ADOPTION AND TECHNOLOGY PROMOTION CASES

The overall acceptance of ICS was low (WECS 1987). As observed during various surveys, it differed from organisation to organisation. Table 5 shows the adoption rate of ICS.

Table 5: Adoption Rate of ICS

Survey Conducted by Organisation/ Private	Number of Households Surveyed	Percentage of Use	Cooking-stove Models	Survey Area by Geographical Region	Comments
CFDP 1984	538	70	Insert Stove	Mid-hills	after 1 year of installation
ADB/N 1985	?	80	New Nepali *Chulo*	?	"
RCUP	?	70-75	Double Wall	Mid-hills	"
UMN	?	40	New Nepali *Chulo*	"	after 3 years of installation
RECAST 1986	40	100	*Tamang* Stove	"	after 1 year of installation
CFDP 1986	499	63.5	Insert Stove	"	"
Sulpya 1989	226	58	Insert Stove	*Terai*	after 1 & 2 years of installation
WECS 1987	?	10-30	?	Mid-hills	?

Source: Introduction of Improved Stoves for Domestic Cooking in Nepal, CFDP 1984.
Five Energy Workshops, WECS 1985.
Improved Cooking-Stoves for Domestic Cooking in Nepal, RECAST 1987.
A Study on the Impact and Effectiveness of Insert Stoves in the *Terai*, Sulpya 1989.
An Evaluation of Alternate Energy Technologies in Nepal, WECS 1987a.

Further Field Observation

Defective construction was also observed at ceramic ICS production sites. They were not produced as specified in the laboratory, and, as a result, high fuel consumption was likely. In most cases, ceramic ICS were purchased without examining them for cracks. In Badhikhel, Bhaktapur District, stoves with structural defects and which were incomplete were delivered from the potter and installed in several households. After a few months of operation, the stoves ceased to function. This had a negative impact on the national ICS programme. One case observed in Rautahat District was that of a chimney cap that sunk completely into the chimney pipe. In Doti District, the diameter of the chimney pipe was hardly 7 cm and the body of the stove looked like a round-bottomed cooking pot.

A majority of the people complained that the ceramic ICS was only suitable for a small-sized family. The stove was fragile and many users who had ceased to use their stoves complained of cracks in the combustion chamber, although some stoves were in use after minor repairs at home. It was suggested that the wood-feeding outlet (entrance door) should be on the side so that the stove would take up less space and the second ring would receive sufficient heat for cooking.

Apart from the ceramic ICS, *Tamang* Stoves were also installed in some areas. These stoves can be locally constructed with locally available materials such as mud-brick/mud-stone iron tripods, and with very little training. The chimney can be made by using mould. In some areas it was observed that the stoves were constructed with massive walls, low baffles, and unusually large wood feeding-outlets.

Wood (1987) estimated that only 70 per cent of the installed stoves were used in the first year, 60 per cent in the second, 40 per cent in the third, and 20 per cent in the fourth year, with no stoves being used beyond four years. As reported, the life of the ceramic stove varies from two to four years (Pradhan and Rijal 1988). Some projects have recorded better performances than others.

In a number of regional countries, where ICS programmes are also being conducted, evaluation results indicated that acceptance rates in India were below 50 per cent during the early years of the national stove programme (FAO 1988). In some NGO programmes where training has been very thorough, users played a major role in the field testing and modification of the stove, and, where extensive monitoring was carried out, acceptance rates were greater than 70 per cent. In Indonesia, over 60 per cent use was reported, while, in Sri Lanka, the level of acceptance was recorded as over 80 per cent.