

Clean Cooking in India

SWACHH URJA TRAINING PROGRAM

Training Intervention for Last Mile
Clean Energy Entrepreneurs



I. BACKGROUND

India is home to around 17.5% of world's population. As per NSSO figures, 67.3% of rural households use firewood and chips as their primary cooking fuel. In addition, WHO estimates that 25% of the 4.3 million global premature Household Air Pollution (HAP) deaths occur in India every year and more than 800 million people are impacted by exposure to HAP in the country. Access to clean energy products, especially for lighting and cooking is necessary, not only to ensure adequate health conditions, but also for overall economic development. In order to address this necessity, GIZ and Gajam India Private Limited have decided to collaborate.

The partnership between the two organisations intends to develop sustainable business models and practices for marketing and wider adoption of clean energy products in rural India. The project outputs directly link to providing enabling conditions for clean energy entrepreneurs by developing conducive market conditions to operate in.

Dharma Life serves the needs of rural households at the bottom of the pyramid by creating a rural distribution network providing customized products and services sold at socially affordable prices. The company provides income generation opportunities for rural entrepreneurs and consumers in order to generate sustainable livelihoods at the rural level.

With on-going projects in 9 states, DL is a social enterprise that aims to "create sustainable livelihoods by creating entrepreneurs, who provide socially impactful products to consumers at the base of the pyramid at an affordable cost". The goal of Dharma Life is to create 100,000 rural entrepreneurs by 2020. Its corporate office is in New Delhi and has a full-fledged Sales Channel facilitating the realization of social cause that Dharma Life stands for. In India,

around 40 crore people live without the distinct advantages offered by modern lighting or cooking of any kind. Lack of modern lighting and cooking resources adversely impacts the health, safety, education and livelihood of people. The quality of life is deeply hampered by using energy sources that are neither freely available nor sustainable.

The use of kerosene, which is the primary source of lighting for such households, has an adverse impact on their health and lifestyle as it is both expensive and polluting. Similarly, high dependence on firewood for cooking has time and again proved to be tedious, dangerous and unhealthy. Rural households are dependent on these sources at the cost of their health and safety. Cardio-vascular diseases, respiratory diseases and eye problems, which are often attributed to Indoor Air Pollution, are very common in the villages. On average, households spent about 7%¹ of their overall annual income on the treatment of diseases.

Clean Energy Solutions look like the most promising and feasible option to curb the challenge of indoor air pollution. It is critical to promote clean energy amongst these households. It has been observed that awareness, low education statistics, affordability and availability have a huge role to play in this. Any intervention on awareness creation and behavioural change regarding indoor air pollution and improved cookstove solutions must include measures to reach audiences with limited educational backgrounds.

II. OBJECTIVES

Over the years, Dharma Life has been providing access to clean lighting solutions in areas where there is no or limited access to grid electricity or clean energy. Dharma Life provides households access to a variety of solutions such as solar lights for their varied needs. These currently include portable solar lanterns and solar home systems.

With success in the clean lighting sector, Dharma Life is now committed to promote clean cooking solutions amongst rural masses through Dharma Life Swacchh Urja Entrepreneurs (DLE). Dharma Life provides extensive skills support and mentorship to empower entrepreneurs and help them grow their business and is thus creating a deep impact. Through periodic trainings, mentoring of aspiring individuals (especially the rural youth) and quipping them with products that positively contribute to their communities, Dharma Life is creating future change makers.

Dharma Life truly believes that rural entrepreneurs evolve to become change makers.

The Swacchh Urja project aims to train 400 entrepreneurs for skill building based on certified training modules. It will result in skill building of village level entrepreneurs for promotion of clean energy products. This will promote usage and at the same time increase the livelihood opportunities for the local communities.

III. TRAINING

The skill building training was to be imparted to 400 DLEs (Dharma Life Entrepreneurs). However, in the first four phases of the program, a total of 550 DLEs has been trained so far.

For skill building, training was conducted in four phases:

Phase I

The first phase of the training was conducted in Sitapur, Shahjahanpur and Jaunpur districts of Uttar Pradesh. 79 DLEs were trained in this phase.

Phase II

The second phase of trainings in Uttar Pradesh could not be continued because of legislative elections. Therefore, the training sessions were moved to the entrepreneurs in rural Bihar, in Munger

and Bhagalpur districts. 107 DLEs were trained in the second phase.

Phase III

For the third phase, the trainings were subsequently brought back to GIZ districts in Uttar Pradesh. Third phase of trainings commenced in Fatehpur and Sultanpur districts. 93 DLEs have been trained.

Phase IV

The fourth phase of skill building trainings were conducted in the districts of Jaipur and Alwar in Rajasthan. A total of 197 DLEs were trained in two district

IV. BRIEF HIGHLIGHTS OF TRAINING

The facilitator introduced Dharma Life to participants as a social enterprise dedicated to poverty alleviation through rural entrepreneurship. It endeavours to create an end-to-end value chain that enables individuals at the base of the pyramid to earn a sustainable livelihood; a model that would engage the local community and offer the highest likelihood of success. This resulted in an innovative approach of value creation that combines rural entrepreneur development and multi-product distribution.

Rural entrepreneurs were identified, selected and trained to become social change makers in their village by addressing the issues of awareness, accessibility and affordability for social impact products such as solar lights, clean cooking solutions, water purifiers amongst others. This resulted in greater income generation for entrepreneurs, improved consumer awareness, and increased adoption of social impact products.

Conducted across three days, brief highlights of the training are:

Day 1

- Dharma Life Orientation – Alignment with social causes and mission.
- Qualities of an Entrepreneur
- What is in it for Entrepreneur?
- Product Overview

Day 2

- Detailed Product Training – Pilot X and Induction Cooktop
- Saksham Selling Skills
- Swacchh Urja: Uses and Importance

Day 3

- Financial Management
- Creation of Business Plan
- How to Conduct Market Activity
- Tracking and MIS'

V. Detailed Summary of Day-wise Activities**Day 1**

1. Knowing Each Other
2. Expectation Setting
3. Understanding the concept of SU
4. Understanding S – Swayam, Swalambi": an attitude of "I Can"
5. Recap and Briefing of the main market

After a round of introductions, participants were asked to write down their background alongside future dreams and goals. The facilitator then discussed some of the dreams in class and explained how and why they may be different based on personal needs and desires. Eliciting why the important to them, the dreams were linked to economic needs and achievements.

They were later shown a film followed by an activity that would emphasise the need to break their social and internal blocks and obstacles. The women in the circle will now try to break free from this circle. The women will hold hands tightly and not allow the

women inside to breakout. In case a volunteer inside does manage to break out, let her stand out and the women in the ring should quickly close the circle so that they are not allowed to break out. Following this, questions were asked about the activity and future expectations from the training to ensure a clear and transparent programme development.

Then, the SU DLE Model was introduced and the goals and values of DL mentioned previously.

V	What it stands for	Description
S	Swayam, Swalambi: an attitude of "I can"	Understanding what is entrepreneurship and how does it help in creating sustainable livelihoods. Also, introducing the qualities of a successful entrepreneur.
W	Wyapar Niyamwali: Ensure all prerequisites	Understanding Time and Business Management. Also, understanding the product and related documentation that would help the entrepreneurs map and execute their business plans in a better manner.
A	Aaj se bane Saksham	Understanding the skill to sell by introducing SAKSHAM Approach. SAKSHAM approach helps entrepreneurs with communication skills, probing skills, negotiating skills and relationship management skills.
C	Customer Kaun	Understanding different levels of consumers and preparing profiles for each set of characteristics.
HH	Hamara Humsafar: Manak Sanchalan Prakriya	Understanding the Standard Operating Process and Complaint Management.
U	Ujjwal Bharat	Understanding the energy scenario in rural India or state (detailed)
R	Swachh Urja ki Raah	Understanding the idea of clean energy and the cooking solutions in this field.

J	Jano, Parkho aur Samjho: Understanding the Unnat Chulha	Understanding the product and its technology – Unnat Chulha.
A	Aao Sath Badhaye Hath	Understanding the financial aspect of the business.

Next, the Understanding S–Swayam, Swalambi: an attitude of “I Can” session aimed to help the participants identify the ‘Swalambi’ in them. Following topics were covered during this session: •

- a. What is entrepreneurship
- b. How entrepreneurship helps in creating sustainable livelihood

The desire to achieve economic independence, respect and status in their community, the facilitator emphasised that entrepreneurship is a means to achieve self-reliance. Demonstrating “S”: the attitude of ‘I Can’, the participants were able to:

- Understand the steps towards becoming an entrepreneur.
- Understand that an entrepreneur initiates an idea and takes it to culmination by creating a business unit/enterprise by selecting the right product
- Understand that the entrepreneur needs various skills.
- Comprehend the qualities of a Successful Entrepreneur.
- Align DLE to the Dharma Life mission and the social causes that they are working for

Once the participants got an idea about organization they were getting associated with, they are briefly explained about the product and the following three days. Why business, how to go about it, financials, operational details, etc. will be covered during these sessions.

- They are exposed to various awareness activities about clean energy, improved cooking methods,

etc. that have been taking place in the village.

- They are introduced to the concept of clean energy and why that is the need of the hour – various aspects related to it, its affordability, availability, its business prospects, etc.
- They are introduced to two amazing products – Unnat Chulha and Induction Stove.
- They are made aware about the maintenance, the fuel requirements, etc.

Additionally, they were also exposed to a simulation of a real life ‘mini market’ to check their entrepreneurial learning with product know how.

Day 2

1. Understanding W – “Wyapaar Niyamavali”: A discussion about basics of Entrepreneurship
2. Understanding A – “Aaj se bane SAKSHAM”: A discussion about the Selling Approach
3. Understanding C – “Customer Kaun?”: A Discussion about customer profiling
4. Recap

The first session of the day introduced participants to the concept of business and entrepreneurship covering the following:

- Role of DLE and their role in the bigger picture •
- Time management and planning •
- Product knowledge and documentation procedure

The participants are trained further on how to become their own boss, carry out their business successfully and achieve personal and professional gains. The gains are not only restricted to material gains, but also gives them an opportunity to earn recognition in their village. It concluded with a story that that if there is a firm decision and determination to work hard, no one can stop us from achieving great things in life.

It is important that the DLEs realize the fact the customer is their King and Queen. The facilitator

explains that handling them is of utmost importance. Every organization and every individual has his/her own way of handling the customers but the motive is to convert a prospect into a valuable customer and extend a long relationship with them. For a customer, a DLE is the face of the organization; hence it is their responsibility to ensure that they educate, enable and motivate the customers.

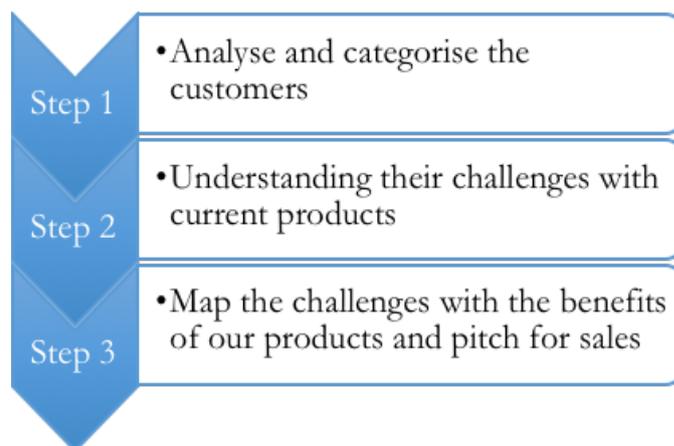
The participants are introduced to the he SAKSHAM approach which aims to initiate and maintain a good relationship with customers. It is a strategy to handle prospective clients and convert them into customers. A Suspect is anyone who might be interested in our products and whom we try to convince to buy the products. A Prospect is anyone who shows interest in buying the product and Customers are those who buy the product. The training is focused on roleplaying potential situations and scenarios to help deal with them in real life.

The next session focuses on consumer profiling. The process of identifying and grouping customers, assessing their needs and mapping them to our business concept is called customer profiling. Every buyer of a product falls into a typical customer profile. Participants are trained to identify answers to questions like:

- Why have the potential customers shown an interest in your product?
- What do they do to fulfil these needs currently?
- What are the problems faced in the current usage?
- What is the income bracket they fall under?

Customer profiling is a three-step process. The facilitator uses a few examples of village entrepreneurs who have done customer profiling for any product. The consumer profiles are summaries, analysed, and then studied to improve pitch methods.

The closing session recaps the day's events and briefly discusses a few marketing management skills.



Day 3

1. Understanding HH – “Hamara Humsafar: Manak Sanchalan Prakriya”: A discussion about the Standard Operating Procedures
2. Marketing Management & Selling Techniques - Mini Market
 - a. Preparation for Market (Charts, Banners and Shop layout)
 - b. Mini Market Operation/Run
 - c. Calculation of Profits and Losses and their reasons
 - d. Processing of the Mini Market - Marketing Management - Selling Techniques - Sales and Promotion
3. Introduction to URJA
4. Recap and Assignment

Understanding HH deals with activities to inculcate the habit of maintaining trackers and capturing all the required details. This trains the participants to manage relationship with the customers. The purpose of this session is to understand: •

- Trackers
- Key Processes
- How the DLE is supported in performing his role by the - EL - Call Centre.

Participants present their customer profiling assignment to the class in groups. They are introduced to trackers that help make a log of every day activities. The facilitator prints out all the trackers and give one copy to each participant and discusses every attribute. Later the participants fill in the details to ensure that they have understood all the attributes correctly.

Next, the mock "Mini Market" exposes the entrepreneurs to different techniques of selling and learn some marketing concepts. Its objectives are

- To enable participants to experience face-to-face selling situations. •
- To make participants aware of different selling techniques. •
- To make them realize the importance of proper communication - verbal, non-verbal and written. •
- To make them understand consumer motives and behaviour.

The next session introduces participants to URJA and the basics of energy sector especially in an Indian rural scenario. Also, to acquaint them with basic concepts and terminology.

It is essential that the participants understand energy and more importantly observe human dependence on it. So the facilitator explains URJA with the help of the following examples:

Q: How do you think a human body does all its daily activities?

Expected Answers: Food, Energy, etc.

Q: What if you don't take food for a day or two?

Expected Answers: Can't work, Tiredness, Sluggishness, etc.

They are then explained that food is the fuel or indhan and energy derived is urja without which all our activities come to a standstill. S/He also explains

that the better fuel you use the better energy you draw. They compare stale or undercooked food to moisture laden fuel wood used in cookstoves– both leading to negative and harmful impacts.

Then, the participants are asked to elucidate various impacts of using traditional cook stove in their houses:

- Risk of injury and violence while collecting wood and other solid fuels
- Time spent collecting solid fuel
- Health effects due to indoor air pollution
- Burns and scalds from open fires/traditional cookstoves
- Black walls

This then goes on to emphasise the need for sustainable cooking fuels and other clean sources of energy.

Day 4

1. Simplifying URJA - U (Ujjwal Bharat)
2. Simplifying URJA - R (Swacchh Urja ki Raah)
3. Simplifying URJA - J (Jano, Parkho aur Samjho)
4. Simplifying URJA - A (Aao Sath Badhaye Haath)
5. Recap and Wind Up

Participants are introduced to the regional energy to appreciate products like Unnat Chulha and Induction Cooktop.

After recapping the day's events, they discuss the negative impacts of conventional and non-renewable sources of energy. It is focused on the region's specific issues and challenges. The next session aims to introduce participants to the idea of clean energy and the cooking solutions available in this field.

The trainings begin with the Chale Chalon intro-session activity for creating bonds among the entrepreneurs. Communication activities are

conducted to derive the trust on self with an “I can do it” mind-set. It helps the DLEs align better with Dharma Life. The DLEs are trained thoroughly about the description of the product. It is followed by instructions as to how to give demonstrations of the product to the consumer. During Saksham selling skills, the DLEs practice role-playing for enhanced understanding of the sales requirements.

Switch to Clean Energy: Swacchh Urja ki Raah

Wood and biomass are major sources of domestic energy in rural India. According to the 2011 Census, an estimated 142 million rural homes that's almost 85% of total rural households in India depend on traditional biomass fuel for cooking. 45 per cent of total rural households do not have electricity. They use wood and kerosene to light up homes. This makes India the largest consumer of fuel wood and biomass. However, this continued dependence on biomass is putting an increased pressure on the country's natural resources and women's health. Women and children who spend maximum time inside the house and near the cooking place face the brunt of the carbon black emissions from the traditional chulhas.

Against the backdrop of electricity shortages and dependence on natural resources, adoption of renewable energy sources such as small hydro and wind turbines, biomass gasification/steam boiler-based power and solar energy (lanterns, home lighting kits, mini grids) is crucial to meeting the growing energy needs of a majority of the population. Renewable energy technologies, in addition to being environment-friendly, have the potential of generating employment in rural areas and do not pose health threat to the users.

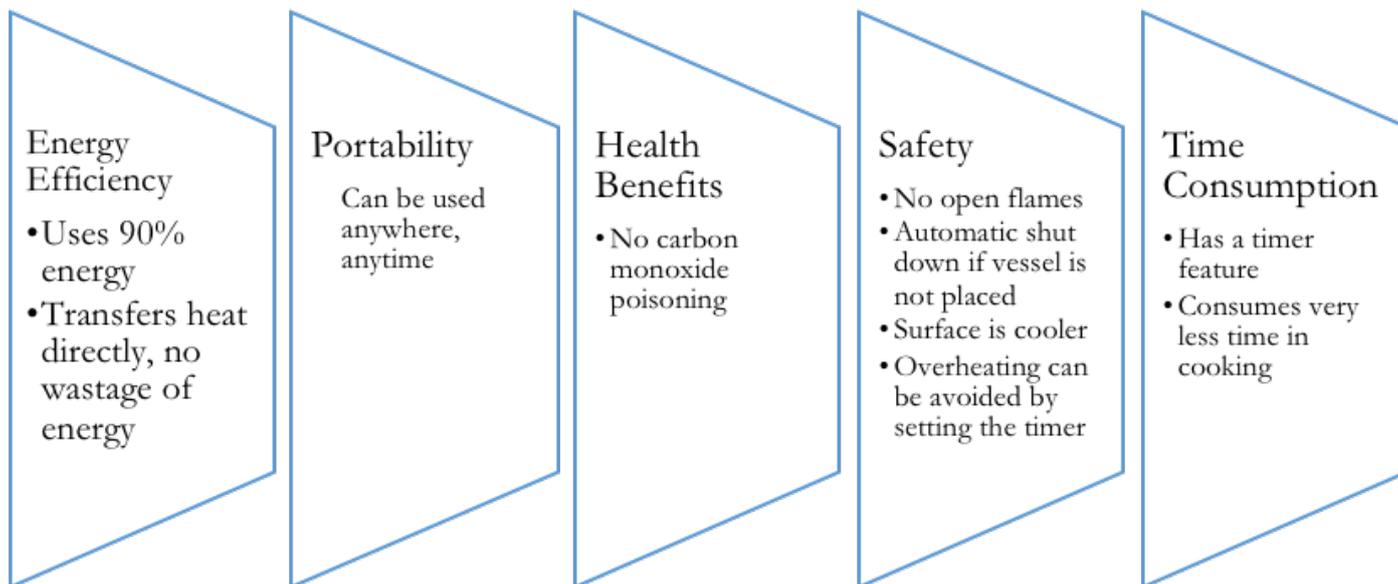
Cooking solutions with focus on Unnat Chulhas

Having discussed all this, facilitator draws the following conclusion and asks the participants if they agree:

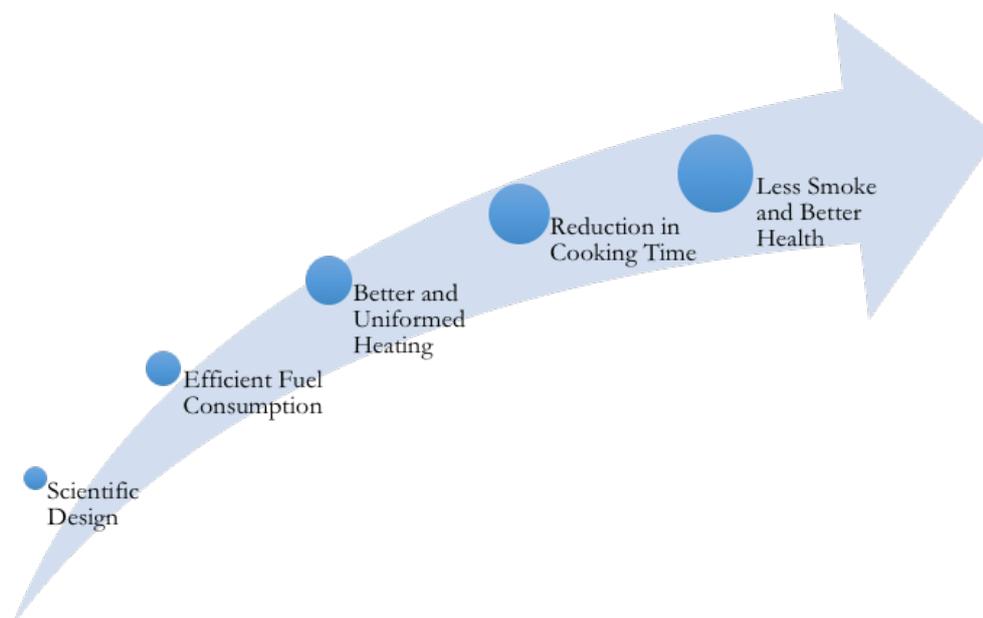
- Women and Children's Health is getting affected due to smoke.
- Carbon Black walls are an added nuisance.
- Firewood procurement is turning out to be risky, tedious and costly too.
- LPG is not an immediate solution.
- Fire Accidents amongst women and children is common

Participants are then introduced to Unnat Chulha which includes Induction Cooktops too. They are easy to use and affordable for rural households making them more attractive.

WHY INDUCTION CHULHA?



Difference between conventional cooking methods and the new technology



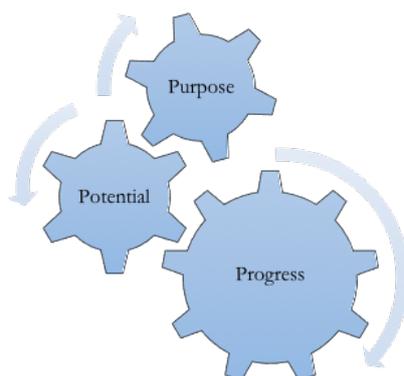
Unnat Chulha is an important socio-economic bridge for rural masses that have access to low-cost readily available biomass and cannot afford expensive modern fuels. The biggest strength lies in its design of the chulha which in turn leads to effective cooking methodology.

The next session encourages participants to Jano, Parkho aur Samjho Unnat Chulha i.e. to know, analyse and understand all aspects of Unnat Chulha including Induction Cooktop. Unnat Chulha is an improved Cook Stove Model designed to revolutionize the cooking methodology in rural India where women toil for hours in the kitchen breathing harmful smoke.

Participants are taught about the functioning of the UC on the natural draft technology which takes cue from the traditional cook stove that we have been using for years. But, the structure is made in such a manner that it traps fuel heat or enthalpy in the best possible manner. This unique design structure ensures that minimum amount of fuel is utilized. This also guarantees low smoke emission and faster cooking mechanism as compared to the traditional cookstoves.

Criteria	Traditional Chulha	Unnat Chulha	Induction Cooktop
Health	<ul style="list-style-type: none"> • Watery Eyes • Respiratory Issues • Severe pneumonia amongst children 	<ul style="list-style-type: none"> • 50-60% less smoke. Hence no health issues amongst women or children. 	<ul style="list-style-type: none"> • No smoke at all.
Cost Benefits	<ul style="list-style-type: none"> • No equipment cost • No fuel wood cost • High expenditure on health issues in the family 	<ul style="list-style-type: none"> • One-time investment on the equipment • No additional expenditure on fuel wood • Drastic reduction in family's expenditure on health 	<ul style="list-style-type: none"> • One-time investment • 90% energy efficiency ensures less use of the electricity.
Time	<ul style="list-style-type: none"> • Long cooking hours • Need more fuel and hence time spent on fuel collection. 	<ul style="list-style-type: none"> • Drastic reduction in Cooking Time • Fuel savings due to efficient burning of fuel diminishes the fuel collection time 	<ul style="list-style-type: none"> • Less time taken in cooking due to high efficiency
Safety	<ul style="list-style-type: none"> • Open flames can lead to accidents and injuries 	<ul style="list-style-type: none"> • Combustion Chamber is covered. So no open flames. 	<ul style="list-style-type: none"> • Surface is heated only when vessel is placed on it. Hence, extremely safe.
Other Benefits	<ul style="list-style-type: none"> • Black walls in the house and black utensils. • High pressure on forest resources. • Environmental degradation due to indoor air pollution. 	<ul style="list-style-type: none"> • No black carbon deposition and hence, no black walls and black utensils. • Alleviates local pressure on wood resources • Reduces air pollution in the environment 	<ul style="list-style-type: none"> • Need very low maintenance and easily cleaned. • Portability – Can be used anywhere in the house where there is a plug point.

DLE Entrepreneurs are explained the following maintenance techniques which is important for them to pass on to their customers. After the participants are aware of all aspects of Unnat Chulha along with the SAKSHAM Module, the participants are divided in teams of 3 or 4 which includes a DLE entrepreneur, a village family, any other member (doctor, child, etc.). Each team puts up short acts where they role play what they have learnt in the SAKSHAM Module keeping Unnat Chulha as their business product.



The final session reiterates Dharma Life's values of Progress with Purpose and explains its three tier approach. Since DL does not sell to customers directly, but only through DLEs, they are the most valuable for Dharma life. The participants are congratulated at the end of the session welcomed as new members of the Dharma Life family. The trainer ends with questions that engage and encourage positive response from participants.

VI. Challenges

Though all the trainings were successfully conducted, a few gaps were observed.

- While training, a need was felt for more interactive audio-visuales. However, some of it was covered using documentaries and success stories that were shot on the existing DLEs.
- Though ample leaflets and banners are distributed, it has become essential to produce more tools bearing product information. User manuals can prove to be a great help.
- There is a necessity to impart knowledge on the existing financial institutions and ways of linking the entrepreneurs with them on an individual level. We must make efforts to enable the DLEs to leverage the financial institutions in order to benefit their business.

VII. Improvement Areas

Other than the challenges, a few improvement areas were noted:

- We need to include a module to simulate market situations wherein the DLEs could simulate sales among different categories of customers.
- DLEs expressed the need for post-training reference materials/guides to support effective post-training self-based learnings.
- The trainers suggested translation of the training materials into more regional languages. Example: Training module translated into Marathi for the sessions in Maharashtra

IV. Way Forward

The swacchh Urja skill building program was received well by the DLEs and has helped them immensely in improving their marketing, selling and business skills. As a next step, the curriculum has been shared with the skill council of green jobs to be certified as training module for clean cooking entrepreneurs pan India. The curriculum has been approved and Dharma Life will soon be certified as a training partner for skill council to train clean cooking entrepreneurs.

Going forward, Dharma Life plans to roll out the swacchh Urja training program to all DLEs to be trained further in the states of Gujarat, Haryana and Rajasthan.

Moreover, Dharma Life is in discussion with the skill council for green jobs to certify some the already trained DLEs under the program by the skill council under the recognition or prior learning (RPL) program run by the council.