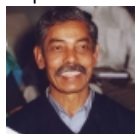


Empowering Housewives through Briquette Business - a revolutionary step

Nepal



Sanukaji Shrestha

Organization type:

nonprofit/ngo/citizen sector

Budget:

\$1,000 - \$10,000

Website:

<http://www.fost-nepal.org>



- [At risk youth](#)
- [Community development](#)
- [Health education](#)
- [Economic development](#)
- [Education](#)
- [Vulnerable populations](#)
- [Rural](#)

Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

Everybody needs cooking fuels to survive in this Earth. No matter people live in mountains, hills or plains or in caves, they have to cook food either in traditional way or in commercial way. Fuel briquettes are nature-friendly and a poor people's sustainable fuel made from their own wastes. That's why it is a social business.

About You

Organization:

Foundation for Sustainable Technologies (FoST)

[Visit website](#)

Section 1: About You

First Name

Sanukaji

Last Name

Shrestha

Website

<http://www.fost-nepal.org>

Country

Section 2: About Your Organization

Is your initiative connected to an established organization?

Yes

Organization Name

Foundation for Sustainable Technologies (FoST)

Organization Phone

977-1-4361574/2190473

Organization Address

35/4, Galkopakha, Thamel, Kathmandu

Organization Country

How long has this organization been operating?

More than 5 years

Your idea

Country your work focuses on

Innovation

What makes your innovation unique?

In Nepal, two types of briquettes are available – one from rice husk, another from fast growing plant (forest killer - Banmara) which is called bee-hive briquettes with multiple holes. Log briquettes are produced for industrial use, and bee-hive briquettes are produced for small family nearby forest areas. No briquettes are produced in urban areas with urban wastes. Obviously, cooking fuels, mostly L.P. gas and kerosene, are more used in the urban areas and fire wood and biomass are used in rural areas. Forest is depleting fast and fossil fuels are inaccessible and unaffordable to the majority of low income groups in rural areas.

I could not see the women's drudgery in collecting a bundle of wood in the forest spending four to six hours. Similarly, we have to line up for several hrs for a liter of kerosene and a cylinder of gas in the city. No other alternative fuel options are introduced as backup fuel source except biomass in Nepal. There is no alternative clean fuel for the urban people.

In view of this critical scenario of fuel crisis in Nepal, I started R&Ds in 2003 on how to make fuel from waste materials what we generate at household, garden and agri-farms in the beginning and later in business houses and industries. After several months' efforts, I finally introduced fuel briquettes made from waste materials for the first time in Nepal in 2004. That's why it is a unique item not only in Nepal, but also in Afghanistan, Cambodia, India, which can be made at home very easily.

Do you have a patent for this idea?

Impact

Tell us about the social impact of your innovation. Please include both numbers and stories as evidence of this impact

Social impacts of my innovation are as follows:

- My idea eats all types of degradable wastes generated at household, agri-farms, forest, schools, business houses, industries etc.
- Most industries pollute local environment in establishment phase, further degrade in production phase. But, my idea cleans pollution factors from the first day implementation.
- It is an effective tool for (a) reducing greenhouse gas emissions, (b) minimizing environmental pollutions, (c) reducing chopping trees, (d) conserving and protecting forests, (e) utilizing household, agriculture, business and forest wastes, (f) relieving housewives from drudgery of collecting fire wood, (g) heavily reducing waste/garbage volume in urban and rural areas, (h) minimizing municipal wastes, (i) fighting with smoke-born and water-born diseases due to contaminated water and excessive smoke emissions from fire wood, (k) creating employment opportunities locally, (l) minimizing foreign currency for importing costly fuels, (m) reducing government subsidy on L.P. gas and kerosene, (n) demonstrating simple solutions on fuel crisis in the country.
- It is a clever design of maintaining 3-Es (energy, environment and empowerment) to solve the issues within the community.

Examples of producing briquettes and their use:

1. About 30 households and half a dozen restaurants are using briquettes in Balambu VDC, Kathmandu.
2. Shanti Sewa Griha (a leprosy rehabilitation center - 800 people) using L.P. gas, kerosene and wood for cooking in messes in four places three years ago (monthly expenditure was US\$750). Now they are not using a single gas cylinder and kerosene, all depending on briquettes produced by themselves.
3. Fulbari Hotel and Resort in Pokhara (300 staff) using L.P. gas, now using briquettes.
4. Utse Hotel in Kathmandu (100 staff) is using briquettes since 2008.
5. Dwarika Hotel in Kathmandu has started producing briquettes for its own use.
6. Yellow Guest House has produced briquettes since 2008 for its own consumption.
7. Orphanage schools in Kathmandu and Patan are also producing briquettes for their own use.
8. Poultry company, garment/pashmina, ceramics, aluminum industry are also using briquettes for dyeing and modeling works.
9. I introduced briquettes in Cambodia in January 2008, in March 2008 in Kabul and in Hyderabad (India) in November 2008.

For more information, please visit

<http://www.engineeringforchange.info/?p=1149>

<http://www.ewb-international.org/larnaca10.htm>

www.ewb-international.org/larnaca09.htm

<http://groups.google.co.uk/group/fuelbriquetting/web/photos-of-the-briqu...>

<http://www.vimeo.com/9833223>

Problem: Describe the primary problem(s) that your innovation is addressing

The primary problems what my innovation is addressing are:

A. Fuel issues

- a) Traditional fuels (fire wood and biomass)
 - Over-dependence on forest resources (80-85% in cooking only)
 - Depleting/converting forest into desert
 - Lack of conservation, protection and plantations
 - More drudgery to the housewives in collecting fuel wood
 - Outdoor and indoor air pollution
 - Victims of smoke-born diseases

- b) Commercial fuels (LP gas, kerosene and electricity)

- Price hiking frequently
- Short supply or artificial shortage of fuels
- Inaccessible and unaffordable to the poor community
- Costly to the low income groups in urban areas
- Headache to the government for subsidizing the fuel
- Over-expenditure of foreign currency for importing fuels

B. Environmental issues

- a) Solid wastes (wastes from kitchen, paper wastes, leaves, grass, saw dust, scrap wood, fruit, packaging and garden wastes)

- Lack of awareness in segregating wastes materials at source (household level)
- Lack of utilizing waste materials in an economic way
- Lack of dumping and land fill sites
- Lack of generating employment opportunities based on wastes
- Lack of translating 3-Rs (reduce, reuse and recycle) into practices

b) Forest resources

- Smuggling forest products, such as timber and other valuable trees
- Chopping unmaturred trees for use as cooking fuel
- Burning leaves and grasses polluting atmosphere
- Lack of awareness creating programs on economic use of barks, leaves and grasses
- Lack of creating jobs based on forest waste resources
- Encouraging the charcoal business by haphazardly chopping the trees
- Lack of greeneries in the country

Actions: Describe the steps that you are taking to make your innovation a success. Include a description of the business model. What might prevent that success?

Every new idea for improving livelihood has to face lot of reactions and negative approach in the beginning. It is not easy to convince the community with new idea even that benefits them directly. We accept this challenge. We demonstrate action-oriented programs in the community. We rely on actions. Whenever we launch programs in the community, we show people economically idle resources and the process of converting them into an economic return in front of them.

We always point out un-environment-friendly behaviors of the community pointing out traditional practices/behaviors in order to avoid their environmental impacts. We demonstrate easily applicable, low cost, environment-friendly technologies matched with the local economy, education and culture. We show our efforts to the community how to reuse and recycle natural and human-made resources in action. We cook local food with fuel briquettes made from waste materials in front of the audience and serve them to taste. We also let them to see how it burns, whether the temperature is enough for cooking their food for the family, its burning time, cost structure and many more things. We interact with them how to make fuel briquettes from waste materials what they generate. We train them to make briquettes. This way, we work in the community for successfully landing our efforts in improving their livelihood. We give sufficient time to think and discuss in the family re participating in the program matched with their income source, culture and practices in order to bring a change in the society.

Results: Describe the expected results of these actions over the next three years. Please address each year separately, if possible

I expect the results of above actions in the community over the next three years as follows:

2010:

- Housewives will be well educated on
 - a) how to reduce over-dependence on forest and fossil fuel (L.P. gas and kerosene),
 - b) how to minimize energy cost for cooking,
 - c) how to maintain household and local environment nature-friendly,
 - d) how to reuse and recycle the waste materials generated in a household and community level,
 - e) how to empower women community based on locally available materials and waste stuff
 - f) how to create suitable atmosphere for setting up micro-enterprises in the community, and
 - g) how to reduce impacts of environment pollution, global warming and climate change.

2011:

- Housewives will be able to manage back up fuel system in a household level reducing dependence on forest and fossil fuels.
- Housewives will be capable to train others on producing fuel briquettes from the waste materials,
- Housewives will be recognized as the change makers in the community for bringing a difference in the society.

2012:

- Housewives will be able to set up micro-enterprises in the community,
- They will be capable to establish a cooperative for supporting the briquette producers with micro-loans in low interest rates.
- They will be recognized by the government body in the village and by the neighbouring communities.

2012 will be the most defining moment in my life when I see my idea effectively working on the ground improving quality of life of the housewives in the community

How many people will your project serve annually?

101 1000

What is the average monthly household income in your target community, in US Dollars?

Less than \$50

Does your innovation seek to have an impact on public policy?

Yes

If your innovation seeks to impact public policy, how?

Due to the efforts of the researchers, development planners, designers and non-profit organizations' efforts, such as ours, government has decided recently to review public policy so that our efforts will be well addressed, well encouraged to disseminate the programs in the rural community. If the relevant factors in the public system, there will be plenty room in the government plan and programs. There will be budgetary allocations in the central and local levels for launching our programs in community level. This is the impact what we see in the public policy so that housewives in the community feel that it is their program, not ours. They are the sole responsible implementing agencies in the community to successfully launch the program for the welfare of the whole community.

Sustainability

What stage is your Social Enterprise in?

Operating for more than 5 years

Does your organization have a board of directors or an advisory board?

Yes

Does your organization have a non monetary partnerships with NGOs?

No

Does your organization have a non monetary partnerships with businesses?

No

Does your organization have a non monetary partnerships with government?

Yes

Please tell us more about how partnerships could be critical to the success of your Social Enterprise

It is very hard to maintain non-monetary partnerships with the NGOs, government agencies and charity organizations because they always want us to participate in their programs voluntarily which costs too much. They don't want to support us, all the time, they want us to demonstrate our activities to decorate their programs time to time with our limited resources. This type of behaviors of the partners are always critical in promoting and setting up of the social enterprises.

We would like to learn more about how your initiative is financially supported. Please explain your business plan/revenue model

Yes, we have business plan as follows:

2010 – 5000 people – focus in Kathmandu valley

2010 – 5000 people - focus in terai, mid and high hills

2011 – 10000 people in 40 districts

All these expectations depend on resources what we expect from our well-wishers. We cannot meet all these things with our limited source. If Changemakers are interested to participate in our activities, let's join hands.

I don't expect any thing from Ashoka, because I have bitter experience with it. I was approached by the Ashoka Office in Kathmandu in 2003. Later they said, let's wait next year. I didn't apply next year.

I was again approached by Ashoka in 2007. I was a failed candidate in 2007 for Ashoka Fellowship. I crossed all the steps of interviews from local panel of experts and external expert from HQ to finalize the selection. Ashoka HQ expert and country representative congratulated me, they gave dinner party to the new candidates. Profiles were made for the Ashoka Board. Board asked Country Office to rewrite the profile on my case, after that what happened, I don't know. And I never received any written information from Ashoka about my rejection till today, whereas Ashoka got everything from me in writing. After ¾ months of the events, Ashoka representative came to my office and informed me verbally that I was not selected by the Board. This is the story why I have bitter experience with Ashoka. I think all the process will be failed if the candidate profile is not written properly reflecting his/her efforts.

The Story

What was the defining moment that led you to this innovation?

In 1995, I was lining up for a cylinder of L.P. gas in distribution depot in Balaju. I was waiting three days, but, I could not find gas.

Seven/eight months ago, I visited an exhibition of solar energy. I noticed a solar cooker. I brought a solar cooker next day and started cooking in solar. But my wife started fighting with me that she does not like to cook in sun openly. It was contrary of the cultural practices. People like to treat kitchen work secret. When I demonstrated cooking food in solar device, she gradually accepted. Now, she is one of the leading motivator for solar cooking. She is the only women in Nepal who made local whisky in solar cooker. Whisky and local beer making need lot of fire wood in rural life, one of the main factor of depleting forest because a family which needs 5 to 10 kg of fire wood to cook food for the family, the same family consumes four times fire wood for making whisky and local beer. What to do? Who takes care in stopping these anti-nature activities.

So, these are the defining moment in my life which led me to innovate many things for protecting the nature and empowering the housewives.

Tell us about the person—the social innovator—behind this idea.

The rationale behind this idea is to create more and more social entrepreneurs, social actors, social innovators who point out the un-environment-friendly acts/behaviors of the society and traditional practices. These social entrepreneurs and actors will show how to proceed with environment-friendly ideas in order to improve quality of life of the community by introducing a behavioral change in the society.

How did you first hear about Changemakers?

Personal contact at Changemakers

If through another source, please provide the information

Source URL: <https://www.changemakers.com/socialbusiness/entries/empowering-housewives-through-briquette-business#comment-0>