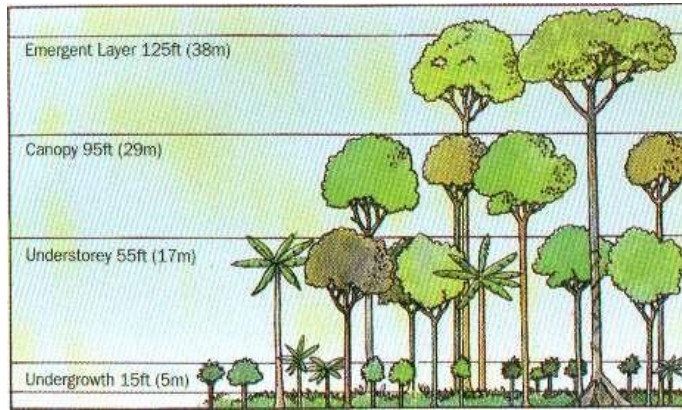


Figure 5.13 World distribution of global ecosystems

The Western Desert	
Challenges	Opportunities
Temperatures can reach 50°C in July	Farming: High temperatures and sunlight are good for growing crops as long as there is a water source!
Water supply – arid climate and only one major river.	Mineral extraction: Lots of natural resources – copper, uranium, lead, zinc and coal.
Accessibility – low population density means few roads were built. Vast area with little infrastructure.	Energy: Solar power. Sonoran Solar project has 1.2 million panels
People have adapted by having whitewashed walls to reflect sunlight or planting drought resistant crops.	Tourism: Grand Canyon, Joshua Tree National Park, Las Vegas, Colorado Museum and Lake Mead.



The layers of the rainforest

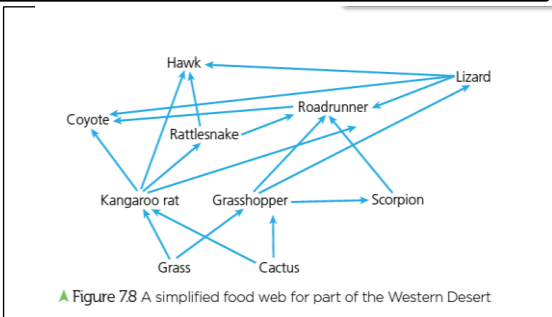
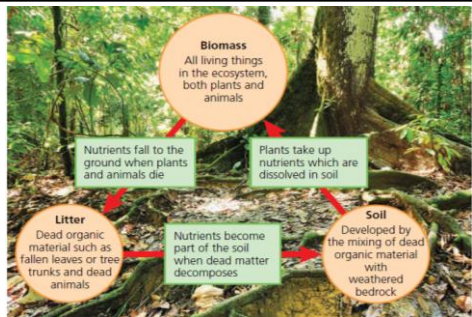


Figure 78 A simplified food web for part of the Western Desert

**Key ideas:**

Ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components.

Tropical rainforest ecosystems have a range of distinctive characteristics.

Deforestation has economic and environmental impacts.

Tropical rainforests need to be managed to be sustainable.

Hot desert ecosystems have a range of distinctive characteristics.

Development of hot desert environments creates opportunities and challenges.

Areas on the fringe of hot deserts are at risk of desertification.

**DEFORESTATION PRESSURE**

	Livestock	Large-scale agriculture	Small-scale agriculture & colonization	Unsustainable logging	Pulp plantations	Fires	Charcoal and fuelwood	Mining	Infrastructure	Hydroelectric power
Amazon	■	■	■	■	■	■	■	■	■	■
Atlantic Forest/ Gran Chaco	■	■	■	■	■	■	■	■	■	■
Borneo	■	■	■	■	■	■	■	■	■	■
Cerrado	■	■	■	■	■	■	■	■	■	■
Chaco-Saricán	■	■	■	■	■	■	■	■	■	■
Congo Basin	■	■	■	■	■	■	■	■	■	■
East Africa	■	■	■	■	■	■	■	■	■	■
Eastern Australia	■	■	■	■	■	■	■	■	■	■
Greater Mekong	■	■	■	■	■	■	■	■	■	■
New Guinea	■	■	■	■	■	■	■	■	■	■
Sumatra	■	■	■	■	■	■	■	■	■	■

Table 2: Summary of main pressures on forests in different deforestation fronts

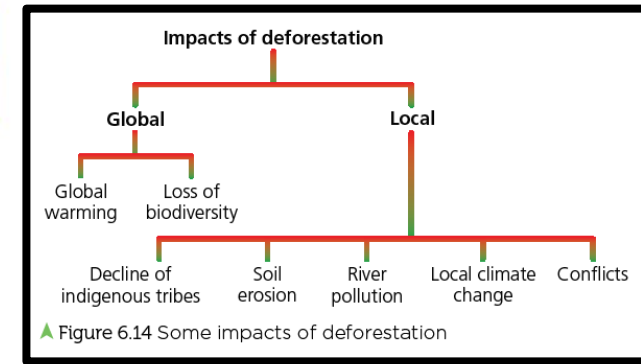


Figure 6.14 Some impacts of deforestation