

Farmers group meeting on joint planning exercise for the implementation of ISFM+/Agro ecology projects. (Abiyot Kebede)

# Farmers Research and Extension Group (FREG) (埃塞俄比亚) FREG

# 描述

A Farmers Research and Extension Group (FREG) engages about 50 or more farmers in a kebele (lower administrative unit), with three sub groups of 17-20 each who live in a homogenous landscape. It is a local institution established for joint learning, piloting, and evaluating soil improvement technologies across the intervention regions.

Farmers Research and Extension Groups (FREGs) are the approach used to test and spread Integrated Soil and Fertility Management (ISFM+)/Agroecology project best practices in Ethiopia. These technologies include livestock urine collection and use, cover crops, intercropping, vermicompost, acid soil treatment by liming, green manures, crop residue management, and bioslurry. A FREG employs a participatory approach, whereby joint investigation and learning is implemented. Farmers' group members use participatory planning and peer learning from one another. The approach is gender inclusive: one-third of the members in a FREG are women. There is also a mix of social categories. FREGs are populated by proactive model farmers who adopt and demonstrate technologies for scaling up. After the first year, the best-performing model farmer serves as an ambassador for knowledge and skills transfer to the indirect beneficiaries.

Collective investigation, learning, adoption, and then promotion of proven technologies are the key features of the approach. Member of the FREG jointly identify soil fertility/acidityrelated issues, participate in training and demonstrate the technologies. The ISFM+/ Agroecology projects equip the target groups with implementation skills and knowledge. Site and participant selection are made with participation of woreda and kebele representative partners and the target farmers. Then soil-related issues are jointly identified with the support of laboratory analysis by the Regional Research Institute. This demonstrates that the intervention is implemented by the public research and development actors with technical, financial and/or inputs supply from the projects. The approach tends to mobilize the communities living in similar agroecology and farming systems who are subjected to the same SLM-related issues.

Identifying proactive model farmers and establishing demonstration plots for different technologies and crop types are the basis of collective learning. The demonstration is employed as an experimental and learning plot by showcasing and inspiring farmer groups and indirect beneficiaries in the area. Organizing field days and exchange visits further enables the demonstration of technologies for scaling out. Experience shows that where ISFM+ technologies have been piloted, farmers have built up new agroecology technologies such as cover cropping, intercropping and woodlots development over and above those previously adopted. Target farmers have piloted at least three or more technologies/practices on their plots. The woreda office of agriculture through the assigned project focal person gives closer follow-up for the proper implementation of the technologies. Provision of technical support and advisory service via the development agents (DAs) are among many other services.

#### 地点



**地点:** Sodo Zuria district, Kuto-Sarfela kebele, Southern Nations, Nationalities and People Region (SNNPR), 埃塞俄比亚

### 选定地点的地理参考

37.69077, 6.90482

启动日期: 2022

#### 终止年份: 不适用

#### 方法的类型

● 传统/本土● 最近的本地倡议/创新✓ 基于项目/方案



Refreshment moment during the expert interviews with SLM experts and regional advisor on the implementation approach of the cover crops. (Gerba Leta)

# 方法目标和有利环境

## 该方法的主要目的/目标

To promote participatory implementation and peer-to-peer learning by increasing its scope from plot based to landscape scale. The approach capacitates the farmers' group and stimulates the scaling of the approach at a larger scale.

#### 推动实施本办法所应用技术的条件

- 社会/文化/宗教规范和价值观: Increasing soil degradation, growing infrequent moisture stress, and farmers' willingness to manage their land can be considered enabling factors.
- 机构设置: The establishment of FREG at local level promotes the implementation of the technology. The involvement of public research and development actors support to implement evidence based and problem solving practices.
- 参与者的的协作/协调: Woreda focal person, development agents, and farmers' group are supporting participatory planning, implementation, and evaluation. The involvement of different actors promotes collaboration and collective action.
- 法律框架 (土地使用权、土地和水使用权): The availability of a legal framework builds farmers' confidence to invest in their land.
- 政策: Support the SLM initiative via the green legacy.
- 了解SLM,获得技术支持: It facilitates effective implementation of technologies/approaches.

#### 阻碍实施本办法所应用技术的条件

- 社会/文化/宗教规范和价值观: Giving priority to food crops due to shortage of farmland, climbing traits of the companion/cover crop that may cause harvesting inconvenience if not managed very well.
- 工作量、人力资源可用性: Shortage of labor and costs are hindering appropriate implementation.

# 相关利益相关者的参与和角色

# 该方法涉及的利益相关者及其职责

该方法涉及哪些利益相关者/执行机构?	指定利益相关者	说明利益相关者的角色
当地土地使用者/当地社区	Members of farmers group	Participate in participatory planning, implementation, and evaluation of the intervention.
SLM专家/农业顾问	Woreda Natural Resource Management experts or project focal person and development agents.	Facilitate farmers' group meetings during participatory planning, implementation, and participatory evaluation of the activities. Also, provide technical support to the implementers at the various stages of project implementation.
地方政府	Kebele administration	Assist in technology scaling up/out via mobilizing the community to learn and adopt from the pilot activities.
国家政府 (规划者、决策者)	Ministry of Agriculture	Establish an agreement with the project and support it in steering the institutionalization of proven technologies for scaling out via policy support.
国际组织	GIZ	Provide financial, technical and material support to the partner organizations and the end users of the project intervention via the public line offices.



Farmers' group involved in participatory planning, experience exchange visit, and evaluation of the activities. Agricultural experts, development agents, and project staff oversee the implementation of activities and provide technical support/advisory services.

Target farmers and development agents involved in problem identification/assessment and planning.

☑ 对充分记录的SLM知识进行评估(基于证据的决策)

Farmers who are members of the FREG are involved in implementing the technology with technical support from the woreda focal person and the DAs.

## 流程图

Agroecology/ISFM+ implementation flow chart that ran from the Ministry of Agriculture to the local level institution, the FREG. The role of stakeholders at different levels are briefly described in the flow chart.



作者:Gerba Leta

# 有关SLM技术选择的决策

# 决策是由……做出的

仅限土地使用者(自主)
 主要是土地使用者,由SLM专家提供支持
 ✓ 所有相关参与者,作为参与式方法的一部分
 主要是SLM专家,咨询土地使用者之后
 仅限SLM专家
 政治家和领袖

# 技术支持、能力建设和知识管理



#### 能力建设/培训

## **向以下利益相关者提供培训** ✓ 土地使用者

🔽 现场工作人员/顾问

### 涵盖的主题

决策是基于

研究结果

个人经验和意见 (无记录)

The concepts of agroecology, integrated soil fertility management and overall benefits of cover cropping and related crops such as Desmodium.

#### 咨询服务

**已提供咨询服务** ✓ 在土地使用者的土地上 ✓ 在固定中心 The advisory service is face-to-face on demonstration plots at various crop stages including for split application of Urea fertilizer, disease/pest management time, harvesting, and post-harvesting.

机构强化

机构已强化/建立

<ul> <li>否</li> <li>是,少许</li> <li>2 是,适度</li> <li>是,非常</li> </ul>			
<ul> <li>是,少许</li> <li>✓ 是,适度</li> <li>是,非常</li> </ul>		否	
	✓	是,少许 <b>是,适度</b> 是,非常	

# 支持类型

■ 财务■ 能力建设/培训■ 设备

Facilitation/mobilization

# 描述机构、角色和职责、成员等.

FREG has three model farmers leading the group. They mobilize their followers, demonstrate technologies, and steer collective action. Farmers' groups along with agricultural experts and project staff support the selection of technologies and replacement of the existing ones if the need emerges.

## 进一步细节

## 监测和评估

Participatory monitoring and evaluation are part of the FREG approach. Essentially, beginning and end-season evaluation is the approach employed in the implementation of new technologies.

#### 研究 研究涉及以下主题 社会学

社会学
 经济/市场营销
 生态学
 ✓ 技术

Research is part of the introduced technologies. Problem identification is the entryway to introducing a new technology/practice. Regional Agricultural Research Institute involves in the assessment and identification of problems, evaluation, and issuance of appropriate recommendations that make the intervention evidence-based.

# 融资和外部物质支持

#### SLM组成部分的年度预算,以美元计算

< 2,000
2,000-10,000
10,000-100,000
100,000-1,000,000
> 1,000,000
Precise annual budget: 不适用

The budget is generally allocated to support woreda's operational cost and to supply necessary inputs for the implementation of ISFM+ and the Agroecology projects.

在下述层面上

区域

国家

✓ 本地

# 已向土地使用者提供以下服务或激励

为土地使用者提供财政/物质支援
 特定投入的补贴
 信用
 ✓ 其它激励或手段

# 其它激励或手段

For best-performing farmers, incentives such as solar panels, energy-saving cooking stoves, wheelbarrows, etc., are offered to further motivate the farmers and enable them to properly implement the technology and become a very good advocator for scaling the beneficial practices.

# 影响分析和结论性陈述

方法的影响

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	中 市 大 市 市 市 市 市 市 市 市 市 市 市 市 市 市 市 市 市 市
该方法是否有助于当地土地使用者,提高利益相关者的参与度? Land users are decision makers on selection of technologies.	で見る
这种方法是否有助于基于证据的决策? Through piloting and learning from the technologies.	
该方法是否帮助土地使用者实施和维护SLM技术?	
该方法是否提高了SLM的协调性和成本效益?	
该方法是否调动/改善了使用财务资源实施SLM的途径?	
该方法是否提高了土地使用者实施土地管理的知识和能力?	
该方法是否提高了其他利益相关者的知识和能力?	
该方法是否建立/加强了机构、利益相关者之间的合作?	
该方法是否缓解了冲突?	
该方法是否有助于社会和经济弱势群体?	
该方法是否改善了性别平等并赋予女性权力?	
该方法是否鼓励年轻人/下一代土地使用者参与SLM?	
该方法是否改善了阻碍SLM技术实施的土地使用权/用户权问题?	
该方法是否改善了粮食安全/改善了营养?	

该方法是否改善了市场准入?	
该方法是否改善了供水和卫生条件?	✓
该方法是否带来了更可持续的能源使用?	✓
该方法是否提高了土地使用者适应气候变化/极端情况和减轻气候相关灾害的能力?	
该方法是否会带来就业、收入机会?	

# 十地庙田老家施SI M的主要动机

✓ 增加生 ✓ 增加利 ✓ 减少土 降低灰	□ / ↓ □ /	土地使 不 之 是 不
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结论和	吸取的教训	

# 方法活动的可持续性

用者能否维持通过该方法实施的措施(无外部支持的情况下)?



ositive outcome of applying the FREG is considered as a payoff for pating farmers as it gave them the energy to sustain the adopted es. The outputs of integrating technologies, collective learning, tion allow to see significant yield increment per unit of land, ed soil fertility and soil health, etc.

# 长处:土地使用者的观点

- Increases farmers understanding of SLM and enables to improve soil fertility and soil health.
- Allows direct and indirect beneficiaries to adopt beneficial agricultural practices.
- Promote peer learning to apply technologies that nurture soil fertility and increase crop production and productivity, supply feed to the livestock, manage pests...

## 长处:编制者或其他关键资源人员的观点

- Ensure stakeholders' participation and allows the development of a sense of ownership of the technology.
- Promote knowledge sharing for scaling out of the technologies.

#### 弱点/缺点/风险:土地使用者的观点如何克服

• The farmers' group meeting is not so strong and there are absentees or dropouts because of the overlaps with other regular and casual meetings, and private chores. Strengthening appropriate participation in planning, implementation, collective learning and action process.

## 弱点/缺点/风险:编制者或其他关键资源人员的观点如何克服

- Lower level of farmers' commitment and non-zealous to bring change with positive impacts. Need regular follow-up and continuous awareness creation exercises.
- Take the project intervention for granted Mainstreaming further land-related issues and the necessity of adopting ISFM and agroecology practices to ensure the sustainability of the management intervention.

### **编制者** GERBA LETA

Editors Julia Doldt Kidist Yilma Noel Templer Tabitha Nekesa Ahmadou Gaye Siagbé Golli

**审查者** William Critchley Rima Mekdaschi Studer Sally Bunning

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## 资源人

Temaledegn Feleke (temaledgn12@gmail.com) - SLM专业人员

### WOCAT数据库中的完整描述

https://qcat.wocat.net/zh/wocat/approaches/view/approaches\_6629/

## 链接的SLM数据

Technologies: Green Manures https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6645/

Technologies: Treating acid soils with lime https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6641/

Technologies: Crop Residue Management https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6644/

Technologies: Cover crops https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6628/

Technologies: Relay Intercropping https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6630/

Technologies: Vermicomposting https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6643/

Technologies: Livestock Urine Collection and Use https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6623/

Technologies: Bioslurry https://qcat.wocat.net/zh/wocat/technologies/view/technologies\_6646/

# 文件编制者

机构

• Alliance Bioversity and International Center for Tropical Agriculture (Alliance Bioversity-CIAT) - 肯尼亚 项目

• Soil protection and rehabilitation for food security (ProSo(i)l)

#### 主要参考文献

- Agricultural extension approach: evidence from an Integrated Soil Fertility Management project in Ethiopia. Leta, G., Schulz, S., Alemu, G. 2020. DOI: 10.15302/J-FASE-2020331: https://www.researchgate.net (Free online)
- Evaluation of Farmer Research Extension Group as Extension Approach: The experience of Sida-Amhara Rural Development Program in Kalu District of Amhara Region, Ethiopia. Abebe, E. 2008.: https://depot.wur.nl/1129

## 链接到网络上可用的相关信息

- Farmer research and extension: https://www.researchgate.net/publication/5055710\_Farmer\_research\_and\_extension
- Basics of cover cropping: https://organicgrowersschool.org/gardeners/library/basics-of-cover-cropping/

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