

PROMISING PRACTICE REPORT

Oil Processing for Self-Consumption

<p>Date [11/2019] Updated [03/2023]</p>	<p>Contact details Habteab Hagos (habteab.hagos@giz.de)</p>
Subject	Key Facts & Figures
 <p>Geographical coverage</p>	<p>Implemented in two Woredas in Tigray, namely Kola Tembien and Laelay Adiabo.</p>
 <p>Actors and Stakeholders</p>	<ul style="list-style-type: none"> • Close collaboration with Regional Bureau of Agriculture, Woreda Office of Agriculture and Tigray Agricultural Marketing Promotion Agency • They are working on production of crops & marketing • Elyas Power Electromechanical Enterprise for the local production of oil expeller
 <p>Target beneficiaries</p>	<ul style="list-style-type: none"> • Rural households with women in childbearing age, pregnant and lactating women and their children under two who have cultivation potential to oil seed varieties • 1,200 beneficiaries were organized under 40 user groups • The user groups consisted of 50% female members • The groups were selected by the Kebele administration together with the Development Agents <p>Selection of beneficiaries:</p> <ul style="list-style-type: none"> • NSAP had a total target group of 21,000 women in Tigray region • Oil processing was introduced in Tigray in 2017, when the target group was 12,000 women • 1,200 participants were identified of which 600 are female farmers • Selection criteria were self-cultivation of oil seeds and positive attitude towards agro-processing • 15 landless farmer & youth have been organized under micro enterprise in Merere Kebelle of Kolla Tembein Woreda and one of the activities were producing oil from oil seeds
 <p>Context</p>	<ul style="list-style-type: none"> • Food and nutrition insecurity are seriously affecting inhabitants in Tigray region due to recurrent drought & high population growth • Survey conducted by Mekelle university indicated that stunting in the project woreda ranges from 27.3 to 51.7 percent for under five children • Oils are one of the six food groups identified in the Ethiopian context • It contributes to consumption of healthy food (organic) than using imported palm oil
 <p>Objective</p>	<p>The availability of diversified foods has been increased for rural households in the selected districts of the Tigray region.</p>
 <p>Methodological approach</p>	<p>To ensure a high level of ownership and capacity development, following approaches were chosen:</p> <ul style="list-style-type: none"> • Avoiding parallel structures by working with existing local structures (micro-enterprises) • Ensuring the support and active participation of the BoA and the WoA through their involvement in every step (identification of agro-processing product and implementation area) • Participatory establishment of user groups • Creation of awareness among beneficiaries through trainings on various topics (group management, oil processing, adequate handling/maintenance of equipment) • Ensuring a sustainable supply of equipment by identifying a local manufacturer for oil expellers • Ensuring gender equality measurement through introducing a 50% rate of female group members

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- Training for new user groups provided by members of experienced user group or established micro enterprise
 - Reduction of waste through its further processing to oil cakes; the by-product is used for livestock feeding
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Results

The results of oil processing before the conflict include:

- Reduction of post-harvest loss
 - Nutritious oil that provides mono- and poly-unsaturated fatty acids and minerals
 - Year-round availability of oil for diversified nutrition
 - Self-produced oil supports the household during oil shortages & reduced expenditure for purchase of oil
 - Healthy alternative to cheap palm oil
 - It contributes to easily available in their home
 - Data collected by GIZ NSAP CF in Kolla Tembein in 2021/2022 from one village indicated that 21 farmers were able to produce 170-liters of oil from 510 kg of Niger seeds, the time was critical to get oil in the local market
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Success factors

Framework conditions include:

- Inclusion of decision-making parties, such as the BoA
 - Motivation of farmers for self-consumption of oil rather than profit
 - Easy access to and steady supply of equipment material
 - Lowlands provide favorable geographical conditions for the cultivation of oil seed varieties
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Constraints

User groups need to be further strengthened:

- More trainings on efficient use of oil expellers needed (vs. farmers demand for more quality equipment)
 - Trainings on food safety and hygienic practices and preservation needed
 - Strengthening of participatory group management needed
 - Introduction of internal cost recovery mechanisms for equipment needed (to avoid subsidy)
 - Location problem of oil expellers, including long walking distance or feeling of invading privacy of group members who keeps oil expeller
 - Contradicting motivation of farmers: oil processing for self-consumption vs. profit
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Sustainability

The potential for sustainable implementation is shown in:

- Demand of user groups for participatory management
 - Strengthening of existing structures through cooperation with already established micro-enterprises
 - Positive attitude of the user groups towards oil processing
 - Interest of neighboring groups in adapting processing practices
 - Low investment costs, which guarantee a higher adaptation rate/ higher benefit
 - Measures for gender equality
 - Use of local material and local manufacturer to produce the oil mills
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Replicability and potential for upscaling

Scalability must be considered from the beginning of every measure. Things to consider:

- Simplicity of tool manufacture and maintenance (user-friendly)
 - Long durability of oil expeller
 - Low investment costs and low space requirements
 - Transferability to other seed varieties and simplicity of processing practice
 - Instant results (processed oil)
 - Minimal effort for the creation of user groups: ca. 20 expert days and minimal equipment, including oil expeller, shelves, and chairs
 - Interest of user groups and BoA to continue oil processing
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