Strengthening Capacity and Market Opportunity for Locally Promising Energy-saving Stove and Quality Tree Sapling in Delta, Myanmar Project. (2011 – 2014)

INTRODUCTION TO QUALITY FUEL EFFICIENT STOVE PRODUCTION AND MARKETING

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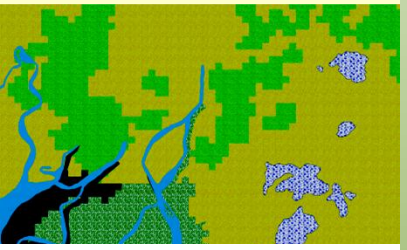
GEOGRAPHICAL CONTEXT



Targeted village 119 in Bogale & Mawlamyinegyun townships

Agro eco-zone Fresh and Brackish water area

Targeted people 60000, 12000 HH. Mostly landless and poor

Usual used stove 3-stone stoves (>95% of HHs utilize)

Pathein stoves & Limestone stoves (<5% in urban area)

Sr	Township	No. of village	No. of H.H	Fuel-wood annual demand
1	Bogale	76	8347	20867
2	Mawlamyinegyun	43	4024	10060
	Total	119	12371	30927 cu ft

Problem issues of fuel consumption

- reduce fuel source (Forest degradation & population growth)
- cost of fuel price increased

Technical and price comparative statement

3-Stone- stove : no cost for making, high fuel wood required, high risk in fire hazard

Pathein Stoves: high price, limited market source limited, save fuel wood

MSN Fuel efficient stove: fair price, reduced fuel wood, marketable in villages (1/3 saved fuel wood compared to 3-stone)

DESCRIPTION OF PRACTICE

1. **Group formation** – Village environmental Conservation Committees(119) 4 Zone committees, 4 working groups with minimum interested 3 men&3 women

2. **Initial Trainings**: Green Stove Making(119), Baked Stove Production(4), Small business management and marketing(40)

3. **Start-up tools** : Stove making instrument, Baking kiln, Marketing facilities Marketing capital, Solar-dryer, Advertisement tools

4. **Further coaching**: Tin-smith training; Exchange visits, Market exploration

5. **Governance:** Management committee formed from business zone villages for steering the business. Profit sharing: 50% to production members, 25% zone villages as stoves, 20% for reinvestment for business growth, 5% for social welfare of group members;

PROCESS OF STOVE PRODUCTION & MARKETING

Making raw Stoves	• Collecting clay and rice husk and mixing with water • Molding
Drying raw Stoves	•Air drying in sun shade and solar dryer in shelves •Smoothening and polishing for final furnishing
Baking in a kiln	•Proper placing the raw stoves in the baking kiln •Baked with rice husk fuel
Frame installation	•Iron frame fitting •Tin covering
Marketing	•By river vendor and door to door for rural market and wholesale for town market with advertising sound and pamphlets •Wholesale shipping to neighboring townships by cars and engine boats •Opening temporary stalls at local festival event places (pagoda festivals, exhibitions and fairs) •Selling through village input stores of WHH

APPROACH USED

- Learning from other successful stove producers & exchange knowledge & experience through peer producers
- Applying Research & Development practices in quality of stoves, market demand, SWOT analysis
- Market competition by quality insure products and reasonable price
- Sale promotion: 1 extra for ten units sold
- Cash down sale through door to door and wholesaler
- Management support in division of work and clear roles and responsibilities of each member for harmonious and synchronized production

VALIDATION OF PRACTICE

- Quality and price are accepted by consumers
- Increasing demand in the market
- Even in the raining season baking process have to be done for increasing market demand
- Members are improving status from casual income (30,000 irregular) to regular income (80,000 per month)
- Social status improved (many come to know them by name and their business)

INNOVATION BY MEMBERS & OTHER SUCCESS FACTORS

- On Started with 8” diameter -> 6”, 8”, 10”
- Simple potter wheel ->Improved design for mass production
- Without tin cover -> tin covered stoves with handle
- Men power clay mixing -> engine mixer
- Air dryer -> improved solar dryer shelves
- Sale on return goods -> cash down bulk sale
- Other success factors:
- Smaller kiln: 200 stove per batch for faster production

CONSTRAINTS

- Need at least 3 years support to establish successful business
- Should not be more than 2 business units per township
- Risk of low production due to heavy rain & high flood
- At the early stove production period ,some of the group members moved to other area to find job.

LESSONS LEARNED

- As the raw stoves can't produced at raining season, need ahead to produced raw stoves during dry season.
- Stoves drying at warehouse on shelves and improved solar dryer are certainly required for air drying.
- Final product of stoves must be good quality and reasonable price for attraction to the buyers.
- Different size of stoves has to be done for buyer selection.
- Door to door selling system and extend the market area by advertising of the products.(such as vinyl, pamphlet, advertising song)
- At the early marketing process wholesale and sale or return goods practices had to take 4-5 cycle periods to accelerate the production cycle.

SUSTAINABILITY

- Emerging efficient stove marketing at Delta area, become increase income to stove production groups, lead to sustainability.
- After returning capital investment to members villages become ownership business of stove production groups.
- Discussion within stove production group members, which could be suitable to join with Bogale T.D.C or co-operative to become legal and sustainable after the end of the project.

- **Benefit of Environmental service & community**

Sr	Township	village	H.H	No.stove used	Annual saved fuel(cuft)	Saved MMK
1	Bogale	76	8347	3384	2961	888 lakh
2	Mawkyun	43	4024	3563	3117	935Lakh
3	Other tsps	54	4279	4279	3744	1123Lakh
	TOTAL	173	16650	11226	9822	2946oLakh

We are grateful to LIFT program for having chance to implement an environmental related Livelihood development project .

Thank you for your attention & invite
Your valuable suggestion

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