

# EFFECTS ON PEOPLE

How do tropical cyclones affect economic and social activities?

## CYCLONE DAMAGE

Tropical cyclones can threaten human life and property in a number of ways:

wind damage

storm surge

high seas

heavy rainfall

# FLOODING

## EFFECTS ON ECONOMIC ACTIVITIES

Tropical cyclones have not caused huge loss of life in the Pacific Islands but they have caused extensive damage to property and agriculture and disrupted island economics for years after the event.

Pacific Island nations are mostly **developing** nations. They are very small countries with few **economic** resources. They rely heavily on agricultural exports and tourism for their overseas earnings. A high proportion of the local population relies on **subsistence** agriculture.

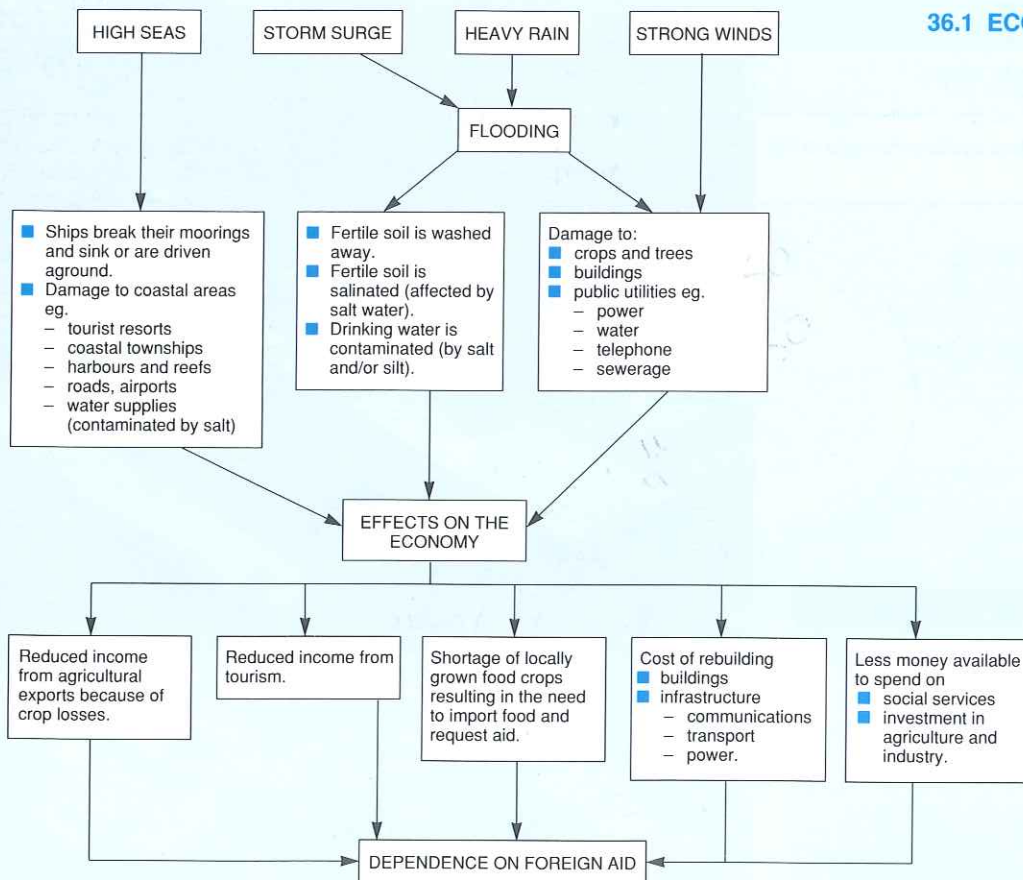
A tropical cyclone can destroy an island nation's economy very quickly by wiping out its export crops and tourist facilities. It can also create a high level of dependence on foreign aid if subsistence crops are destroyed.

Resource 36.1 summarises how tropical cyclones can affect island economies.

## ACTIVITIES

- Copy resources 35.4 and 35.5 (without the circled information).
- Add to the drawings examples of the following features:
  - farmland
  - residential landuse, eg hotels
  - urban areas
  - a factory
  - transport routes
- Add new circles that show possible effects on people as summarised in resource 36.1.
- Construct a diagram similar to resource 36.1 using the information on resource 36.2.

### 36.1 ECONOMIC EFFECTS



## 36.2 ECONOMIC EFFECTS ON VANUATU

Production of copra – mainstay of Vanuatu's export trade – is expected to decline as a result of the damage inflicted on coconut plantations by Cyclone Nigel (Jan 1985).

The storm carved through the main copra-producing region, stripping nuts and fronds off palms and up-rooting up to 25 percent of the trees in some plantations.

A Government agricultural survey predicts that 1985 production will be down by 30 percent (14 600 tonnes) on the figure for last year, which represented, by value, 84 percent of total exports.

By mid-year, however, export tonnages were running at a similar level to last year's shipments. Government

officials assumed the industry was being sustained temporarily by the windthrow of mature nuts.

The same survey revealed a grave situation for subsistence food supplies in some areas, especially South Maewo and North Pentecost, where crop losses as high as 100 percent were reported. The survey said it would take six months for normal supplies to be restored.

Source: *Development* Sept 1985

## EFFECTS ON SOCIAL ACTIVITIES

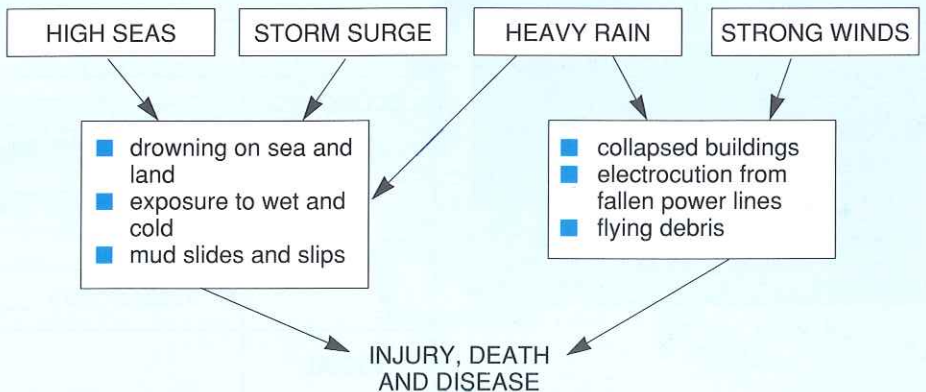
Tropical cyclones can cause death, social disruption and mental stress (see resource 36.3).

### 36.3 EFFECTS ON PEOPLE

#### SOCIAL DISRUPTION

- Island communities are cut off from each other.
- **Accessibility** to villages overland is limited.
- Families and communities have to adjust to economic and human loss (eg crops, homes, family members).
- Relief and aid agencies come in and take over.
- Whole villages sometimes need to be **evacuated**.
- Repeated cyclone damage can cause a 'dependency mentality' on foreign help.

#### LOSS OF LIFE AND INJURY



#### SOCIAL EFFECTS

#### MENTAL STRESS

- People who have experienced a tropical cyclone often describe it as 'terrifying' – the noise from wind, rain and waves can be deafening.
- It can take years to repair all the damage making life difficult for a lot of people.
- Communities where tropical cyclones have been frequent can develop a fear complex (see resource 36.4).

# New levels of intensity – and terror

Cyclones Eric and Nigel created history in Fiji when they slammed into the western shores of the main island of Viti Levu in January in the space of 48 hours (on 17th and 19th January, 1985).

Such a phenomenon had never been heard of.

Bearing wind speeds greater than those of the notorious Hurricane Bebe in 1972, Eric and Nigel reached peak intensity over Fiji waters, having a few days earlier caused havoc in Vanuatu.

Western Division people had experienced cyclones before – at least one a year for the past six years. Indeed, they were still getting over a mauling from Cyclone Oscar in 1983.

But Eric and Nigel struck a new note of terror, especially as many of the evacuation centres – concrete school buildings and churches – had collapsed in the storms.

Where was safe?

A fortnight later, Cyclone Gavin, its centre passing to the south of the main islands, brought torrential rain and flooding. One man was drowned, another electrocuted by fallen power lines.

Then in mid-March Cyclone Hina loomed out of the western ocean. This was a super-cyclone. Forecasters estimated wind speeds of up to 160 knots.

The storm came to within 24 hours' striking distance of the coast when it veered away, and its most violent zone passed to the south.

Hina was the fourth – and last – cyclone of the season.

Its psychological impact was unusually pronounced, given that the population was not unused to nightmare storms.

"In the past", says Emergency Services Committee executive Tom Tuiloma, "people would tend to stay by their homes till the cyclones passed. This year we had people evacuating in large numbers as warnings were issued of an advancing hurricane. They were really frightened."

Development, September 1985–9

## 36.4 EFFECTS IN FIJI

## ACTIVITIES

Using resource 36.4 answer the following questions.

- 1 How many tropical cyclones affected Fiji in the 1984/85 cyclone season?
- 2 How does the timing of these cyclones support the data in resource 33.6?
- 3 What was the impact of the 1984/85 cyclone season on the people of Fiji?
- 4 Read the information on page 111 about Cyclone Isaac and fill in the gaps on resource 36.5.

## POSITIVE AND NEGATIVE EFFECTS

Usually tropical cyclones affect people in negative ways. There can be some benefits to people however (see resource 36.5).

### 36.5 ECONOMIC AND SOCIAL EFFECTS: TONGA 1982

	POSITIVE	NEGATIVE
<b>ECONOMIC</b>	<ul style="list-style-type: none"> <li>■ building materials _____</li> <li>■ crops _____</li> <li>■ transport links _____</li> </ul>	<ul style="list-style-type: none"> <li>■ buildings _____</li> <li>■ economy _____</li> <li>■ communications _____</li> </ul>
<b>SOCIAL</b>	<ul style="list-style-type: none"> <li>■ aid _____</li> <li>■ community spirit _____</li> <li>■ government _____</li> </ul>	<ul style="list-style-type: none"> <li>■ deaths _____</li> <li>■ isolation _____</li> <li>■ dependence _____</li> </ul>