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'Indoor' air pollution is the biggest killer

NEW DELHI: Indoor air pollution (IAP), resulting from chulhas burning wood, coal and animal dung as fuel, is claiming a shocking 500,000 lives in India every year, most of whom are women and children. According to the World Health Organisation, India accounts for 80% of the 600,000 premature deaths that occur in south-east Asia annually due to exposure to IAP. Nearly 70% of rural households in India don't even have ventilation.

What's worse, WHO is finding it tough to get donors to fund programmes that seek to raise awareness of this unknown menace, besides providing smokeless chulhas or liquid cooking gas cylinders to the rural poor. The WHO has estimated that globally, it would need \$650 million to change the way most of the world cooks. However, it has managed to raise just 10% of the necessary funds.

Speaking to TOI, Alex Hildebrand, WHO's environmental health adviser for South Asia, said, "Donors don't find indoor air pollution a sexy enough cause to donate money, even though more than 1.6 million people die every year from the effects of breathing poisonous smoke.

We have estimated that 80% of the expenditure of a rural household in India can go into health services. A simple mechanism promoting smokeless chulhas and improving ventilation can reduce the incidents of IAP deaths by half, which is our goal by 2015."

He added, "That's why the ministry of environment has to relaunch the smoke chulha campaign of the 1990s. If the government is committed, local material can be used to make these chulhas with the help of local labourers, reducing costs immensely."

More than three billion people rely on the burning of solid fuels to prepare their meals. Burning solid fuels emits carbon monoxide, particulates, benzene and formaldehyde which can result in pneumonia, asthma, blindness, lung cancer, tuberculosis and low birth weight.

WHO estimates that pollution levels in rural Indian kitchens were 30 times higher than recommended levels and six times higher than air pollution levels found in New Delhi.

"We know that the amount of total suspended particles present inside a kitchen has 1,000 times greater chance to penetrate deep into your lungs than the suspended particles outside. Women are constantly exposed to chulha smoke in India due to several cultural mindsets.

The men in villages complain that the taste of food lacks their favourite burnt flavour if there was no smoke. They also don't want to create ventilation as they think it would compromise with their privacy. Some villagers think smoke would keep mosquitoes and snakes away," Hildebrand said.

"It is a tragic irony that the very act of preparing food, which is designed to aid and nurture a family, is putting that very same family at risk," said John Beale, an official at the US Environmental Protection Agency.

Uma Rajarathnam from The Energy and Resources Institute said one person dies every 20 seconds from fuel-induced illness. According to the World Health Report 2002, indoor air pollution is responsible for 2.7% of the global burden of disease.