(b) and (c). Do not arise.

Industrial Pollution

7717. SHRI PARASRAM BHARDWAJ: II the Minister of ENVIRONMENT AND RESTS be pleased to state:

- (a) whether industrial air pollutions ect trees particularly mango trees;
- (b) if so, whether any efforts have been ade to check the industrial air pollutants save the vegetation; and
- (c) the efforts made to save the trees so ected and whether any research has en done in this regard?

THE MINISTER OF STATE IN THE MINTRY OF ENVIRONMENT AND FORESTS: HRI Z.R. ANSARI): (a) Industrial air pollunts adversely affect vegetation including ango trees.

- (b) The steps taken to check the indusal air pollutants include the following:
 - i. Emission standards have been specified for major air polluting industries.
- ii. Consents are required to be taken under the Air (Prevention and Control of Pollution) Act, 1981, amended in 1987, for setting up industries.
- iii. Air pollution control areas are notified depending on the pollution load due to industries and other activities.
- iv. Industries have been directed to install pollution control equipment within the specified time schedule as per consent orders issued by the Pollution Control Boards.
- v. Guidelines for siting of industries have been evolved.
- vi. Legal action is taken against defaulting units.
- vii.A network of ambient air quality monitoring stations has been set up.

(c) Twelve research projects to study the response of plants to air pollutants are in progress. Studies have indicated that the pollutant injury to plants may be reduced by the use of certain chemical agents which have a protective ability.

Air and Water Pollution in Jharia and Raniganj Coalfields

7718. SHRI MATILAL HANSDA: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state the steps taken by Government to study the extent of air and water pollution due to open cast mining in Jharia and Raniganj coalfields?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI Z.R. ANSARI): Several studies have been made to determine the extent of air and water pollution in Jharia and Raniganj coalfield areas. The major studies are shown below:

- (i) Air pollution studies with respect to dust and gases have been carried out by the Central Mining Research Station, Dhanbad, at Jharia and Raniganj coalfields. The study covered dust fall, suspended particulate matter, sulfation rate, sulphur dioxide, nitrogen dioxide, oxidants, carbon monoxide, etc.
- (ii) Meteorological studies have been carried out by the Central Mining Research Station in different areas of Dhanbad and Jharia coalfields with a view to co-relating the air pollution pattern with meteorological data.
- (iii) The Central Board for the Prevention and Control of Water Pollution has studied the problem of air pollution in this region.
- (iv) The Central Mining Research Station has taken up a study on mine water quality in these areas and for suggesting suitable treatment measures for its improvement.