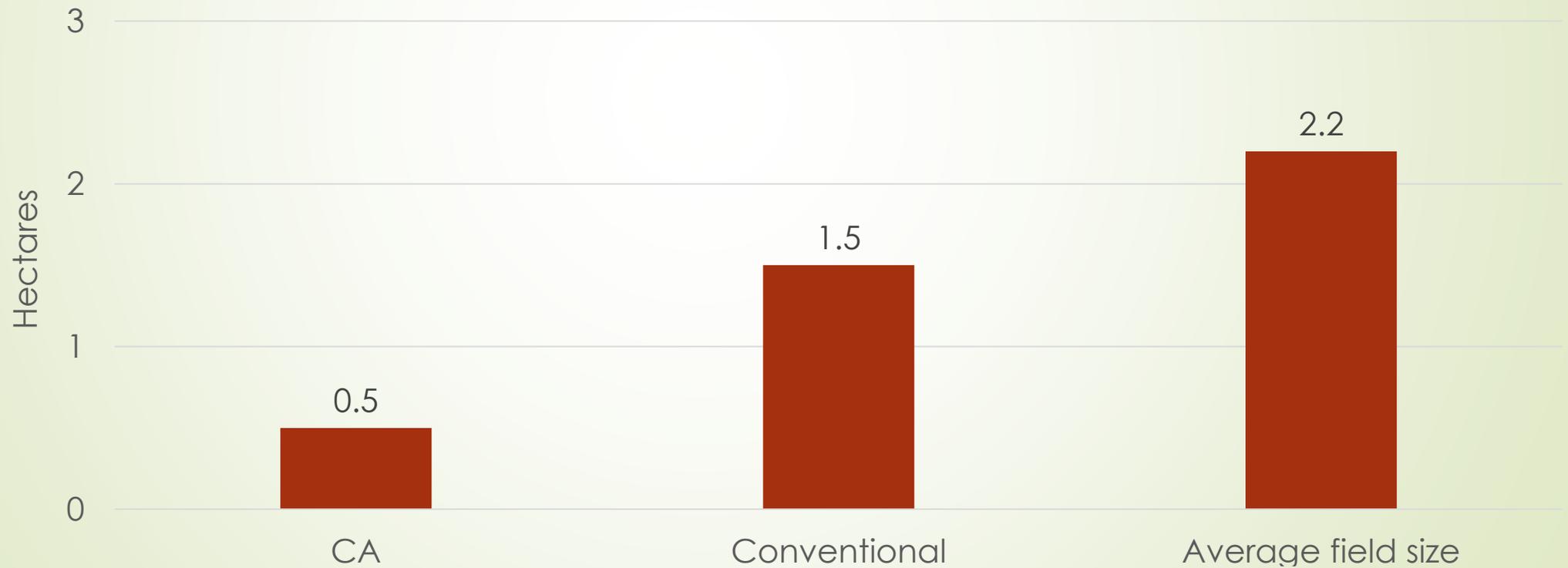
Household Interviews

District	Trained and Practicing	Not trained and Practising	Trained and not Practising	Not trained and not Practising	Total
CHIMANIMANI	42	6	7	5	60
CHIRUMANZU	40	2	5	13	60
GUTU	63	5	6	7	79
NKAYI	41	8	2	9	60
NYAMINYAMI	22	3	9	12	46
Total	207	24	26	48	305

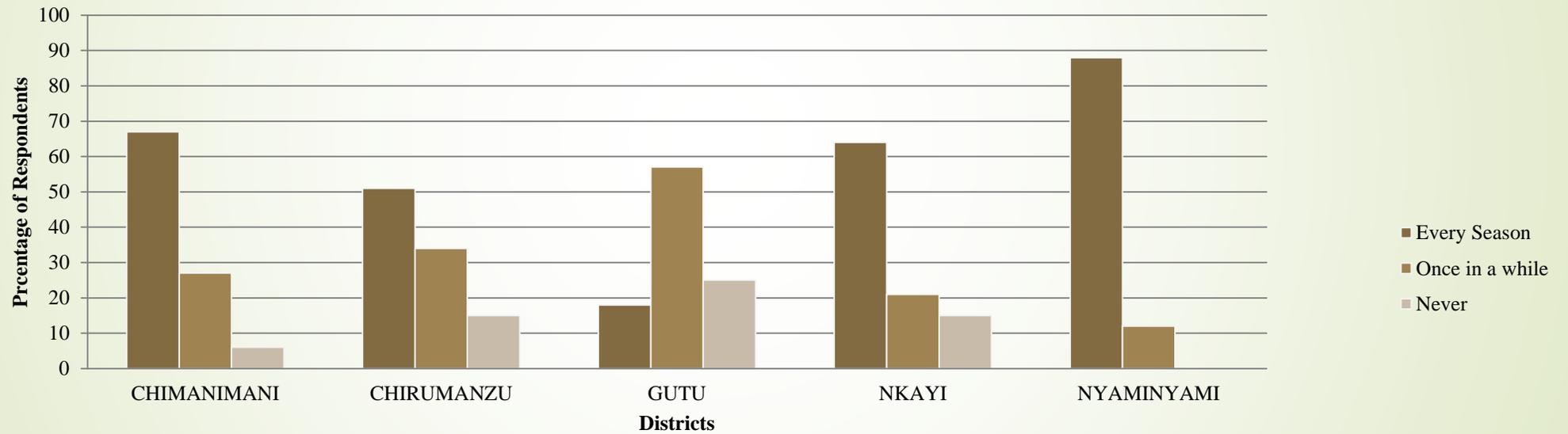
Adoption of CA Principles



Area Allocation to CA and Conventional



Use of OPV seed



Community seed banks

Influenced the formation of household seed banks but group seed banks were hampered by:

- Quality variations
- Poor treatment in storage
- Social issues
- Drought and cash shortages
- No external support/ leadership responsible

Green manure cover crops adoption

- Limited to Cowpeas
- Unavailability of GMCC seed
- No full understanding



Contribution of CA to Food Security

'Even where there were no granaries before, they are now there because of CA' (quote from a Key informant in Nkayi)



Increased reliance on food from own harvest



Food diversity

Drivers to Adoption

- Higher yields than conventional (more than double conventional)
- Farmers without draft power and farming implements such as the plough can plant on time
- Precision application of nutrients saves inputs
- Improve soil fertility and moisture conservation



Happy CA couple- Mr and Mrs Mukuze

Barriers to Adoption



Photo by Christian Care

Barriers to Adoption



Barriers to Adoption



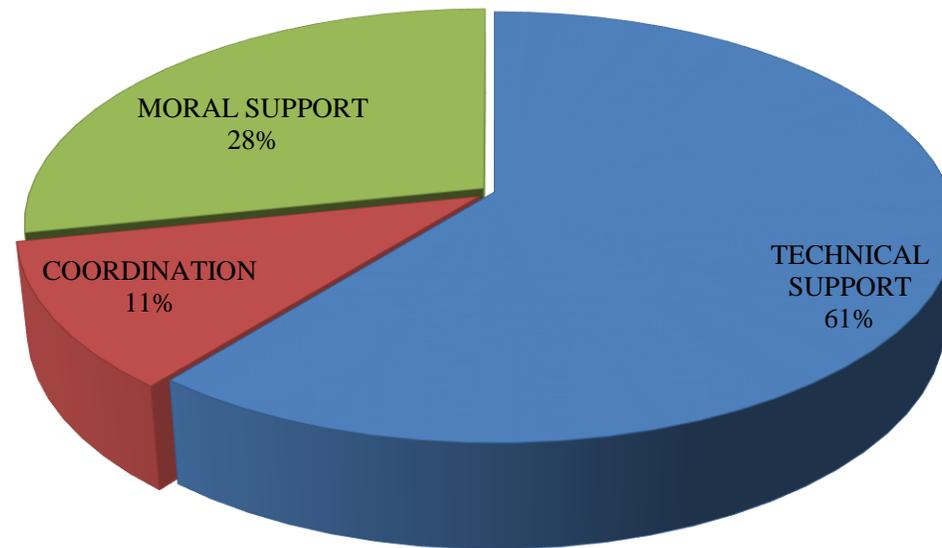
Gender Impacts

- Increased access to extension services and leadership positions by women through lead farmers
- Control of farming activities through the use of the hoe. Most farmers who lack farming implements are women
- Benefit of increased production to both men and women
- Shifted labour to women- handhoe seen as women's tool, land preparation during dry season and mulching usually done by women- no rest



Sustainability of Extension strategies used

Lead farmer roles





Government Extension Support

- ▶ 75% of FGD participants reported receiving technical support from Govt extension workers
- ▶ 65% reported receiving training on other concepts such as cover crops and use of rippers
- ▶ Public extension officers also provide inputs such as seed and fertilizers
- ▶ CA has become part of the public extension system mandate

Conclusions

- ▶ There is evidence of adoption (CA has become part of the farming system) of CA practices in the five districts long after CC left
- ▶ The main driver to adoption of CA is higher yields than conventional
- ▶ CA has been limited to small plots due to the labour intensive nature of land preparation, mulching and weed management
- ▶ Lead farmer roles have shifted from farmer to farmer visits to demand driven support
- ▶ Government extension support on CA has continued in districts



Recommendations

- Introducing other minimum tillage methods other than the hand hoe
- Understand context
- Address mulching challenges through promotion of GMCCs and other mulching material such as plastic mulch
- Integrate CA into the farming system through strategies that also address livestock production such as fodder production
- CA programs should not exclusively target the poor
- Involving government extension and existing community structures in supporting CA
- Household seed banks should be encouraged



Thank You!