

REPORT OF TLUD STOVE TEST PROGRAMME IN GONDIA BLOCK OF DHENKANAL DISTRICT, ODISHA
PREPARED BY:- NATIONAL YOUTH SERVICE ACTION AND SOCIAL DEVELOPMENT RESEARCH INSTITUTE
(NYSASDRI)

ABOUT THE PROGRAM

“NYSASDRI “involved in the TLUD Stove test program in Gondia block of Dhenkanal DistOdisha. As per guideline of HELIOZ we have distributed 4 selected household representatives in two tribal villages of Gondia Block which was covered earlier in our survey area.

Section-1:

Selection of Household

We have selected 4 HH in two different villages in Gondia Block of Dhenkanal District those are using three stone stoves/Traditional stoves with 90% fire wood, family size within 5-6 and Woman is the primary cook of HHs.

Section-2:

Line of Action

After Orientation and demonstration to 4 selected HHs about TLUD Stove we have handed over the cook stove on 6th Nov 2022. Based on line of Action we have made regular follow and collected information on weekly basis. Then end of two weeks, our staff visited the respective HH and collected information as per parameters of Monitoring and recorded the final result.

Monitoring -11st village

Particulars	(SukantiSain) Address : Village-Deojhar, Gram Panchayat--Sorisiapada,Block- Gondia,Dhenkanal,Odisha	(Geeta Dehury) Address : Village-Deojhar ,GP-Sorisiapada, Block-Gondia, Dhenkanal,Odisha
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P1:-HH Description:	Nos. of HH : 06 members Primary Cook: Woman Main Income: Cultivation	Nos. of HH :04 members Primary Cook: Woman) Main Income: Mason Labour
P2:- Number and Type of Cook Stoves	1. Traditional Stove: 01nos. 2. TLUD Stove : 01nos.	1. TraditionalStove: 01nos. 2. TLUD Stove : 01nos.
P3:-Fuel use (Both Traditional/Three stone and TLUD stoves)	Use of Fuel wood by HH : Firewood Consumed Firewood per day for TLUD stove:05 kg.(2 times used per day) Consumed Firewood in 07 days for TLUD stove:35 kg. Consumed Firewood per day for Traditional stove:02 kg(1times per day and mainly use for cattle feeding) Consumed Firewood in 07 days for Traditional stove:14 kg	Use of Fuel wood by HH : Firewood Consumed Firewood per day for TLUD stove :03 kg.(2 times used per day) Consumed Firewood in 07 days for TLUD stove:21 kg. Consumed Firewood per day for Traditional stove:02 kg(1times per day and mainly use for cattle feeding) Consumed Firewood in 07 days for Traditional stove:14 kg
P4:-Cook stove used	Consumed Firewood per day for Traditional stove:02 kg(1times per day and mainly used for cattle feeding)	Consumed Firewood per day for Traditional stove:02 kg(1times per day and mainly use for cattle feeding)

P:5-Cooking Habits :	For dishes the HHs mainly cooked both veg and non-veg. Under veg HH cooked Rice, Dal, Veg Fry, Curry etc. while in non-veg they cooked Meat, Fish, Egg Curry etc.Out of 07 days she cooked Veg in 04 days and nonveg 02 days.	For dishes the HHs mainly cooked both veg and nonveg. Under veg HH cooked Rice, Dal, Veg Fry, Curryetc while in nonveg they cooked Meat, Fish, Egg Curry etc.Out of 07 days they cooked Veg in 04 days and nonveg 02 days .
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2ndVillage

Particulars	(Surati Pingua, Pimpudia , Khankira Block-Gondia,Dhenkanal,Odisha	SukantiPurtyKhankira Block- Gondia,Dhenkanal,Odisha
P1:-HH Description:	Nos. of HH : 05 members Primary Cook: Woman Main Income : Cultivation and labour work	Nos. of HH :04 members Primary Cook: Woman) Main Income : Cultivation and labour work
P2:- Number and Type of Cook Stoves	1. Traditional Stove: 01nos. 2. TLUD Stove : 01nos.	1. TraditionalStove: 01nos. 2. TLUD Stove :01nos.
P3:-Fuel use (Both Traditional/Three stone and TLUD stoves)	Only TLUD Stove used 7 days Consume 2kg Firewood for complete cook of Rice& Curry in one time Per day firewood Consume (2 *2) = 4 kg. Used of Firewood in 7 days=28 kg	Only TLUD Stove used 7 days Consume 2.5 kg Firewood for complete cook of Rice & Curry in one time. Per day Firewood used 5 kg. Used Fire Wood in 7 days= 35 kg
P4:-Cook stove used	Only TLUD stove used	Only TLUD stove used

P:5-Cooking Habits:	For dishes the HHs mainly cooked both veg and non-veg. Under veg HH cooked Rice, Veg Fry, and Curry etc. while in non-veg they cooked chicken, Fish, Egg Curry etc. Out of 07 days she cooked Veg in 06 days and nonveg 01days.	For dishes the HHs mainly cooked both veg and non-veg. Under veg HH cooked Rice, Veg Fry, Curry etc. while in non-veg they cooked chicken, Fish, Egg Curry etc. Out of 07 days she cooked Veg in 06 days and nonveg 01 days.
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2nd Monitoring: 1st Village

Particulars	(Sukanti Sain) Address : Village-Deojhar	(Geeta Dehury) Address : Village-Deojhar,
<p>P3- Fuel use: what kind of fuels does the house hold use? How much fuel is being consumed (in kg per type)?</p> <p>Does the household consume less fuel than before? if yes, how much?</p>	<p>Use of Fuel wood by HH : Firewood Consumed Firewood per day for TLUD stove:4 kg. (2 times use per day) Consumed Firewood in 07 days for TLUD stove: 28 kg. Consumed Firewood per day for Traditional stove:02 kg(1times per day and mainly use for cattle feeding) Consumed Firewood in 07 days for Traditional stove:14 kg Yes, less than before Qty:7 kg (As increase the use of technique)</p>	<p>Use of Fuel wood by HH : Firewood Consumed Firewood per day for TLUD stove :2.5 kg.(2 times use per day) Consumed Firewood in 07 days for TLUD stove :17.5 kg. Consumed Firewood per day for Traditional stove :02 kg(1times per day and mainly use for cattle feeding) Consumed Firewood in 07 days for Traditional stove:14 kg Yes, less than before Qty:7 kg (As increase the use of technique)</p>

<p>P4 Cook stove usage</p> <p>How many times a day does the household use the TUUD stove</p> <p>For what our purposes is the cook stove being used?</p>	<p>02 times per day</p> <p>TLUD stove was used for cooking purposes only</p>	<p>02 times per day</p> <p>TLUD stove was used for cooking purposes only</p>
<p>Is the traditional cook stove still being used? If yes, fir what purpose? Do the household prefer their traditional cook stove or the TLUD stove?</p>	<p>Yes, the HH has still being used the Traditional stove for mainly one time per day for preparing the cattle feeding. In preference HH prefers TLUD stove and Traditional stove. In TLUD stove HH will use for cooking purpose and Traditional stove will use for Cattle feeding, they used both while joining of guest members to make the cook quickly.</p>	<p>Yes, the HH has still being used the Traditional stove for mainly one time per day for preparing the cattle feeding. In preference HH prefers TLUD stove and Traditional stove. In TLUD stove HH will use for cooking purpose and Traditional stove will use for Cattle feeding, they used both while joining of guest members to make the cook quickly.</p>
<p>P5 Cooking Habits</p> <p>What dishes are being cooked at the household and how often?</p>	<p>On these days like the previous seven days the HHs mainly cooked many dishes in both veg and non-veg. Under veg HH cooked Rice, Dal, VegFry, Curry etc. while in non-veg they cooked Meat, Fish, Egg Curry etc.Out of 07 days they cooked Veg in 04 days and non-veg 03 days.</p>	<p>On these days like the previous seven days the HHs mainly cooked many dishes in both veg and non-veg. Under veg HH cooked Rice, Dal, Veg Fry, Curry etc. while in non-veg they cooked Meat, Fish, Egg Curry etc. Out of 07 days they cooked Veg in 05 days and non-veg 02 days.</p>

P6 Charcoal produced How Much charcoal did the household produce individually?	In the process of Charcoal collection like previous seven days, we questioned her regarding the collection of Charcoal as per the use of Fuel and she said that whatever they used firewood in TLUD stove some of them are burning or burning to ashes therefore it would be lesser quantity of Charcoal produced: - Collection of Charcoal per day :400-500 gm Collection of Charcoal: 06kg.	In the process of Charcoal collection like previous seven days, we questioned her regarding the collection of Charcoal as per the use of Fuel and she said that whatever they used firewood in TLUD stove some of them are burning or burning to ashes therefore it would be lesser quantity of Charcoal produced. The Collection of Charcoal per day :350-400 gm The Collection of Charcoal: 5 kg.
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2nd Village.

Particulars	(Surati Pingua, Pimpudia ,Khankira	SukantiPurtyKhankira
P3- Fuel use: what kind of fuels does the house hold use? How much fuel is being consumed (in kg per type)? Does the household consume less fuel than before? if yes, how much ?	Use of Fuel wood by HH : Firewood Consumed Firewood per day for TLUD stove:4 kg. (2 times used per day) Consumed Firewood in 07 days for TLUD stove: 28 kg. Yes, less than before Qty:7 kg (As increased the use of technique)	Use of Fuel wood by HH : Firewood Consumed Firewood per day for TLUD stove:2.5kg. (2 times use per day) Consumed Firewood in 07 days for TLUD stove: 35 kg.
P4 Cook stove usage How many times a day does the household use the TLUD stove For what our purposes is the cook stove being used?	02 times per day TLUD stove was used for cooking purposes only	02 times per day TLUD stove was used for cooking purposes only

Is the traditional cook stove still being used? If yes, for what purpose? Do the household prefer their traditional cook stove or the TLUD stove?	Only TLUD stove was used Because they more anxious use TLUD stove.	Only TLUD stove was used, to collect charcoal
P5 Cooking Habits What dishes are being cooked at the household and how often?	HH cooked two times -Morning and Evening per day like Rice, Veg Fry, and Curry etc. while in non-veg they cooked chicken/Fish, /Egg Curry once in a week.	HH cooked twice per day like Rice, Veg Fry, and Curry etc. while in non-veg they cooked chicken/Fish, /Egg Curry once in a week.
P6 Charcoal produced How Much charcoal did the household produce individually?	Collected 10kg Charcoal in 15 days.	Collected 15 kg Charcoal in 15 days

Monitoring: 3 1st Village

Particulars	(SukantiSain) Address : Village-Deojhar	(Geeta Dehury) Address :Village-Deojhar,
P-3 Fuel use What kind of fuel does the household use? How much fuel is being consumed (in Kg per type)? Does the house hold consume less fuel than before? if yes how Much?	: Firewood Consumed Firewood per day for TLUD stove:4 kg. (2 times use per day) Consumed Firewood per day for Traditional stove:02 kg (1times per day and mainly use for cattle feeding) Yes, comparatively less (2kg per day)	: Firewood Consumed Firewood per day for TLUD stove:2.5kg. (2 times use per day) Consumed Firewood per day for Traditional stove:02 kg (1times per day and mainly use for cattle feeding) Yes, comparatively less (1.5 kg per day)

<p>P-4 Cook stove usage</p> <p>How many times a day does the household use the TLUD stove?</p> <p>What purpose is the cook stove being used?</p> <p>Is the traditional cook stove still being used? if yes what purposes?</p> <p>Do the household prefer their traditional cook stove or the TLUDstove?</p>	<p>Twice per day</p> <p>For cooking</p> <p>Yes, (1times per day and mainly use for cattle feeding)</p> <p>Both as per requirement</p>	<p>Twice per day</p> <p>For cooking</p> <p>Yes, (1times per day and mainly use for cattle feeding)</p> <p>Both as per requirement</p>
<p>P-5 Cooking habits</p> <p>What dishes are being cooked at the household and how often?</p>	<p>Cooked both veg and nonveg food. Under veg HH cooked Rice, Dal, Veg Fry, Curry etc. while in nonveg they cooked Meat, Fish, Egg Curry etc.Out of 07 days they cooked Veg in 04 days and non-veg 03 days. Cooking twice in a day</p>	<p>Cooked both veg and nonveg food. Under veg HH cooked Rice, Dal, Veg Fry, Curry etc. while in nonveg they cooked Meat, Fish, Egg Curry etc.Out of 07 days they cooked Veg in 04 days and non-veg 03 days. Cooking twice in a day</p>
<p>P-6 Charcoal produced</p> <p>How much charcoal did the household produce?</p>	<p>Collection of Charcoal per day: 500-600 gm</p> <p>Collection of Charcoal after 2 Week:8 kg.</p>	<p>Collection of Charcoal per day :500-600 gm</p> <p>Collection of Charcoal per week:03 kg 3.5kg</p>

<p>-7 TLUD Feedback</p> <p>Please ask the households about their opinion of the TLUD stove?</p> <p>What are some perceived advantages and disadvantages?</p> <p>Will the household continue to use the TLUD as their primary cook stove?</p>	<p>HH opinion on TLUD stove:</p> <ul style="list-style-type: none"> ➤ It requires Firewood cutting machine. ➤ Better to extend the size of stove. <p>Advantages</p> <ul style="list-style-type: none"> ➤ Smoke less stoves. ➤ Less time consumes. ➤ Use Lesser quantity of Firewood than Traditional stove. ➤ Easily carry from one place to another. ➤ Less Risk or good for health. ➤ Help to prepare Food quicker than Traditional stove. <p>Dis Advantages</p> <ul style="list-style-type: none"> ➤ It is difficult to cut firewood and put in the stove. ➤ It is difficult to prepare food for everyone when guests come home. ➤ Small stove. <p>Yes</p>	<p>HH opinion on TLUD stove:</p> <ul style="list-style-type: none"> ➤ It requires Firewood cutting machine. ➤ Better to extend the size of stove. <p>Advantages</p> <ul style="list-style-type: none"> ➤ Smoke less stoves. ➤ Less time consumes. ➤ Use Lesser quantity of Firewood than Traditional stove. ➤ Easily carry from one place to another. ➤ Less Risk or good for health. ➤ Help to prepare Food quicker than Traditional stove. ➤ More helpful at the rain time. ➤ Help to prepared food inside home ➤ Helps to prepare tasty food. <p>Disadvantages</p> <ul style="list-style-type: none"> ➤ It is difficult to cut firewood and put in the stove. ➤ It is difficult to prepare food for everyone when guests come home. ➤ Small stove. ➤ More care is needed compare to Traditional stove. <p>Yes</p>
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2nd village

Particulars	(Surati Pingua, Pimpudia ,Khankira	SukantiPurtyKhankira
<p>P-3 Fuel use</p> <p>What kind of fuel does the household use?</p> <p>How much fuel is being consumed (in Kg per type)?</p> <p>Does the house hold consume less fuel than before? if yes how Much?</p>	<p>: Firewood</p> <p>Consumed Firewood per day for TLUD stove:4 kg. (2 times use per day)</p> <p>Yes, comparatively less (2kg per day)</p>	<p>: Firewood</p> <p>Consumed Firewood per day for TLUD stove:2.5kg. (2 times use per day)</p> <p>Yes, comparatively less (1.5kg per day)</p>
<p>P-4 Cook stove usage</p> <p>How many times a day does the household use the TLUD stove?</p> <p>What purpose is the cook stove being used?</p> <p>Is the traditional cook stove still being used? if yes what purposes?</p> <p>Do the household prefer their traditional cook stove or the TLUDstove?</p>	<p>Twice Cooking</p> <p>No</p> <p>Yes TLUD stove</p>	<p>Twice Cooking</p> <p>No</p> <p>Yes TLUD stove</p>
<p>P-5 Cooking habits</p> <p>What dishes are being cooked at the household and how often?</p>	<p>HH cooked Rice, Veg Fry, and Curry etc. while in non-veg they cooked chicken, Fish, Egg Curry etc. Out of 07 days cooked Veg in 06 days and non-veg in 01 days .</p>	<p>HH cooked Rice, Veg Fry, and Curry etc. while in non-veg they cooked chicken, Fish, Egg Curry etc. Out of 07 days cooked Veg in 06 days and non-veg in 01 days</p>
<p>P-6 Charcoal produced</p> <p>How much charcoal did the household produce?</p>	<p>Collected 10kg Charcoal in 15 days.</p>	<p>Collected 15 kg Charcoal in 15 days</p>

<p>P-7 TLUD Feedback</p> <p>Please ask the households about their opinion of the TLUD stove?</p> <p>What are some perceived advantages and disadvantages?</p> <p>Will the household continue to use the TLUD as their primary cookstove?</p>	<p>Opinion</p> <ul style="list-style-type: none"> ❖ Respondent suggested that provide a firewood cutting machine so that easily cooked in this TLUD Stove. ❖ Planning and contact to Agency for selling of Charcoal <p>Advantages</p> <ul style="list-style-type: none"> ❖ Fully Smokeless. ❖ Use of Less Fire Wood. ❖ Lesser Quantity of firewood use than Traditional Stove ❖ Less time taking ❖ Easily carry from one Place to another Place. ❖ Prepared Tasty Food. <p>Dis Advantage of TLUD Stove:</p> <ul style="list-style-type: none"> ❖ Time taking for cutting of Firewood about the measurement of TLUD Stove. ❖ Size of TLUD Stove is Small size. ❖ When comes of relatives then face problem. <p>Yes</p>	<p>Opinion</p> <ul style="list-style-type: none"> ❖ Respondent suggested that provide a firewood cutting machine so that easily cooked in this TLUD Stove. ❖ Planning and contact to Agency for marketing the Charcoal <p>Advantages</p> <ul style="list-style-type: none"> ❖ Fully Smokeless. ❖ Use of Less Fire Wood. ❖ Lesser Quantity of firewood use than Traditional Stove Take less time to cook ❖ Easily carry from one Place to another Place. ❖ Prepared Tasty Food. <p>Dis Advantage of TLUD Stove:</p> <ul style="list-style-type: none"> ❖ Time taking for cutting of Firewood about the measurement of TLUD Stove. ❖ Size of TLUD Stove is Small size. ❖ When comes of relatives then face problem. <p>Yes</p>
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Section: 3

Who and what are the enterprises that using charcoal? :

Blacksmith, gold smith, few restaurants and laundry shop

How many charcoal using enterprises are there per block approximately?

Presently except laundry and gold smith others are not using such type of charcoal in the area. Approximately 10 to 15 nos enterprises available in the block those are using laundry, gold smith.

How much charcoal does the enterprise use in average per month?

5kg to 10 per month per person

Who sells the charcoal? How is this charcoal produced?

They collect by own or purchase

At what price per kg is the charcoal being sold?

15 to 20 per kg

After interacted with few charcoal uses they told that they are not using such type of charcoal . But now they are using hard coal which is cheaper easily available and more useful than charcoal. They are not interested to purchase our products charcoal. Because they change their chullas (blacksmith)

Section: 4

After use of TLUD cookstove, all beneficiaries are very much happy and other people in the community also want to use such type of stove as stoves are smokeless, less time consume., use lesser quantity of firewood., easily carry from one place to another place. Less risk, good for health., help to prepare food quicker than traditional stove etc .. But It is difficult to cut firewood and put in the stove, to prepare food for everyone when guests come home due to small stove. These stoves need timber and bamboo piece types of firewood which is not available in every household and they will depend upon forest. In the other hand forest officials are not allowed to collect firewood from their protected and village forest. As the size is small so it's difficult for cooking for more people. For sales of charcoal, it may be difficult because forest people restricted to market, so people are using hard coal instead of charcoal.

PHOTOGRAPHY



Orientation about TLUD cook stove



Demonstration about TLUD Cook stove



Collection of Charcoal after 07 days

Wight and measurement of Charcoal



Collection of Charcoal after 15 days



Interaction with Respondent on data Collection

Weight and measurement of Charcoal



Data collection about opinion, advantages and disadvantages of Cookstove



Information collection from Blacksmith charcoal user



Information collection from Laundry man



Cooking with TLUD
cook stove