Empowering Women and Youth in the Malian Dryland Systems - Impact of research technologies diffusion

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Bamako | Feb 15, 2017
OUTLINE

- Background and Implementation context
- Problem statement & research questions
- Methodology
- Results & conclusion
Action sites across aridity x pop. density gradients

- **WBS:**
  - contrasted biophysical conditions
  - More homogeneous socio-economic conditions
- **KKM**
  - More homogenous biophysical conditions
  - Diverse socio-economic conditions
The DS interventions can be grouped into four main categories (2012 -2016) – reaching 24,913 (5,061 women) beneficiaries

- Designing technologies/interventions
- Integrated soil fertility management
- Agroforestry systems
- Social innovations in institutions and markets
1. More efficient **livestock-mediated nutrient** transfer through dual purpose crop varieties and fodder trees reduces feed gaps and increases overall system productivity
2. Increased **biomass production** from better tree/crop/livestock integration improves SOM, WHC, nutrient availability and system resilience
3. Improved **access and equitable participation in markets** by smallholders adds value, enhances profitability, productivity and reduces vulnerability
4. **Land tenure security** enhances system intensification and reduces vulnerability of rural households
5. Improved **access to financial services** (credits, savings, subsidies, insurance) enhances technology adoption, productivity and community resilience
6. Enriching agro-biodiversity improves system resilience and profitability for smallholders
7. **Empowering disadvantaged groups** (women, youth, migrants) in decision making, resources and technology improves productivity and reduces vulnerability of rural households
8. Effective **water harvesting and management** increase both plant and livestock productivity and reduce exposure to climatic and other risks
9. **Strengthening** local and national institutions (laws, by-laws and conventions) reduces natural resource degradation and conflicts
10. Strong incorporation of indigenous knowledge in the **innovation systems approach** accelerates adoption and scaling up of promising practices and services
Implemented Activities

Designing technologies/interventions compatible with the resources and objectives of the target groups

- Improved crop variety
- Integrated soil fertility and water management
- Tree propagation
- Post harvest handling of fruit trees
Implemented Activities

Testing the interventions/technologies

- Pests & diseases
- Capacity building/PVS
- Quality seed dual purpose crops production and usage
Implemented Activities

Scaling up of proven technologies: Technologies/interventions, innovation platforms
Implemented Activities

Scaling up of proven technologies: Technologies/interventions, innovation platforms
Key questions expressed by beneficiaries and drylands consortia of gender focal points across and within flagships:

- “to which instance these the interventions - research outputs- capacity building , helped improving women and youth situations”
- “how to build awareness on the impact of mainstreaming and empowerment on women and youth for a sustainable scaling up and out research outputs?”
Problems statement and research questions

- What are the impact on:
  - Decision making around production and income generation;
  - Access to productive capital;
  - Access to credit;
  - Leadership and influence in the community;
  - Membership for different groups in the village;
  - Capacity to make one’s own decision regarding some activities
Methodology

A mixed method approach will be used during this research.

• Quantitative
  – A-WEAI approach couple with qualitative research methods (Re-adjustment with age-disaggregation)
  – The survey was carried out to gather data from a sample of 240 households (30 households in each village)
  – and communities selected from 3 sites in WAS-DS action transect and 5 others control sites from non-transect sites.
  – No gender specific baseline study was not initially conducted, calling for a counterfactual sampling and analytical approach will be used

• qualitative
  – in-depth case studies will be conducted with men, women and youth, to understand the technologies diffusion and adoption history, path and process, perception through gender disaggregated FGD (3 x 8)
Data collection sites

Control sites
## Computing the WEAI

### Domains
- 1. Production
- 2. Resources
- 3. Income
- 4. Leadership
- 5. Time

### Indicators
- 1. Input in productive decisions
- 2. Autonomy in production
- 3. Asset ownership
- 4. Rights over assets
- 5. Access to and decisions over credit
- 6. Control over use of income
- 7. Group membership
- 8. Speaking up in public
- 9. Workload

### Abbreviated-WEAI
1. Production
2. Resources
3. Income
4. Leadership
5. Time

### Pro-WEAI
1. Production
2. Resources
3. Income
4. Leadership
5. Time
...Any combination of domains

### Ad-hoc adaptations
Any combination of indicators, and any weighting scheme can be chosen, as determined by the organization.
Computing the WEAI

Scoring WEAI

Five domains of empowerment

- Production 1/5
  - Ten Indicators
    - Input in productive decisions 1/10
    - Autonomy in production 1/10
  - Ownership of assets 1/15
  - Purchase, sale, or transfer of assets 1/15
  - Access to and decisions on credit 1/15
- Resources 1/5
  - Control over use of income 1/5
- Income 1/5
  - Group Member 1/10
  - Speaking in Public 1/10
- Leadership 1/5
  - Leisure 1/10
- Time 1/5
  - Workload 1/10
Lack of access to credit contribute a lot to both men and women disempowerment in the intervention area.
Disempowerment factors in the control zone

Lack of access to credit – lack of control over income – low group membership - contribute to both men and women disempowerment.
The domains that contribute most to women's disempowerment are lack of leadership (30.1%) and access to credit and productive resources (19.9%).

- Production decision making: 30%
- Access to productive resources: 18%
- Control over use of income: 17%
- Community leadership: 15%
- Time allocation: 20%
Results (cont.)

Contribution of each of the 5DE to women disempowerment (*Control zone*)

In the control zone the lack of leadership (27.7%) and access to credit and productive resources (23.4%) are found to be the most determinant women's disempowerment domains.

- Production decision making: 19%
- Access to productive resources: 28%
- Control over use of income: 23%
- Community leadership: 18%
- Time allocation: 12%
### Empowerment statistics

<table>
<thead>
<tr>
<th></th>
<th>Intervention zone</th>
<th>Control zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of women disempowered (&lt;80%)</td>
<td>58.5%</td>
<td>55.6%</td>
</tr>
<tr>
<td>Average inadequacy score</td>
<td>40.7%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Disempowerment Index</td>
<td>0.24</td>
<td>0.32</td>
</tr>
<tr>
<td>5DE Index</td>
<td>0.76</td>
<td>0.68</td>
</tr>
<tr>
<td>Women with no gender parity</td>
<td>65.4%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Average empowerment gap</td>
<td>0.32</td>
<td>0.37</td>
</tr>
<tr>
<td>GPI</td>
<td>0.79</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>WEAI (0.9<em>5DE + 0.1</em>GPI)</strong></td>
<td><strong>0.76</strong></td>
<td><strong>0.69</strong></td>
</tr>
</tbody>
</table>

Women in the intervention area are more empowered than those in the control zone.
## Results (cont.)

Disempowerment and individual characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Intervention area</th>
<th>Control site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>68.50%</td>
<td>71.50%</td>
</tr>
<tr>
<td>25 &amp; &gt;</td>
<td>67.47%</td>
<td>65.00%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>87.4%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Primary level</td>
<td>67.8%</td>
<td>71.3%</td>
</tr>
<tr>
<td>Secondary education or higher</td>
<td>58.1%</td>
<td>66.5%</td>
</tr>
<tr>
<td>Literacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knows how to read and write</td>
<td>59.0%</td>
<td>62.1%</td>
</tr>
<tr>
<td>Does not know how to read or write</td>
<td>88.6%</td>
<td>89.3%</td>
</tr>
</tbody>
</table>
Results (cont.)

Women empowerment index

- WEAI value \((0.09 \times 5DE + 0.1 \times GPI)\) is **0.76** in the intervention against 0.69 for the control zone.

- These figures place the intervention zone in the **middle class** while the control zone remains in the **lower classification**.

  - >0.85 the high score
  - [0.73 - 0.84] median score
  - <is 0.72 low score

- Initial WEAI in Mali 0.667 < 0.76
Results (cont.)

Domains contributing to women's disempowerment

- Lack of leadership (30.1%) IZ & CZ
- Access to credit and productive resources (19.9%) IZ & CZ
- Agricultural decision-making is the least contributing factor to the disempowerment of women (14.5%) IZ
- Time allocation contributes the least in CZ (12.3%)
Thank you
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A global partnership to realize the potential of rural dryland communities