MALAWI

IFPRI

BRACC Impact Evaluation Design

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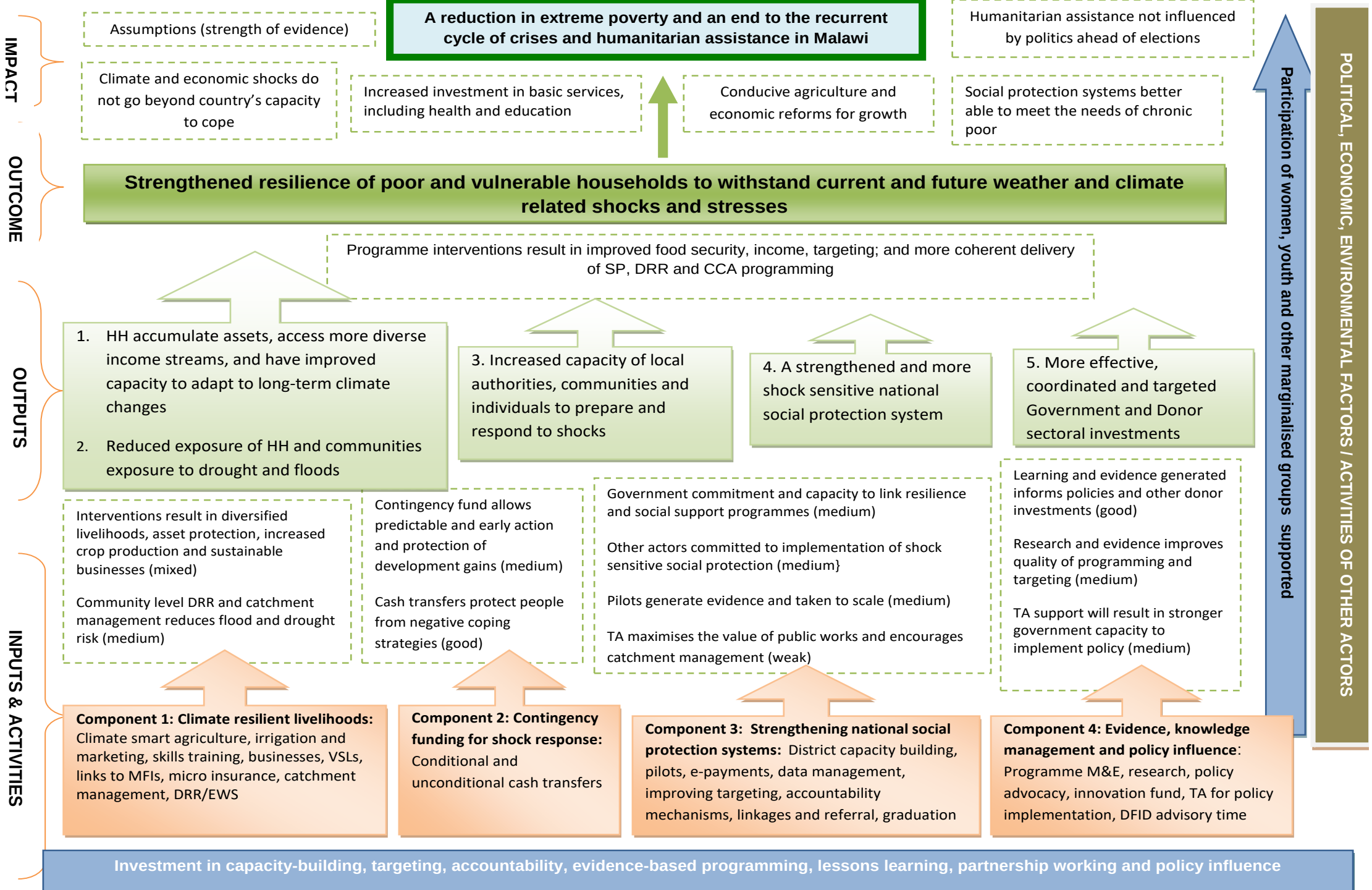
PROSPER Interventions

- **Nutrition:** social and behavior change communication (SBCC) for nutrition; awareness campaigns on diets and WASH
- **Agricultural production:** train lead farmers; farmer field schools; goats
- **Agricultural processing and markets:** processing training; financial services; develop business skills; link farmers to markets
- **Natural resource management and risk reduction:** food-for-assets provides cash transfers and community assets (e.g., soil and water conservation; nurseries)
- **Insurance products:** weather index insurance; area yield insurance
- **Transfers:** targeted humanitarian assistance; lean season top-ups


IMPACT
OUTCOME
OUTPUTS
INPUTS & ACTIVITIES
Assumptions (strength of evidence)
A reduction in extreme poverty and an end to the recurrent cycle of crises and humanitarian assistance in Malawi
Humanitarian assistance not influenced by politics ahead of elections
Climate and economic shocks do not go beyond country's capacity to cope
Increased investment in basic services, including health and education
Conducive agriculture and economic reforms for growth
Social protection systems better able to meet the needs of chronic poor
Strengthened resilience of poor and vulnerable households to withstand current and future weather and climate related shocks and stresses
Programme interventions result in improved food security, income, targeting; and more coherent delivery of SP, DRR and CCA programming
1. HH accumulate assets, access more diverse income streams, and have improved capacity to adapt to long-term climate changes
2. Reduced exposure of HH and communities exposure to drought and floods
3. Increased capacity of local authorities, communities and individuals to prepare and respond to shocks
4. A strengthened and more shock sensitive national social protection system
5. More effective, coordinated and targeted Government and Donor sectoral investments
Interventions result in diversified livelihoods, asset protection, increased crop production and sustainable businesses (mixed)
Community level DRR and catchment management reduces flood and drought risk (medium)
Contingency fund allows predictable and early action and protection of development gains (medium)
Cash transfers protect people from negative coping strategies (good)
Government commitment and capacity to link resilience and social support programmes (medium)
Other actors committed to implementation of shock sensitive social protection (medium}
Pilots generate evidence and taken to scale (medium)
TA maximises the value of public works and encourages catchment management (weak)
Learning and evidence generated informs policies and other donor investments (good)
Research and evidence improves quality of programming and targeting (medium)
TA support will result in stronger government capacity to implement policy (medium)
Component 1: Climate resilient livelihoods: Climate smart agriculture, irrigation and marketing, skills training, businesses, VSLs, links to MFIs, micro insurance, catchment management, DRR/EWS
Component 2: Contingency funding for shock response: Conditional and unconditional cash transfers
Component 3: Strengthening national social protection systems: District capacity building, pilots, e-payments, data management, improving targeting, accountability mechanisms, linkages and referral, graduation
Component 4: Evidence, knowledge management and policy influence: Programme M&E, research, policy advocacy, innovation fund, TA for policy implementation, DFID advisory time
Investment in capacity-building, targeting, accountability, evidence-based programming, lessons learning, partnership working and policy influence
Participation of women, youth and other marginalised groups supported
POLITICAL, ECONOMIC, ENVIRONMENTAL FACTORS / ACTIVITIES OF OTHER ACTORS

Overview of the BRACC Impact Evaluation Design

- **Goal:** identify the *causal impact* of access to the BRACC programme on poverty, resilience, and household food security
- **Design:** cluster randomized controlled trial (cRCT) with village clusters
  - Treatment
    - Component 1 interventions to promote climate resilient livelihoods, market access and business skills, access to financial services, and investment in NRM
    - "business-as-usual" targeted humanitarian aid funding in response to shocks
  - Control
    - "business-as-usual" targeted humanitarian aid funding in response to shocks
- **Treatment details:**
  - Intervention packages in T villages will depend on the village context
  - Household classification into hanging in, stepping up, or stepping out groups

Overview of the BRACC Impact Evaluation Design (2)

- **Why use an RCT design?**
  - most reliable approach to estimating the causal impact of a programme
  - observational studies suffer from selection bias
  - randomly assigning units to Treatment and Control assures that households and villages are comparable on average at baseline
  - creates a valid counterfactual

- **Randomized assignment**
  - more villages were assigned to T (n=149) than to C (n=75)
    - include more villages in the BRACC programme
    - allow for additional learning/experimentation through sub-treatments within T
  - randomize at the village level rather than GVH level to assure we had the number of clusters needed for statistical power

Overview of the BRACC Impact Evaluation Design (3)

- **Quantitative survey structure**
  - Baseline survey (August 27 – October 9, 2019)
    - set the sample for the entire evaluation
    - document that randomization for the RCT was effective (low sampling error)
    - obtain baseline measures of outcome variables
    - measure contextual variables for descriptive and analysis purposes
  - Midline survey (August-September 2021); Endline survey (August-September 2023)

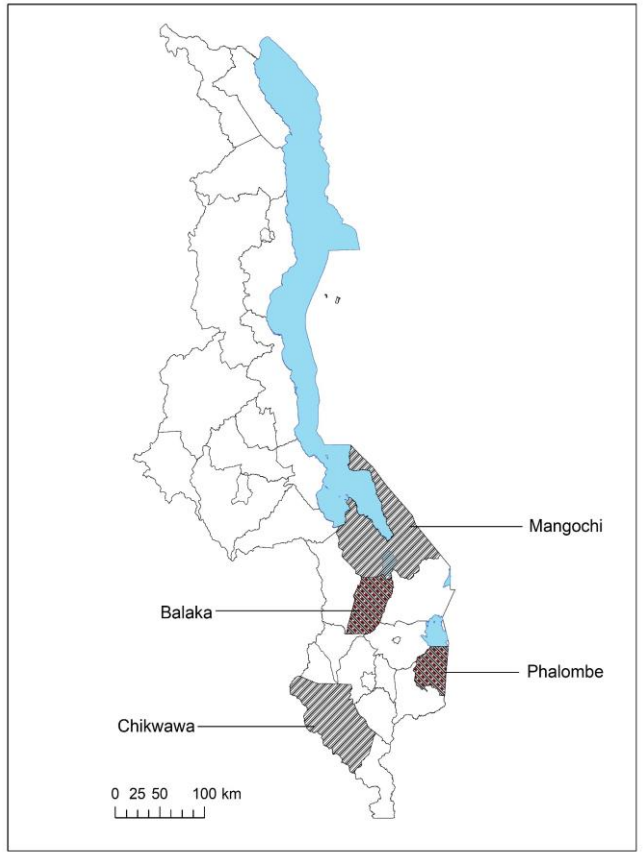
- **Qualitative research**
  - complementary qualitative assessments are proposed between the quantitative survey rounds (September-October 2020 and 2022)
    - Focus Group Discussions and Key Informant Interviews
    - provides information on beneficiaries' perceptions about access to the program, satisfaction with the program and potential pathways of impact

- The evaluation sequence will have five phases:

  quant(baseline) – qual – quant(midline) – qual – quant(endline)

Impact Evaluation Sample

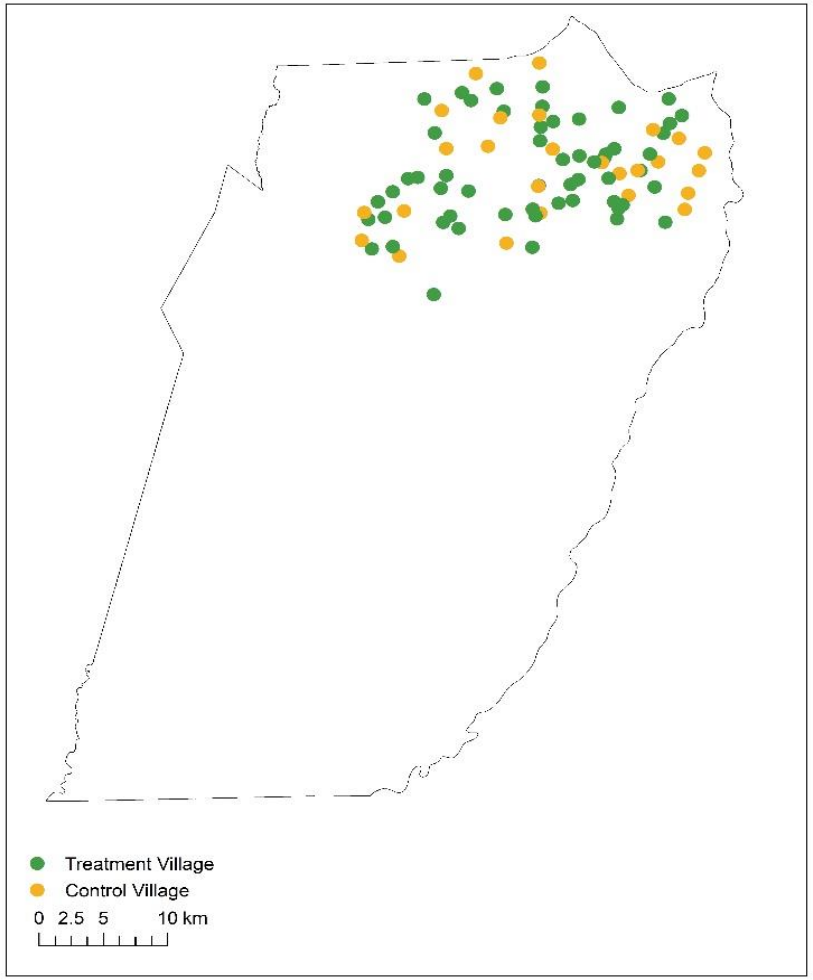
- Districts
  - BRACC districts: Balaka, Chikhwawa, Mangochi and Phalombe
  - Impact evaluation districts: **Balaka** and **Phalombe**



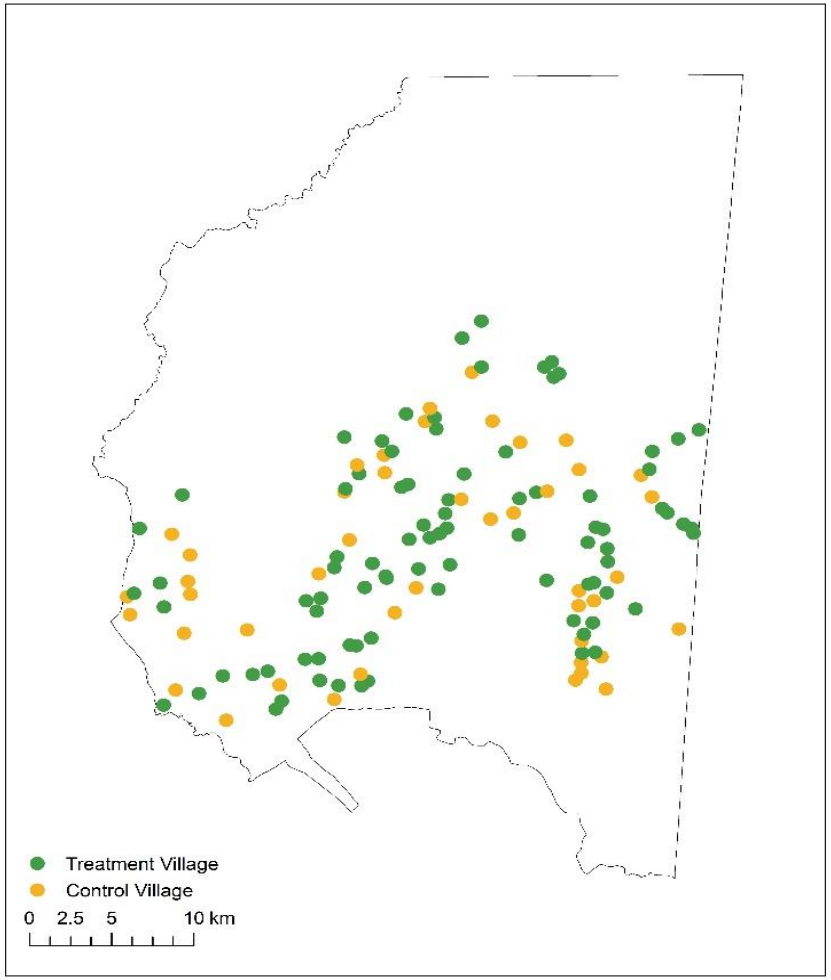
- Village sampling
  - 73 Group Village Headmen (GVHs) under 5 TAs
  - contain 401 villages and 67,093 households according to 2018 census
  - sampled 224 villages: assigned 149 to Treatment and 75 to Control
  - 1 Control village was replaced with a randomly drawn alternate village
- Randomization
  - stratified at the TA level

BRACC Baseline Sample Location

Villages sampled in Balaka



Villages sampled in Phalombe



Target groups

- Following the National Resilience Strategy (2018), BRACC tailors interventions to 3 groups of beneficiary households (Dorward et al. 2009) based on poverty status
  - **hanging in:** maintaining asset levels; lowest socio-economic status
  - **stepping up:** invest in assets and activities to improve livelihoods, increase income
  - **stepping out:** accumulate assets to foster new livelihood activities with higher returns
- Households in BRACC communities are targeted to using these 3 groups
  - community targeting exercise was not completed before the baseline survey
  - baseline sample is a random sample of village households – representative of the 3 groups but does not reflect targeting
  - caution: our preferred sample design would have included households in each targeted group proportional to their share as program beneficiaries BUT we may have too few hanging in households in the sample

Sample Size Calculations for the Baseline Survey

- sample size calculations were conducted before the baseline
  - number of villages and households needed to be able to identify impacts on primary outcome variables of expected size for an accepted level of statistical power (0.8) and significance (α=0.05)
- outcomes for sample size estimates
  - log of total monthly expenditure per capita (MPCE)
  - household food consumption score (FCS)

Outcome	Baseline Obs per cluster	Endline Obs per cluster (rounded)	Intervention Clusters	Control Clusters	Baseline Obs Total	Endline Obs Total (rounded)	Detectable Effect Size (% Increase)
MPCE	14	13	149	75	3,136	2,823	12
FCS	14	13	134	68	2,828	2,546	7

  - MPCE minimum effect size of 12% is smaller (more conservative) than the 15% effect of a multisectoral graduation program in Ethiopia (Banerjee et al. 2015)

Baseline Survey Data Collection

- Ethics approval
  - Institutional Review Board (IRB) approval received from two sources
    - National Committee for Research in Social Sciences and Humanities (NCRSH)
    - IFPRI's internal IRB
  - approach guided by OECD (2010) DAC Quality Standards for Development Evaluation and DFID's (2011) Ethics Principles for Research and Evaluation

- Survey instruments, enumeration team and trainings
  - questionnaire based on Fourth Integrated Household Survey (IHS4) and others
  - questionnaire translated from English to Chichewa and back translated
  - instruments were programmed into Open Data Kit (ODK) software; enumerators used tablets to record responses during the interviews
  - enumeration teams: 8 teams of 5 enumerators and 1 supervisor each
  - baseline training on August 5-8, 2019

Baseline Survey Fieldwork

- Sampling
  - A Community Listing Exercise (CLE) was conducted to obtain a complete list of all households in the 224 sample villages
  - 14 households per village were randomly sampled from the CLE
  - final target sample of 3,136 households

- Baseline survey data collection
  - August 27 – October 9, 2019
  - Challenges
    - difficulty getting satellite signal for GPS coordinates
    - most households in TA Mbera were involved in FFA/R4 and MASAF programs; only available for interviews between 11am and 2pm
    - language barriers in TA Kalembo in Balaka, where Chichewa is not the first language

Thank you!