Project: Promoting Sustainable Rural Energy Technologies for Households and Productive Uses

Component 3: Sustainable Financial Mechanism (SFM)

Field Supervision Report

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I. Introduction

This field supervision was conducted in three Regional States where operationalization of the of the credit risk guarantee fund (CRGF) was initiated so far and the provision of the energy loan was started just to enhance the dissemination of Renewable Energy Technologies (RETs) to the off-grid areas and communities. These regional States are Amahara Regional State, SNNP Regional State and Oromia Regional State.

The field supervision was conducted to assess the implementation status of energy loan provision, the renewable energy technologies (RETs) supply and dissemination up to the off-grid areas and communities. It was also intended to check whether the technologies under production and dissemination are as per the recognized quality and the standard given by the project.

In order to realize the intention of the field supervision explained above several RETs (mainly, Solar energy technologies and Improved Cook Stoves (ICS) importers, manufacturers and distributers were visited. And also, several users of the technologies (target communities) were visited.

II. Objectives of the Field Supervision

2.1. General Objective

The prime objective of the field supervision is to assess the implementation status of the project and to identify the project implementation gaps and to seek possible solutions or actions so as to enhance smooth implementation of the project.

2.2. Specific objectives

The specific objectives of the field supervision are the following:

- To assess the financial access status of the RET suppliers
- To assess the quality and standards of the technologies under supply and dissemination
- To assess the types of the technologies disseminating to the off-grid rural communities
- To assess the ways of handling and using the technologies

- To assess the awareness level of the technology users about the technologies they are using.

III. Metrologies employed during the field supervision

The methologies employed during the field supervision are the following:

- Visiting workshops or Business areas of selected RETs suppliers (both Solar energy and ICS technologies)
- Conducting discussions with the selected RET suppliers
- Visiting selected Users of the technologies
- Discussing with regional Energy Bureaus

IV. Activities performed / Deliverables

4.1. Field Observations (Workshops/Business Areas visit)

The team has conducted field observations at workshops or business areas of the selected RETs suppliers.

The prime purpose of the field observation is to observe /assess the status of working/business areas of the RET suppliers. In other words, to check whether the technologies under production and dissemination are as per the recognized design and the certification provided from the certifying organizations.

During the field observations various RET suppliers were observed from the regions and Addis Ababa City Administration. During the visit about 18 RETs suppliers were observed and the observed RET suppliers are the following:

1. W/ro Genete Tadese - ICS production and distribution center –Bahir Dar
2. W/ro Abaynesh Alemu - ICS production and distribution center – Worreta
3. Ato Zenebe Tesfaye - ICS production and distribution center – Bahir Dar
4. Ato Yosef Tesega - ICS production and distribution center – Bahir Dar
5. Ato Getu Alemayehu - ICS production and distribution center – Bahir Dar
6. Ato Mola Yenesew - ICS production and distribution center – Burer (Shindi)
7. W/ro Ayal Nugusie - ICS production and distribution center – Lumame
8. Ato Wondewosen Ketema -ICS production and distribution center –W/ Arsi

9. Ato Kemal Kedir- both Solar and ICS - W/Arsi (Shashemene and Hasasa)
10. Ato Bekele Alemu-Solar Energy Technologies supplier –SNNP (Alaba)
11. Ato Fekadu Abebe - Solar Energy Technologies supplier –SNNP (Buta Jira)
12. Eyosias Fekadu - Solar Energy Technologies supplier –SNNP (Buta Jira)
13. Ato Hailu Manenda - Solar Energy Technologies supplier –SNNP (Wolkite)
14. W/ro Astrer Taye - both Solar and ICS technologies – SNNPR (Wolayita S)
15. W/ro Amsale Berga- ICS production and distribution center (Wolkite)
16. T.T. Solar Women- Solar tech. importer and distr/ - Addis Ababa
17. Green Hope PLC- Solar tech. importer and distr/- Addis Ababa
18. Lydetco Solar PLC- Solar tech. importer and distr/- Addis Ababa

4.1.1. Detail Discussion and Visit of the Workshop/Business Areas of the RET suppliers

- Capacity of the workshops/business areas
- Year of establishment
- Types of technology product produced/supplied/disseminated
- Checking quality standards (whether it coincides with the provided design
- Demands with the technologies
- Market situation of the technologies
- Production inputs/materials of the technologies
- Quantity produced and sold/disseminated of the technologies
- Price of the technologies
- Distribution areas of the technologies
- Technology installment and maintenance
- Technology promotion/Awareness creation of the technology users
- Reporting to whom (GIZ, energy bureau: Woreda, Zone, Region)
- Loan processing procedure
- Foreign currency supply shortage
- Contraband and substandard products and market distortion confronted
- Low /no attention from energy bureau
- No support from energy bureau
- Lack of physical collateral and access to loan

- Shortage of transportation facilities to further distribution to the most off-grid areas
- Shortage/lack of production and marketing places/spaces
- Lack capacity building and support
- Shortage/limited/lack of product promotion mechanisms

4.2. Visiting Selected Users of the RET and discussion held with them

During the field visit various selected RETs users were visited and discussions were held with them. About 20 users of the technologies were visited from the three regions (11 ICS and 9 solar technology users).

- From Amahara Regional State 5
- From SNNP Regional State 12
- From Orromia Regional State 3

During the visits and discussions held with the technology end users the following points were focused:

- Types of the technology they used/are using
- Source to the technology/from whom they bought
- At what price they bought
- Whether the tech/currently functioning or not
- Whether the technology is cheap or expensive
- Does it real y save wood(for ICS)
- How they came to know the technology
- Whether their neighbors like it or not
- How the neighbors came to know the technology
- What are the advantages of technologies (what differences did you see after using the technology)?

For example they said:

- **It saves wood (If ICS)**
- **It avoids smoke**

- **It minimizes burden of women when cooking**
- It enhances students efficiency in their study/studies
- It minimizes cost of learning for rural students
- It minimizes healthy hazardous
- It saves time by enabling side by side cooking

4.3. Discussion held with selected MFIs

The points raised during the discussion were:

- Availability of alternative collateral mechanisms
- How to making business by lending for RET suppliers
- How to Discharge their corporate social responsibility (CSR)

Among the alternative Collateral mechanisms are:

- House guarantee
- Vehicle guarantee
- Letter guarantee
- Saving guarantee
- Salary guarantee
- Group guarantee (Group Solidarity)

4.4. Debriefing Discussion with energy Bureaus

After conducting visits and discussions with each selected RET suppliers and RET users (end users of the technologies), debriefing discussions were conducted with respective regional energy bureaus.

During the debriefing discussions the points focused were the following:

- Feedback of the visits and discussion with RET suppliers
- Feedback of the visits of selected technology users
- Gaps observed and identified during the visits and discussions with RET suppliers and the technologies users
- Challenges confronted the supplying and dissemination of the technologies
- Suggestions and the way forewords

- Reporting procedures
- Loan processing procedures
- Confirmation letter writing process and procedures for RET suppliers
- Quality controlling procedures

V. Findings of the overall field supervision

The overall findings of the field visit are mainly the following:

- The ICS producers and distributers are aware of the design of the stoves that they produce and distribute. The design they are working with is as per the design given from MOWIE, and regional Energy bureaus.
- Regarding with ICS technologies, it is not well promoted; the rural community knows it roughly. They do not know it deeply. Some of them do not know why they use it deeply.
- There are gaps in handling the technologies technically and the technique how to use it. For example setting of the stoves properly and keeping maintaining it.
- ICS technologies (esp. those with tick edges are too heavy to transport with all its accessories.
- Supports from energy bureau at all level (woreda level, Zonal level, Bureau level) none-existent or almost none. Especially in:
    - ✓ Promoting the technologies
    - ✓ Providing spaces for production and marketing
    - ✓ Providing capacity building
    - ✓ etc
- No reporting system (periodic reporting is not available) with energy bureaus: woreda, zonal and regional level. Totally there is no connection with report with energy bureaus.
- There is critical Supply shortage of the solar technologies
- Contraband and substandard with solar energy technology businesses is prominent.

5.1. Successes up to now

- Solar Energy Technology is highly promoted and demand for it is high and alarmingly increasing.
- Rural students especially those have been preparing for Grade 8, 10 and 12 have been using the solar technology for studying.
- TV- and Sound systems were disseminated and being disseminated with the solar technologies to households and institutions (for Churches, Mosques, etc):
    - * **For instance:**
        - ✓ Green Hope Solar PLC disseminated 275 pcs of TV systems
        - ✓ Kemal Kedir (Jitu RET enterprise) disseminated 26 TV systems and 60 sound systems for institutions for churches and Mosques Mortamboo sound systems)
        - ✓ Tigist Taddesse Solar woman disseminated over 285 TV systems for 285 HHs (under process)
        - ✓ Eyosias Fekadu disseminated 15 TV systems for rural area communities
- Forth coming innovation with ICS ready for patent right by the "Jitu wood saving stove" by Kemal Kedir.
    - ▪ Bricket production technology being started in some ICS centers like W/ro Genete Tadese from Bahir Dar

5.2 Gaps identified

During the field visits and discussion with RET suppliers and the technology end users the following gaps were identified.

- Transporting the technologies with their accessories (ICS) is difficult from its production points to Users HHs
- Difficulty with access to loan due to physical collateral shortage/absence/under standards of what lending institutions (Banks) require.
- The technologies are not well promoted and awareness with end users is not deep/very low.
- Spaces for production and marketing is not available is a big problem with the producers and distributors of the technologies (ICS)

- Technology Supply shortage is a serious problem (solar energy technology)
- Contraband solar technology in solar markets is also a key problem
- Lack of support and attention from Energy bureaus (woreda, zone and bureau level)

VI. Suggested Actions for the major gaps identified

In order to smooth the technology supply, distribution and dissemination the following actions are suggested:

- The design of ICSs with tick edges and heavy accessories need to be revised based on users demand.
- In order to minimize the difficulty with shortage or lack of sufficient and to the standard physical collateral (fixed asset) other alternative collateral mechanisms need to be sought.
- In order to enhance further promotion of the ICS technologies energy sectors at all level need to aggressively work on it by using various alternative promotion and awareness creation mechanisms.
- To expand the RET production, marketing and promotion the concerned government sectors (woreda, zone, regional level bureaus in collaboration with urban land management and development) need to aggressively work on providing production and marketing spaces for the RET producers and sellers or disseminators.
- In order to increase the supply of the solar energy technologies and solve the acute shortage of the technology in the local market the concerned government sectors need to play its role just to enable the technology importers to import large and continuous quantity.
- To crab the problem of marketing contraband and substandard solar technologies the regulatory bodies (Ministry of trade, Customs Commission, Regional Energy bureaus in collaboration with MOWIE) need to work on it aggressively.
- In order to speed up the technology promotion and development and in order to foster its expansion among the rural off-grid areas the concerned bodies (energy sector at all level should deserve due attention and support the emerging RET suppliers in different areas.