



Opportunities for Transition to Clean Household Energy

Application of the Household Energy Assessment Rapid Tool (HEART)







Opportunities for transition to clean household energy: application of the Household Energy Assessment Rapid Tool (HEART) in India

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Abbreviations and acronyms

BPL below the poverty line

CAG Comptroller and Auditor General of India

COPD chronic obstructive pulmonary disease

DDUGJY Deen Dayal Upadhyaya Gram Jyoti Yojana

DWCD Department of Women and Child Development

FPS fair price shop

HAP household air pollution

HEART Household Energy Assessment Rapid Tool

JGSY Jawahar Gram Samriddhi Yojana

LED light emitting diode

LPG liquefied petroleum gas

MNRE Ministry of New and Renewable Energy

MoHFW Ministry of Health and Family Welfare

MoPNG Ministry of Petroleum and Natural Gas

NCD noncommunicable disease

NGO nongovernmental organization

NITI Aayog National Institutions for Transforming India

NSS National Sample Survey

PDS public distribution system

PHFI Public Health Foundation of India

PM particulate matter

 PM_{25} particles that can pass through a size-selective inlet with a 50% efficiency cut-off

at 2.5 μ m aerodynamic diameter. PM_{2.5} corresponds to the "high-risk respirable"

convention" as defined in ISO 7708:1995, 7.1

PMUY Pradhan Mantri Ujjwala Yojana

TERI The Energy and Resources Institute

TSP total suspended particles

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Preface

Household air pollution (HAP) from inefficient fuel combustion is one of the most important global environmental health risks today. Almost 3 billion people, mainly in low- and middle-income countries, still rely on solid fuels (wood, animal dung, charcoal, crop wastes and coal) burnt in inefficient, highly polluting stoves for cooking and heating. Widespread use of polluting cookstoves causes almost 4 million premature deaths annually among children and adults from respiratory illness, cardiovascular diseases and cancer, as well as serious injuries from scalding, burns and poisoning.

The WHO guidelines for indoor air quality: household fuel combustion (2014) provide technical recommendations for policy-makers and specialists working on energy, health, environmental and other issues to ensure health benefits from the clean energy transition.

In support of the implementation of the guidelines, WHO has developed a tool, the Household Energy Assessment Rapid Tool (HEART), to identify relevant stakeholders, and map out a country's policies and programmes on household energy

and/or related health impacts. The tool is being pilot-tested as a guide to conducting rapid situational assessments of countries' readiness to address access to clean energy technologies. It is used to gather and synthesize information on household energy use and its public health impacts and to stimulate an informed dialogue on the impacts of household energy interventions, shared responsibilities and coordinated actions, country-specific barriers to implementation and opportunities for the public health sector to accelerate a transition to clean household energy.

The rapid assessments do not take the place of the detailed economic evaluations required to identify national energy priorities, national and global work on mapping disease incidence nor the social and political considerations required in implementing major social interventions in public health. They do provide a broad overview of the current household energy and health situation, identify key stakeholders and will ultimately support intersectoral cooperation. This report presents the results obtained with HEART in India.

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