

DATELINE: August 2000. Up to five million people are homeless in eastern India following flooding along the Brahmaputra River. The floods have been caused by heavy monsoonal rainfall. The worst affected area is the Indian state of Assam. Deforestation in the Naga Hills region has been blamed for additional floodwater on the plain. Tens of thousands of stranded villagers have been without food and medical supplies for over a week. There are fears of an outbreak of water-related diseases.

1. What natural hazard is affecting north-eastern India?

2. Which region has been the worst hit?

3. List three problems faced by people in the worst-affected regions.

4. Using the outline map and page 154 of the *Jacaranda Atlas*, mark in the following features:

- (a) The countries of Myanmar, Bangladesh, India, Nepal and Bhutan.
- (b) The cities of Gauhati, Dacca and Calcutta.
- (c) The Brahmaputra and Ganges Rivers.
- (d) Himalayas and Naga Hills.

5. Look carefully at the map of annual rainfall on page 143 of the *Jacaranda Atlas*. What is the annual rainfall for the region?

6. Cherrapunji, to the south of Assam, holds a world record. Find out what it is on page 14 of the *Jacaranda Atlas*.

7. Use page 43 of the *Jacaranda Atlas* to complete the two 'before and after' diagrams at right showing the impact of deforestation.

- (a) On the forested hillside diagram, mark in the following:
evapotranspiration, trees protect soil from heavy rain, cultivated land, water table, tree roots hold soil and maintain stable water table, low runoff, steady river flow
- (b) On the after deforestation diagram, mark in the following:
plantation crops, roads destabilise hillsides, water table rises, erosion, gullies, increased runoff, evapotranspiration decreases, grazing, landslipping, dust storm removes topsoil, rapid runoff causes flooding and erosion; cultivated land flooded and silted up, silt blocks river

8. Why are flood plains heavily populated if they are subject to flood? (You'll find a clue in the Ganges Delta information on page 155 of the *Jacaranda Atlas*)

