The rationale of ME & L in SIMLESA
What has been done in SIMLESA ME & L?
The SIMLESA indicators in the intervention logic
The lessons drawn from SIMLESA
The future focus
The Rationale ME&L in SIMLESA …..

- To report on progress & program performance to stakeholders, management, donor, partners and the program participants (beneficiaries – feedback)
- To evaluate and adjust implementation strategies and activities
- To identify and share with others best practices and lessons learned (Learning)
- To improve the programming of new interventions and strategies

Assess to what extent has SIMLESA implemented its activities as planned and to identify operational and strategic lessons for smooth running and continuity

The dashboard of SIMLESA
What has been done in SIMLESA ME&L?

- Used the ASARECA M&E work in SIMLESA 1 as an entry point
- Generated a simplified M & E Framework with clear performance questions at 3 levels
- Designed country information sheets and shared these with country teams
- Designed an indicator tracking system based on the intervention logic and started populating it

<table>
<thead>
<tr>
<th>Objective Statement</th>
<th>Verifiable Indicators</th>
<th>Unit of measure</th>
<th>Baseline</th>
<th>Target</th>
<th>Preceding Achievement</th>
<th>Current</th>
<th>Performance Actual/target(%)</th>
<th>Comment</th>
</tr>
</thead>
</table>

- Designed data collection tools for feeding into the indicator tracker
- Compiled a comprehensive and deployable M E and Learning plan in response to 2015 MTR recommendations
Monitoring, Evaluation & Learning Indicators

Indicator definition

A quantitative or qualitative variable that provides a valid and reliable way to measure achievement, assess performance, or reflect changes connected to an intervention.

Important: Attribution – The change should be linked to the program (SIMLESA)
What was observed as the project beneficiaries made use of SIMLESA outputs

Overall population-wise desired change. Usually resulting from SIMLESA (Attribution)

INPUTS

Objective 1
Objective 2
Objective 3
Objective 4
Objective 5

SIMLESA 1 & 2

INPUTS

Processes

Activities

Outcomes

4 INDICATORS

2 INDICATORS

18 INDICATORS

What SIMLESA immediately made available after the inputs and various actions and processes are mixed & utilized.
The ME&L Output Indicators – Objective 1

- Number of maize legume farming communities selected: 188 (Target), 265 (Achievement) - 140%
- Number of socio economic and biophysical profiles characterized: 74 (Target), 137 (Achievement) - 185%
- Number of maize value chains studies conducted: 10 (Target), 14 (Achievement) - 140%
- Number of farm household typologies identified: 10 (Target), 19 (Achievement) - 190%
- Number of baseline studies done: 5 (Target), 5 (Achievement) - 100%
The ME&L Output Indicators – Objective 2

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
<th>Achievement</th>
<th>Percentage Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of exploratory trials established</td>
<td>327</td>
<td>492</td>
<td>150%</td>
</tr>
<tr>
<td>Number of best bet options selected</td>
<td>25</td>
<td>28</td>
<td>112%</td>
</tr>
</tbody>
</table>
SIMLESA cumulative number of trials per country

- **Ethiopia**: 33 trials (170 on-farm, 29 on-station)
- **Kenya**: 278 trials (10 on-farm, 14 on-station)
- **Tanzania**: 180 trials (16 on-farm, 10 on-station)
- **Malawi**: 72 trials (29 on-farm, 16 on-station)
- **Mozambique**: 228 trials (170 on-farm, 29 on-station)
## The ME&L Output Indicators – Objective 3

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
<th>Achievement</th>
<th>Percentage Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stress tolerant maize varieties identified</td>
<td>63</td>
<td>97</td>
<td>153%</td>
</tr>
<tr>
<td>Number of stress tolerant legume varieties identified</td>
<td>89</td>
<td>147</td>
<td>165%</td>
</tr>
</tbody>
</table>

A total of 268 and 378 maize and legume on farm Participatory Variety Selection (PVS) were conducted where best performing maize and legume varieties that met farmers’ preferences were selected and scaled up by partner companies.
Breeder seed production and supply
Maize and legume seed production partners

- By end of 2017, 45 seed companies were involved in scaling up maize and legume seeds.
The ME&L Output Indicators – Objective 4

• A total of 58 Innovation Platforms with a membership of 1,654 (60% women) were established to assist in raising efficiency in raising productivity, market linkages, access and value addition.

• Toward the end of 2016, the program managed to select 19 partners (12 competitively and 7 commissioned) to drive the scaling out initiative under the Competitive Grants Scheme.
  – The CGS partners have managed to reach out a total of about 4.1 million farmers as of beginning of 2018 through various approaches eg media (radio, tv), field days, training.
## The ME&L Output Indicators – Objective 5

<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>PhD</th>
<th>Country University</th>
<th>MSc</th>
<th>Country University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kenya</td>
<td>3</td>
<td>Kenya</td>
<td>1</td>
<td>Kenya</td>
</tr>
<tr>
<td>2</td>
<td>Mozambique</td>
<td>2</td>
<td>Australia</td>
<td>2</td>
<td>South Africa</td>
</tr>
<tr>
<td>3</td>
<td>Rwanda</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>Kenya</td>
</tr>
<tr>
<td>4</td>
<td>Ethiopia</td>
<td>2</td>
<td>Ethiopia</td>
<td>18</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>5</td>
<td>Ethiopia</td>
<td>12</td>
<td>Australia</td>
<td>9</td>
<td>Ethiopia-Only research funded</td>
</tr>
<tr>
<td>6</td>
<td>Malawi</td>
<td>3</td>
<td>Australia</td>
<td>2</td>
<td>Malawi</td>
</tr>
<tr>
<td>7</td>
<td>Tanzania</td>
<td>1</td>
<td>South Africa</td>
<td>9</td>
<td>Tanzania</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td><strong>23</strong></td>
<td></td>
<td><strong>42</strong></td>
<td></td>
</tr>
</tbody>
</table>
The ME&L Output Indicators – Cross cutting

- A total of 21 Policy Briefs,
- 52 Posters
- 131 publications were produced
## The ME&L Outcome Indicators – Estimated adopters

<table>
<thead>
<tr>
<th>Year</th>
<th>Targets</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Malawi</th>
<th>Mozambique</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010/11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2011/12</td>
<td>13,680</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2012/13</td>
<td>24,624</td>
<td>3,800</td>
<td>3,467</td>
<td>3,287</td>
<td>2,226</td>
<td>5,789</td>
</tr>
<tr>
<td>4</td>
<td>2013/14</td>
<td>44,323</td>
<td>10,454</td>
<td>13,600</td>
<td>9,843</td>
<td>4,440</td>
<td>8,641</td>
</tr>
<tr>
<td>5</td>
<td>2014/15</td>
<td>79,782</td>
<td>18,817</td>
<td>24,480</td>
<td>17,717</td>
<td>7,992</td>
<td>15,554</td>
</tr>
<tr>
<td>6</td>
<td>2015/16</td>
<td>143,607</td>
<td>33,871</td>
<td>44,063</td>
<td>31,891</td>
<td>37,639</td>
<td>26,069</td>
</tr>
<tr>
<td>7</td>
<td>2016/17</td>
<td>258,493</td>
<td>47,437</td>
<td>63,870</td>
<td>34,960</td>
<td>51,097</td>
<td>38,057</td>
</tr>
</tbody>
</table>
## Estimated Cumulative (2012-2017) Adopters of SIMLESA technologies by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Target</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>61,005</td>
<td>39,843</td>
<td>7,594</td>
<td>47,437</td>
<td>77.8%</td>
</tr>
<tr>
<td>Kenya</td>
<td>51,957</td>
<td>29,229</td>
<td>34,641</td>
<td>63,870</td>
<td>122.9%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>51,957</td>
<td>24,290</td>
<td>10,670</td>
<td>34,960</td>
<td>67.3%</td>
</tr>
<tr>
<td>Malawi</td>
<td>46,787</td>
<td>27,690</td>
<td>23,407</td>
<td>51,097</td>
<td>109.2%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>46,787</td>
<td>27,156</td>
<td>10,901</td>
<td>38,057</td>
<td>81.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>258,493</td>
<td>148,208</td>
<td>87,213</td>
<td>235,421</td>
<td>91.1%</td>
</tr>
</tbody>
</table>

1. The estimation of adopters is based on the adoption rates of the 2016 Adoption Monitoring Survey. An adopter is defined as one who at least have practiced one or more of the recommended practice for more than one year on at least 25% of his/her cultivated land (SIMLESA ME&L 2017)
Yield and labor outcomes

• The program had witnessed an average **yield increase of at least 50%** from conservation agriculture-based sustainable intensification after adopting SI technologies for both maize and legumes against a target of **30%**

• SIMLESA has witnessed farmers enjoying **labor savings of at least 50%** by adopting sustainable intensification technologies particularly zero tillage, use of herbicides and crop rotation.
Variety performance under CA/CP

Maize grain yield variety demos, all Malawi sites 2015/2016

Conventional ridge tillage

Conservation agriculture

Maize Grain Yield (kg ha$^{-1}$)

Yield benefit +66%

DKC 80-53
ZM 523
Chitedze 2 QPM
MH 26
Peacock 10
CAP 9001

DKC 80-53
ZM 523
Chitedze 2 QPM
MH 26
Peacock 10
CAP 9001
Variety performance under CA/CP

Maize grain yield variety demos, all Malawi sites 2015/2016

Maize Grain Yield (kg ha\(^{-1}\))

Conventional ridge tillage

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield (kg ha(^{-1}))</th>
</tr>
</thead>
<tbody>
<tr>
<td>DKC 80-53</td>
<td>2000</td>
</tr>
<tr>
<td>ZM 523</td>
<td>2200</td>
</tr>
<tr>
<td>Chitedze 2 QPM</td>
<td>2500</td>
</tr>
<tr>
<td>MH 26</td>
<td>2800</td>
</tr>
<tr>
<td>Peacock 10</td>
<td>3000</td>
</tr>
<tr>
<td>CAP 9001</td>
<td>3200</td>
</tr>
</tbody>
</table>

Conservation agriculture

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield (kg ha(^{-1}))</th>
</tr>
</thead>
<tbody>
<tr>
<td>DKC 80-53</td>
<td>3500</td>
</tr>
<tr>
<td>ZM 523</td>
<td>3700</td>
</tr>
<tr>
<td>Chitedze 2 QPM</td>
<td>4000</td>
</tr>
<tr>
<td>MH 26</td>
<td>4200</td>
</tr>
<tr>
<td>Peacock 10</td>
<td>4500</td>
</tr>
<tr>
<td>CAP 9001</td>
<td>4800</td>
</tr>
</tbody>
</table>

Yield benefit +66%
The ME&L Impact Indicators

The increase in yield can be used as a proxy for food security as it addresses issues availability as one of the pillars.

Yield increase has also resulted in surplus hence leading to 34% of the households making at least a sale of either maize or legume.
Adoption of sustainable practices in Ethiopia: impacts on income ($/ha)

Impact: Financial benefits

Additional income from adoption of multiple Sustainable Intensification Practices (SIP) in Ethiopia [in USD/ha]

- T: Minimum tillage (zero/one pass)
- D: Crop diversification
- V: Improved maize varieties
- V+T: Improved maize varieties + Minimum tillage
- D+T: Crop diversification + Minimum tillage
- V+D: Improved maize varieties + Crop diversification
- V+D+T: Improved maize varieties + Crop diversification + Minimum tillage

Additional income due to multiple adoption of SIPs in Malawi (in USD/ha)

- R: Legume-maize rotation
- I: Legume-maize intercropping
- V: Improved maize varieties
- V+I: Improved maize varieties + Legume-maize intercropping
- I+R: Legume-maize rotation + Legume-maize intercropping
- V+R: Improved maize varieties + Legume-maize rotation
- V+I+R: Improved maize varieties + Legume-maize intercropping + Legume-maize rotation

Note: V-Improved maize varieties; D-Crop diversification (legume-maize intercropping & rotation), T-Minimum tillage (zero/one pass).

Note: V-Improved maize varieties; I-legume-maize intercropping, and R-legume-maize rotation.

- There are larger benefits when multiple innovations are adopted
Qualitative assessment of the program impact:

Most Significant Change Stories:
Some households have witnessed an improvement in both food and income security e.g:

1. The success story of Adriano Gabriel in Mozambique
2. The success story of Angeline Odero of Siyaya County, Western Kenya which also gives the SIMLESA gender dimension
3. The success stories of Catherine Kariza of Ntcheu District and Jessie Mbodo of Kasungu District both in Malawi
4. The case of lead farmer James Mugo from Kyeni in eastern Kenya
5. The case of Fuleki in Mozambique in the use of AGRIMERC driven VBAs
The SIMLESA Lessons Learned

1. Those farmers belonging to groups had a higher chance of adopting sustainable intensification technologies.

2. Farmers who were near markets were more likely to adopt. This was confirmed in Ethiopia where proximity to the market was the main determinant of the adoption.

3. Adopting individual practice benefit farmers but a combination of technologies:
   - Led to highest income
   - Reduced fertilizer use, without yield penalty
   - Lowered cost of risk (downside risk)

4. For conservation agriculture to succeed (Kenya) alternative feed sources are needed. Crop residue is a valuable multi-use resource.
The SIMLES A MEL Future focus

1. Follow of status of AIPS through the Group Maturity Index (GMI) assessment to check on: *Formation, Growth, Maturity or Sustainable*

2. Investigating deeper the benefits of capacity building

3. Continue to populate with more detail outcome and impact indicators
Thank you!