List of figures

1. Indoor air pollution is second most important risk factor: Twice the number of excess deaths reported than outdoor air pollution 1
2. The energy ladder: household energy and development inextricably linked 3
3. Deaths from indoor smoke from solid fuels 6
4. In the line of fire: Poor countries suffer more from IAP 7
5. Design for survey for the selection of wards and households/women respondents for sampling in Aligarh city (2008-09) 15
6. Design for IAP monitoring in different cooking places, using different cooking fuels (biomass and LPG) 18
7. Aligarh city: Location map 23
8. Aligarh City : Location Map (In India, Uttar Pradesh and in Aligarh district) 24
9. Aligarh City: Location of the selected wards from where income-wise households were sampled (2008-2009) 25

1.1 Aligarh city: Income-wise distribution of the sampled women respondents/ households (in percentages) according to
   (1) Religion and caste 34
   (2) Family type and size 39
   (3) Number of children 40

1.2 Aligarh city: Income-wise distribution of sampled households (in percentages) according to
   (1) House type 42

1.3 Aligarh city: Income-wise distribution of sampled women respondents/ households (in percentages) according to
   (1) Place of cooking food 51
   (2) Time spent for kitchen work 56

2.1 Aligarh city: Income-wise distribution of the sampled households (in percentages) according to
   (1) Types of fuel used for cooking 62
   (2) Amount of money spent for purchasing cooking fuel (per month) 65
2.2 Aligarh city: Income-wise distribution of sampled households (in percentages) according to
(1) Types of cooking stove used

(2) Time of exposure to smoke and fire/high temperature (per day)

(3) Time taken for smoke to exit from cooking place/house

2.4 Aligarh city: Income-wise distribution of sampled households (in percentages) according to other sources of indoor air pollution in the house

3.1 Average daily concentration of SPM before and during cooking around cooking place using biomass fuel for cooking
(i) Chulha in verandah
(ii) Chulha in open space

3.2 Average daily concentration of SPM before and during cooking in different types of kitchen using LPG as cooking fuel
(i) Separate kitchen without ventilation
(ii) Separate kitchen with ventilation
(iii) Kitchen in verandah
(iv) Kitchen in multipurpose room

3.3 Average concentration of SPM (PM-10, PM-2.5) in living room

3.4 Variation in concentration of gaseous pollutants during working hours in summer days (including cooking hours using biomass fuel for cooking)
(i) Level of CO
(ii) Level of CO2
(iii) Level of SO2
(iv) Level of NO and NO2

3.5 Variation in concentration of gaseous pollutants during working hours in rainy days (including cooking hours using biomass fuel for cooking)
3.6: Variation in concentration of gaseous pollutants during working hours
(including cooking hours using LPG as cooking fuel)

(1) In ventilated kitchen
   (i) Level of CO
   (ii) Level of CO$_2$
   (iii) Level of SO$_2$
   (iv) Level of NO and NO$_2$

(2): In non-ventilated kitchen
   (i) Level of CO
   (ii) Level of CO$_2$
   (iii) Level of SO$_2$
   (iv) Level of NO and NO$_2$

3.7 Concentration of gaseous pollutants in living room during working hours
   (i) Level of CO
   (ii) Level of CO$_2$
   (iii) Level of SO$_2$
   (iv) Level of NO and NO$_2$

3.8 Mean concentrations of SPM in different kitchen locations using different types of fuels

3.9 Mean concentrations of gaseous pollutants in different kitchen locations using different types of fuels

4.1 Aligarh city: Income-wise distribution of the sampled women respondents according to problems and disease associated with indoor air pollution (2008-09)
   (1) Instant problems
   (2) Short term problems
   (3) Specific diseases

4.2 Aligarh city: Income-wise distribution of the sampled women respondent according to the identified risk factors associated with household energy used and indoor air pollution (2008-09)

4.3 Aligarh city: Relationship between household energy used and indoor air pollution related risk factors and occurrence of associated specific disease in sampled households (2008-09)
4.4 Aligarh city: Relationship between household energy used and indoor air pollution related risk factors and occurrence of associated specific diseases in the sampled households (2008-09)

1. Acute lower respiratory infection (ALRI)  
2. Acute upper respiratory infection (ALRI)  
3. Chronic obstructive pulmonary disease (COPD)  
4. Asthma  
5. Pulmonary tuberculosis  
6. Perinatal mortality  
7. Low birth weight  
8. Eye irritation and cataract

4.5 Aligarh city: Diagrammatic representation of associated diseases and the high risk conditions in the sampled households

5.1 Types and vulnerability to indoor air pollution to which women are exposed

5.2 Aligarh city: Overall vulnerability status of income-wise women respondents/households according to housing, cooking, exposure and health conditions (2008-09)

5.3 Most vulnerable: Lower income women/households according to chosen Criteria

5.4 Aligarh city: Causes of vulnerability of lower income women/households

1. Housing vulnerability
2. Cooking vulnerability
3. Exposure vulnerability
4. Health vulnerability

5.5 Aligarh city: Vulnerable areas mapped on the basis of income and use of biomass fuels (2008-09)

5.6 Managing indoor air pollution-linkages with various ministries