Home Based Grocery Stores

Home Based small Grocery stores are one of the major activities that employ women in the informal sector across India.
“Geetaben’s home is also her work place.”

About the Livelihood

HOUSEHOLD COMPOSITION
Geetaben lives with her husband, two sons and a daughter.

HOUSEHOLD’S ECONOMY
Geetaben carries out her daily retail activity in her small grocery shop which is attached to her home. She earns INR 13,000 per month. ($185 per month).

Her Husband is a seasonal labour who earns around INR 5000 ($70) every month.

Geetaben’s net household income from both the economic activities is **INR 18,000 ($257)** per month.

Out of the total household income almost 70% (INR 13,000/ $185) of the income is generated by their small scale grocery store.

- **Geetaben**
- **Husband**
- **Son**
- **Son**
- **Daughter**

Livelihood Income

- **Kirana Store**: INR 13,000 ($185)
- **Seasonal Labour**: INR 5,000 ($70)
- **Livelihood Income**: INR 18,000/ month ($257/month)

Livelihood Expenses

- **Household Necessities**: INR 10,000 ($142)
- **Rent**: INR 500 ($7)
- **Electricity Bill**: INR 800 ($11)
- **Livelihood Income**: INR 11,300/ month ($161/month)

**NET HOUSEHOLD INCOME**: INR 7,200/ month ($100/ month)
ENERGY AUDIT

Geetaben stays in a rented house and also rents electricity from the landlord. Due to this arrangement between geetaben and her landowner, geetaben ends up paying 25% extra (Rs 800/ $11) on electricity bills every month. MHT’s technical team conducted an energy audit at Geetaben’s house to understand the household’s energy consumption. The energy audit suggests that the maximum average consumption of electrical units should result in an expense equivalent to Rupees 620 ($10) per month.

Geetaben’s livelihood is heavily dependant on retail of products such as milk, buttermilk, curd, cold drinks etc. that requires storage under refrigeration. Breakdown from the energy audit indicated that the maximum consumption of electricity resulting in high electricity bills was from the Refridgerator. Geetaben’s refrigerator operates effectively for more than 12 hours a day and has a share of almost 60% of the total household electricity bill. Therefore, intervention on Refrigerator was the primary objective.

MHT’s Intervention

MHT’s Technical team intervened with the use of Solar powered solution. The intervention was designed to include a DC to AC power conversion inverter with a solar panel system. With consultation from the SELCO Foundation the interventions design was reworked to increase its capacity enabling its functioning as an entire home lighting system. The implementation of Solar Intervention component was completed for the refrigeraror with planning to extend it as a Home lighting system in the future along with the effective management of livelihood space of the house.

Learnings & challenges

1. Holistic Design Interventions
   - The team designed a special mounting structure for solar panel installation as beneficiaries have kutcha roots.

2. Space Layout Design
   - MHT’s team will be integrating space design of the household for increasing efficiency of the livelihood activity.

3. Cumulative capacity building
   - MHT’s installation team used it’s experiences from the previous pilot installations for improved application in this case.

4. Material Inventory management
   - Effective implementation of pilots was realised post installation with the scope to efficiently manage unused materials in future pilots.
The sustainable Housing Project intends to explore the possibilities of achieving sustainability in Built Environment through different interventions on a pilot basis and subsequent scaling of pilots.

The Pilots undertaken under energy efficient appliances and technology intends the demonstration of sustainable built environment of different livelihoods through the effective use of solar powered technology in the geographical regions of Gujarat and Madhya Pradesh in India.

Sustainable Housing Programme

Energy Efficient Home Based Livelihoods

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