**Chapter Review 1.3 What are the environmental impacts of food production?**

Changes to the natural environment Page 76-77

1. Explain what is happening to biomes all over the world.  
   Some are expanding and some are shrinking
2. Who is responsible for most of the change to biomes and why are they doing it?  
   Human activity is responsible for this change and primarily to feed the worlds population
3. Use the statements from Source 1.53 to complete the second column of this table:

|  |  |
| --- | --- |
| Farming Practice | Impact on the environment |
| Overuse of soil | Can lead to *Soil Fertility Reduction* |
| Terracing of hillsides to create flat land | Helps to *Create Flat Land and Control water* |
| Natural vegetation replaced with introduced crops, pasture and animals | Can lead to *Pests and weeds* |
| Farming animals eg pigs releases methane | Contributes to *Climate Change* |
| Taking water from the ground | Can lead to *Aquifers Emptying* |
| Loss of animal habitat due to clearing of vegetation | Can lead to *Endangered Specious* |
| Diverting waterways for water used in irrigation of crops | Can lead to *Diverted Water?* |
| Clearing of natural vegetation and hillsides | Can lead to *Bare Hillsides* |
| Changes to land cover for farming | Can lead to *erosion* |
| Run off from farm pesticides and animal waste | Can cause *Polluted Waterways* |
| Irrigation | Can lead to *Raised water tables* |

Changing Vegetation Page 78

1. How do farmers change the natural environment (biome) to create land for farming?  
   By clearing land for farming reasons
2. Explain the link between deforestation and poverty and the effects of slash and burn farming.

The more poor the country the less care for the environment they have

Changes to grasslands Page 80

1. Explain how the grasslands biome is being negatively impacted by farming (six effects).

* Clearing
* Not having nutrients returned to soil
* Chemical fertilizers
* Pesticides
* Erosion
* Less water is held in soil

Changes to water Page 81

1. Explain who is the biggest user of water?

The agriculture industry

1. Finish the following statements from those in the table below (cut and paste):
2. Water used on farms
3. because their roots are no longer held together
4. The washed away soil can end up in waterways
5. can’t penetrate the water to the stream bed,
6. causing algae blooms.
7. Algae blooms starve the water of oxygen and
8. and native animals and the plants of their habitat.

|  |
| --- |
| create dead zones in the water |
| causing in streams to become cloudy. |
| this will kill animals and aquatic plants. |
| eventually flows through soil and rocks into nearby streams and rivers. |
| pesticides can poison |
| unprotected bare soil can be washed away |
| fertilisers and animal manure can end up in water ways |

Wearing out the soil Page 82

1. What is a world-wide problem as a result of soil degradation?

The amount of food that can be grown is in decline

1. List the type of human activities which have led to soil degradation (4 activities):

Clearing forest. Increasing farm density, poor irrigation and overfarming

1. Explain how soil degradation can result from the clearing of forests and vegetation.

No roots holding the soil together

1. What is salinity?

The amount of salt in soil

1. Which type of salinity, primary or secondary, is evident in each of these statements:  
     
   After constant years of irrigation, the land area has become to salty to grow crops. Secondary

Even though the land has not been farmed, there are areas of salinity.

Primary

The removal of native deep-rooted trees to clear land for livestock grazing has resulted in salinity over time.

Secondary

1. Describe what causes a rising water table and the effect this will have on the surface.  
   over irrigation and removal of native crops will salinize the soil
2. Referring to Source 1.63 Page 83 explain the reason behind each of the farming practices:

* Drains – Funnel salty water away from plants
* Fencing areas of natural vegetation – Prevents erosion
* Building levees – Stops water overflowing flooding
* Planting native trees – Prevents erosion

1. Explain the link between food security and desertification.

In the desert you grow food so like duh; no food

1. Explain how humans and their activities have caused desertification.  
   There are various reasons including increased salinity in the soil, clearing of land increased temperatures and pollution.