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WOMEN IN ENERGY

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Group

COOK STOVES AND HEALTH

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SOME FEEDBACK FROM THE FIELD

- **The smoke in the kitchen is actually beneficial!**

SOME FEEDBACK FROM THE FIELD

- **If only men were doing the cooking!**

SOME FEEDBACK FROM THE FIELD

- **Ah! So you city folk
can have all the gas!**

PROGRESS TO AN ORDINARY HOUSEWIFE IS

....

- Moving from
- to LPG !
- to KEROSENE
-
- FIRE WOOD

BUT IT IS A FACT

- **FOR HALF OF HUMANITY,
THE POORER HALF,
COOKING WITH FIRE WOOD STOVE
IS A REALITY,
WITH NO IMMEDIATE ALTERNATIVE**

THE HEALTH HAZARD

- **OVER ONE MILLION CHILDREN DIE EVERY YEAR FROM THE POLLUTION DUE TO COOKING SMOKE**
- **THE TOTAL DEATH TOLL IS ABOUT 1.6 MILLION EVERY YEAR...**

A LIFE LOST EVERY TWENTY SECONDS!

- **Acute respiratory infections, ear and eye problems, breathlessness, chest pains, headaches and giddiness are just some of the symptoms that poor women and children suffer in their rural homes.**

THESE ARE MAINLY DUE TO:

- * **the concentration of fine particles, especially PM2.5, that is particulate matter less than 2.5 microns in diameter; and**
- * **carcinogenic compounds, in particular, benzo(alpha)pyrenes.**

- **Numerous health studies around the world have confirmed the association between fine particulate air pollution and adverse respiratory and cardiac health effects.**

- A recent research study has found a direct link between a specific carcinogen found in wood smoke and cigarette smoke, and mutations in the gene associated with human lung cancer.
 - Benzo(alpha)pyrene is one of several carcinogenic chemicals which have been measured in wood smoke.
- In fact, over 100 chemicals found in cigarette smoke have also been identified in wood smoke.



It has been reported that the amount of Benzo (alpha) pyrene ingested by a person working habitually in the kitchen, is equivalent to that inhaled by a person who smokes 20 cigarettes a day !



THE ANSWER?

- **IMPROVED COOK STOVES, CERTAINLY PROVIDE AN IMMEDIATE AND INTERMEDIATE SOLUTION**
- **BUT, IN THE LONG RUN, THE CHALLENGE BEFORE SCIENTISTS AND TECHNOLOGISTS IS TO MAKE A GASEOUS COOKING FUEL AVAILABLE FROM BIOMASS, AT AFFORDABLE COST**

PERHAPS,

**BIO METHANATION
OR
BIOMASS GASIFICATION
COULD PROVIDE A SUSTAINABLE
AND ACCEPTABLE SOLUTION**

THANK YOU !