IMPROVED COOK STOVE PROGRAMMES
SOME LESSONS FROM ASIA

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Some misconceptions

1. There exists no such thing as a 'dirty fuel'. However, 'dirty technologies' do exist. This holds for any fuel, e.g. traditional wood stoves, poor kerosene stoves, old diesel engines, many coal stoves, boilers and furnaces, etc.

2. Wood and other biomass are not per se traditional fuels. In Europe and North America woodfuel is considered modern. Anywhere in the world wood and other biomass can be clean and convenient fuels at small scale (households, commerce) and at large scale (industries, power sector), provided the user avails of a proper technology.

3. Most of the woodfuels in Asia are used on a sustainable basis, contrary to common belief. Woodfuel use is not a main or major cause of deforestation. About 2/3 of all woodfuels originate from non-forest land. Areas where woodfuel use degrades forest land, are the exceptional cases. Such exceptions require special attention, but do not form a basis for general policies towards woodfuel.

4. The so-called process of fuel transition is in fact a process of fuel complementation. The 'modern' fuels come on top of the biomass fuels. Contrary to common belief, there is no evidence for a net transition from woodfuel to modern fuels with rising incomes[1]. There is no point in 'helping people to make the transition', on the contrary!

Some lessons

5. The main paradigm for successful improved cook stove (ICS) programmes has always been and will always remain "understanding users needs". Lack of appreciation of this paradigm amongst field workers is still faltering many ICS programmes.

6. Improved health and more convenience are the main and foremost benefits of ICS. Such benefits matter for both the individual and the country. Achieving these benefits justifies considerable costs.

7. There is no evidence whatsoever that more efficient stoves would help saving forests and indeed, that would be very unlikely. (Don't tell the donors!) However, fuelwood saving by increased efficiency may add to users' convenience.

8. Acceptance of ICS is closely related to women's opportunities for paid labour. This linkage is not yet fully appreciated by designers of ICS programmes (Dev Nathan).

9. Failures of ICS programmes so far are largely because of wrong starting points like: forest saving, village woodlots per se rather than women's income earning opportunities, isolated micro-projects, no adequate understanding of users needs, amateurism. Better starting points are: health, kitchen design, convenience, income generation, and strategic design of programmes/policies.

Current views

10. Sustainable use of wood/biomass fuels is carbon neutral, unlike the use of fossil fuels (for complete combustion). The current savings of greenhouse gases by sustainable wood/biomass fuel can be estimated. The results show that substantial benefits for the global atmosphere are thanks to poor households using wood/biomass fuels rather than coal or oil.

11. The sustainable potential of woodfuel in Asia is much larger than the present consumption. Therefore, the use of wood/biomass fuels should be encouraged, and users should be discouraged to abandon woodfuel.

12. Encouraging wood fuel use implies helping people to avail of proper technologies, which are clean and convenient. Such technologies do exist and can be introduced at reasonable costs.

13. The health benefits fully justify the costs of improved stoves. These benefits go parallel with greenhouse benefits (Kirk Smith).

Call for action

14. Introducing ICS is still to be undertaken on a massive scale. As yet only a few percent of the poor countries' households avail of improved stoves.

15. ICS programmes should focus on improving health and convenience aspects, rather than efficiency per se.

16. Large-scale ICS programmes are justified by health and greenhouse benefits, and can be guided by current improved understanding.

17. Priorities for technical stove research are in improved combustion of (loose) biomass under various conditions and for various types of biomass. This should result in better options for poor users in regions of wood scarcity.

Note:

[1] The representations of World Bank and other sources which suggest an overall shift away from woodfuel when incomes rise, are misleading. North America consumes as much woodfuel per capita as South Asia, whereas the income/cap of the former is 40 times the one of the latter. In Thailand in the period 1980-1996 GNP/cap increased threefold, whereas in the same period woodfuel consumption per capita increased by 68%. The 16 RWEDP member countries in which the vast majority of the world's woodfuel users happen to live, exhibit no relationship between income/cap and woodfuel consumption/cap. Note that we refer to overall national consumption and not to case studies amongst selected user groups. (Wood Energy News Vol.12 No.2 p20, October 1997).