Prospects and challenges for mechanizing rural agriculture through women linked with microfinance

Sumitra Manandhar Gurung
Mahila Sahayatra Laghubitta Bittiya Sanstha Ltd.

RESILIENT MOUNTAIN SOLUTIONS WEBINAR SERIES

Women farmers and Sustainable Mechanization: Improving lives and livelihoods in the Hindu Kush Himalaya

March 5, 2021
Brief Context:

• Where do I come from... from ICIMOD to Development – social inclusion to Microfinance
• Microfinance sector - 99% clients women. Directly/indirectly supporting national economy and sustaining livelihoods across the country,
• Economically empowering women.
• Huge potential to promote mechanization through microfinance sector -
• The baseline – 34 branches in the mountains and hills - men absent, very tough geography – mechanization can support in reducing labour and help in the entrepreneurship, income of women and of the country as a whole
• Tremendous scope to improve agricultural pattern, and balance trade deficits,
Rhetoric of mechanization aiding agriculture aside, let us ponder how to reach mechanization in the terrain of Hills and mountains...

the working area of Sahayatra...

Let us be reminded of the terrain where we need to access the machines, information, maintenance services.

Some pictures to bring us to the reality where women do the farming and where mechanization can transform economy but HOW?
Some pictures of the working area of Mahila Sahayatra...

Program area in Kalikot
Terrain in Jumla as seen from the air
Sahayatra’s working area in Raksirang, Makwanpur
Program area and access in Salyan
Working area in Kakani, Nuwakot
Dandakot, Nuwakot area
Center Chief’s meeting in Aathbiskot, Rukum Forum to disseminate information to women clients.

<table>
<thead>
<tr>
<th>S No</th>
<th>Particulars</th>
<th>Unit</th>
<th>077 Poush</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MFIs</td>
<td>Number</td>
<td>76</td>
</tr>
<tr>
<td>2</td>
<td>Staff</td>
<td>Number</td>
<td>19,788</td>
</tr>
<tr>
<td>3</td>
<td>Members</td>
<td>Number</td>
<td>4,928,087</td>
</tr>
<tr>
<td>4</td>
<td>Borrowers</td>
<td>Number</td>
<td>2,855,458</td>
</tr>
<tr>
<td>5</td>
<td>Capital Fund</td>
<td>Million Rs.</td>
<td>39,583</td>
</tr>
<tr>
<td>6</td>
<td>Borrowing</td>
<td>Million Rs.</td>
<td>177,755</td>
</tr>
<tr>
<td>7</td>
<td>Deposits</td>
<td>Million Rs.</td>
<td>120,062</td>
</tr>
<tr>
<td>8</td>
<td>Loan Outstanding</td>
<td>Million Rs.</td>
<td>322,154</td>
</tr>
</tbody>
</table>

https://www.nrb.org.np/category/monthly-statistics/?department=bfr
Mechanization solutions tools, machinery, and/or equipment available in market...

Types of mechanization solutions:
Land tilling,
Seeding and planting,
Polyhouses
Sprayers
Irrigation/sprinklers, pumps
Weeding,
Reapers,
Harvesting
Threshers
Hullers/Shellers, milling
Pellet making for livestock feed
Dryers solar, mechanical..
Processing/powder- grits, (spices, nettles, ... 
Grading, sorting, grinding..
Packaging
Cold storage
Current status of use of mechanization in Sahayatra’s branches:

34 branches in the Hills and mountains
35,000 members; 22,000 clients
Rs. 1.8 billion Outstanding in Jan 2021
80% loans are in agriculture and livestock
Rs 5 million loaned for mini tractors 11, Mills 9, Seller and pump set
Or 0.28% of total portfolio.
Recovery of investment is one year for tractors/mini tillers. Rest is bonus
Staff underlined HUGE POTENTIAL
And NEED for mechanization.
Staff identified need of training, exposure,
Information, catalogue of implements, leaflets,
maintenance mechanisms.
Project approach to mechanization service provision:

• Huge gap in information on available tools, equipments, their functions, effectiveness cost, maintenance etc. to WOMEN -

• Mountainous areas are difficult to reach by Entrepreneurs of Mechanisation due to cost of transport and the clients are in no position to pay the transport costs.

• Who will bear the cost?

• MFIs with could be the best institutions to finance but the no mechanisms to orient the staff
Challenges faced in service provision - promoting access to mechanization for women farmers.

- Subsidy programs are largely beneficial to the MH-HHs due to FH-HHs low level of interactions with the extension agents and institutions.
- No information to women
- Access – unthinkable
- Lack of trust on machines due to repair, maintenance service
- Subsidy in the hands of leaders and fake farmers...
- Mechanization and men go together and unwittingly helping men to control income.
  Contrary to objective of aiding women.
- Growing trend in use of machines but controlled by men –
- Just look at the pictures...
Agricultural Mechanization Promotion Policy, 2071 (2014)

Main Objectives

• To increase productivity through it as per the economic and geographical need in order to develop the sustainable, competitive and commercial agriculture sector

• To develop the services and business of agriculture machineries through the coordination among the government, private sectors and cooperatives

• To identify and promote women and environment friendly agriculture machineries. (encouraging the use of tools to reduce the workload of women, empowerment, and design, adopt appropriate machinery etc..)

• To establish and strengthen the organizational structure of quality standardization, regulation, monitoring and promotion of agriculture machineries for agricultural mechanization.

• **Policy 2078 needed for Access to Mechanization by Women?**
• Assuming investment in Mechanization is recoverable in a year.
• If only 1% of the Rs 300 billion is loaned in mechanization, it can add up Rs 3 billion income directly – with many multiplier effects – maintenance personnel, productivity livelihood enhancement, reduction of domestic violence....
• identified need of training, exposure,
• Information, catalogue of implements, leaflets, maintenance mechanisms.
What were the key entry points for women’s adoption of mechanization

Govt’s subsidy directed to women through MFIs
subsidy on interest through NRB policy on mechanization

Create ~10% fund for training, maintenance, spare and service parts.

Orient MFIs 20,000 staff on the benefits of mechanization and provide leaflets, catalogue and exposures.

Start modestly and modify policy as we go along...