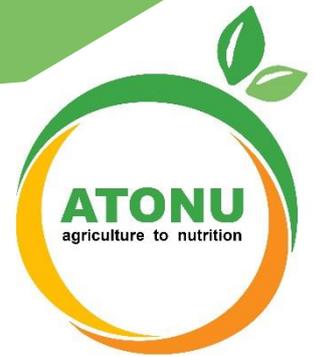


GUIDANCE: Designing Nutrition-Sensitive Interventions

Improved Technologies

E.g., Access to Post-Harvest Motorized Solutions



BACKGROUND

Harvest and post-harvesting activities are extremely labour intensive and are typically done manually by women and children by hand. Large-scale farms often have access to mechanized solutions that help to decrease labour costs and time while also preserving the quantity and quality of the crop post-harvest. However, this machinery is expensive and availability is limited for smallholder farmers in rural areas. There exist lower-cost options that can be introduced through community agrodealers, farmer organizations, other formalized groups or lead farmers and can be an effective nutrition-sensitive intervention.

CONTRIBUTION TO AGRICULTURE-TO-NUTRITION PATHWAYS

Post-harvest mechanized solutions can contribute to each of the three main agriculture-to-nutrition pathways:

1. **Production pathway:** by reducing post-harvest loss and damage to the crop, more higher-quality crop (maize, rice, etc.) will be available for home consumption and for the market.
2. **Income pathway:** by decreasing post-harvest loss and reducing damage, more crop will be available for farmers to sell thereby increasing their income.
3. **Women's empowerment pathway:** by reducing women's time and intensity of physical labour during post-harvest, women will decrease their caloric needs and also free up their time for other activities such as caring practices.

TARGET BENEFICIARIES

- Lead farmers
- Farmer associations
- Farmers' groups
- Women's groups
- Community Agro-Dealers

OBJECTIVES

1. Increased quantity of crop post-harvest
2. Increased quality of crop post-harvest
3. Increased income for women and/or target population
4. Reduced workload/physical labour for women
5. Increased time available for child and self-care.

INDICATORS

1. Amount of crop processed with new technology (outcome)
2. Time allocation change for women/men (outcome)
3. Quality of grains from different post-harvest methods; differentiated prices (outcome)

ACTIVITIES

1. Conduct assessment of existing post-harvest mechanized solutions (including indigenous innovations/solutions that are scalable) available in the project area for the targeted crop. Focus on solutions that will alleviate women's time constraints.
2. Conduct assessment of existing associations/groups to identify management opportunities and gaps in adopting mechanized solution
3. Design and conduct business management training for selected associations/groups
4. Procure equipment and conduct training with associations/groups
5. Identify local mechanics/artisans for maintenance and repairs (provide training if needed)
6. Develop business plan model with associations/groups

POTENTIAL CHALLENGES

1. The machines could be a major challenge to obtain in terms of their affordability (both in terms of purchase and maintenance/upkeep) and availability
2. Ownership of the machines can be unclear unless open communication and clear management exists in the group or organization.
3. There are environmental concerns over the disposal of post-harvest off-products.
4. There may be a lack of local mechanics to maintain and repair machines.

ADDITIONAL RESOURCES

[Farm power and mechanization for small farms in sub-Saharan Africa. FAO Agricultural and Food Engineering Technical Report.](#) Food and Agriculture Organization of the United Nations, 2006.

[Intervention Guide for the Women's Empowerment in Agriculture Index](#). USAID, 2016.