

## REDUCING INDOOR AIR POLLUTION IN SRI LANKA IS THE SITUATION IMPROVING?

R.M. Amaresekara<sup>1</sup>, A. Gunawardena<sup>2</sup>, P. Steele<sup>2</sup>, A.G.T. Sugathapala<sup>3</sup>

<sup>1</sup>Integrated Development Association

<sup>2</sup>Institute of Policy Studies

<sup>3</sup>Department of Mechanical Engineering, University of Moratuwa

### Abstract

Indoor air pollution is known to be linked to exposure to emissions from biomass combustion. This particularly affects women in low-income households. The exposure is linked to type of fuel use, cooking habits and stove and kitchen design. Data on these risk factors will be reviewed and an assessment made on whether the situation is improving or not, based on an extensive literature review and analysis of lessons learnt from past interventions.

Strategies to reduce exposure include changes from biomass to other fuels (e.g. gas), the dissemination of improved cook stoves and improved kitchen design. These factors are themselves influenced by economic, cultural and social factors and these will be analysed.

For example, there is some evidence that improved cook stoves have started to move from subsidised distribution via NGOs to distribution via the market – but this has also brought problems of declining quality and inappropriate installation. Relative prices and availability of gas and wood, dung and other sources of biomass impact on household fuel choice. There are also other reasons why biomass fuel may be preferred such as for drying, mosquito control and for heat in some areas (e.g. the hill country). Cooking habitats and kitchen design may be influenced by cultural factors and space availability.

The paper concludes with a review of the current situation and how exposure to biomass combustion emissions can be reduced in the future, including the development and dissemination of improved cook stoves.