ACE COOK STOVE
OBJECTIVE
A COMPARATIVE TEST WITH ACE STOVE VERSION 1 AND OTHER EXISTING CHULHAS
Lighting up the stove for a water boil test
Observations:

> Water boils in 6 minutes.
> It consumes 200 gms. of wood.
> The wood needs to be dry to minimise smoke and get optimal combustion.
> Operating the fan at full speed gives a roaring flame indicating optimal combustion.
Embers when the fan is switched off
Observations:

>One has to wait for the embers to cool down as pouring water in the combustion chamber might damage the underlying electronic components by leakage.

> The entire stove needs to overturned to extract the ash, which is very tedious.
## A Comparative Study

An experiment was conducted to compare the efficiency of the ace stove 2 as compared to ace stove 1, a TIDE stove and a traditional chulha.

> **Note:** A predetermined volume of water was put to boil using only small chopped wood pieces. A test was deemed concluded when the boiling temperature was reached and the reading recorded.

<table>
<thead>
<tr>
<th></th>
<th>Ace Stove 1</th>
<th>Ace Stove 2</th>
<th>TIDE chulha</th>
<th>Traditional chulha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water vol. (Ltrs)</strong></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Weight of wood consumed (gms)</strong></td>
<td>400</td>
<td>200</td>
<td>400</td>
<td>500</td>
</tr>
<tr>
<td><strong>Time taken to boil</strong></td>
<td>12mins. 53 sec.</td>
<td>5 mins. 50 sec.</td>
<td>10 mins. 15 sec.</td>
<td>14 mins.</td>
</tr>
</tbody>
</table>
Community feedback:

Lingrajpuram community was chosen to showcase the stove and get their thoughts and impressions on it as it is the most vulnerable yet grounded community who think very purely from a utilitarian perspective.
Community feedback:

The price was the dominant questions in the minds of the people along with the warranty period. Inquiries about the servicing were also made in case of any damage/repairs. The feature of charging any phone form the charging outlet generated a positive buzz along with the whirring sound of the fan which stoked the fire.