Fig. 3.1: Sampling location in the study area upto 30 km radius from the proposed site
Fig. 3.2: Kharif cropping pattern in the study area

Fig. 3.3: Rabi cropping pattern in the study area
Fig. 3.4a: Quarterly average wind rose for proposed Nuclear Power Project Site (2005–2009)

Fig. 3.4b: Annual average wind rose for proposed Nuclear Power Project Site (2005 – 2009)
Fig. 3.5: Collection of vegetable samples from the field

Fig. 3.6: Collection of rice sample from the field
Fig. 3.7: Collection of pearl millet samples from the field

Fig. 3.8: Collection of groundwater samples from the field
Fig. 3.9: Collection of grass sample from the field

Fig. 3.10: Collection of undisturbed soil samples from the field
Fig. 3.11: ZnS(Ag) scintillation counter used for gross alpha counting

Fig. 3.12: GM counter used for gross beta counting
Fig. 3.13a: Nitrogen Laser Fluorimeter used for Uranium analysis

Fig. 3.13b: LED based uranium analyzer used for Uranium analysis
Fig. 3.14: Liquid scintillation analyzer used for analysis of $^3$H in water

Fig. 3.15: Well type NaI(Tl) scintillation detector used for $^{137}$Cs activity measurement
Fig. 3.16: A specimen spectrum for $^{137}$Cs measurement
Fig. 3.17: Gas flow low beta counter used for $^{90}$Sr activity measurement

Fig. 3.18: HPGe spectrometry system used for gamma activity measurement
Fig. 3.19: A specimen spectrum of soil sample generated by HPGe spectrometer
Fig. 3.20: Sunpet 250 ml plastic box used for packing of samples

Fig. 3.21: Air sampler for sampling fine particulate matter
Fig. 4.1: Stack diagram for average gross alpha and gross beta activity distribution in water samples at different locations
Fig. 4.2: Correlation between gross alpha and gross beta activities in water samples

Fig. 4.3: Box plot for gross alpha and gross beta activities in water samples
Fig. 4.4: Frequency distribution of gross alpha and gross beta activity in water samples
Fig. 4.5: Bar diagram of average uranium concentration distribution in water samples at different locations.
Fig. 4.6: Box plot for uranium concentration in water samples

Fig. 4.7: Frequency distribution of uranium concentration in water samples
Fig. 4.8: Stack diagram for average $^{137}$Cs and $^{90}$Sr activity distribution in water samples at different locations.

Fig 4.9: Box plot for $^{137}$Cs and $^{90}$Sr activity in water samples.
Fig 4.10: Frequency distribution of $^{137}$Cs and $^{90}$Sr activity in water samples
Fig. 5.1 Frequency distribution curve of $^{137}$Cs activity in soil samples

Fig. 5.2 Box plot of $^{137}$Cs activity in soil samples
Fig. 5.3 Box plot of $^{238}$U ($^{226}$Ra), $^{232}$Th and $^{40}$K in soil samples
Fig: 5.4 Frequency distribution of $^{238}$U, $^{232}$Th and $^{40}$K in soil samples
Fig: 5.5 Scatter diagram and correlation curve between $^{232}$Th and $^{40}$K in soil samples

Fig: 5.6 Scatter diagram and correlation curve between $^{238}$U and $^{40}$K in soil samples

Fig: 5.7 Scatter diagram and correlation curve between $^{238}$U and $^{232}$Th in soil samples
Fig. 6.1: Box plot for $^{137}$Cs activity in food grain (wheat, pearl millet, rice) samples

Fig. 6.2: Box plot for $^{137}$Cs activity in vegetables (saag i.e. green mustard leaves) samples
Fig. 6.3: Box plot for $^{137}$Cs activity in mustard grain and cluster bean samples

Fig. 6.4: Box plot for $^{137}$Cs activity in fodder (Barseem, jai and doob grass) samples
Fig. 6.5: Box plot for $^{40}$K activity in food grain (wheat, pearl millet, rice) samples

Fig. 6.6: Box plot for $^{40}$K activity in vegetables (green mustard leaves, carrot, radish and ash gourd) samples
Fig. 6.7: Box plot for $^{40}$K activity in mustard grain and cluster bean samples

Fig. 6.8: Box plot for $^{40}$K activity in fodder (Barseem, jai and doob grass) samples
Fig. 6.9: Box plot for $^{232}$Th activity in food grain (wheat, pearl millet, rice) samples

Fig. 6.10: Box plot for $^{232}$Th activity in vegetables (green mustard leaves) samples
Fig. 6.11: Box plot for $^{232}$Th activity in mustard grain and cluster bean samples

Fig. 6.12: Box plot for $^{232}$Th activity in fodder (Barseem, jai and doob grass) samples
Fig. 6.13: Box plot for $^{238}$U activity in food grain (wheat, pearl millet, rice) samples

Fig. 6.14: Box plot for $^{238}$U activity in vegetables (green mustard leaves, carrot, radish and ash gourd) samples
Fig. 6.15: Box plot for $^{238}\text{U}$ activity in mustard grain and cluster bean samples

Fig. 6.16: Box plot for $^{40}\text{K}$ activity in fodder (Barseem, jai and doob grass) samples
Fig. 7.1: Thermo Luminescent Dosimeter and Survey Meter used for the experiment
Fig. 7.2: TLD installation location in the study area upto 30 km radius from the proposed site
Fig 7.3: Quarterly average indoor and outdoor gamma radiation dose estimated using survey meter.

Fig. 7.4: Quarterly average values of indoor and outdoor gamma radiation dose estimated using TLD.
Fig. 7.5: Comparison of the indoor and outdoor gamma radiation dose estimated using survey meter and TLDs

Fig. 7.6: Box plot for quarterly indoor gamma radiation dose estimated using survey meter and TLDs
Fig. 7.7: Box plot for quarterly outdoor gamma radiation dose estimated using survey meter and TLDs
Fig. 7.8: Frequency diagram for gross alpha and gross beta activities in air particulate matter (PM2.5)