

Exercise walk-through

The Green Revolution ■ 5.5

eXercise

You must be able to

- describe the Green Revolution's methods (**high-yield seeds 高产种子**, fertilizers, irrigation)
- state its main benefit
- state two drawbacks
- evaluate its uneven global impact

Method — Green Revolution methods

The **Green Revolution** (mid-20th century) introduced **high-yield seed varieties**, chemical fertilizers, pesticides, and irrigation to boost food production.

Method — Benefits

It hugely increased yields of staples like wheat and rice, helping avoid famine and feed growing populations, especially in Asia and Latin America.

Method — Drawbacks

It needs costly inputs (poor farmers can be left out), can damage soil and water, reduces crop diversity, and had little impact in some regions like much of Africa.

Practice 2.1 ■ 2 marks

State two methods of the Green Revolution.

Solution 2.1

Method: Green Revolution methods

Worked steps

any two of: high-yield seeds, chemical fertilizers, pesticides, irrigation **B1** **B1**.

Practice 2.2 ■ 2 marks

State one benefit and one drawback of the Green Revolution.

Solution 2.2

Method: Green Revolution methods

Worked steps

benefit: much higher yields / avoided famine **B1**; drawback: costly inputs, environmental harm, or lost crop diversity **B1**.

Practice 2.3 ■ 1 mark

A poor farmer cannot afford the seeds and fertilizer the Green Revolution requires.

- (a) State the drawback this illustrates.
- (b) Explain why yields still rose overall.

Solution 2.3

Method: Green Revolution methods

Worked steps

(a) high input costs exclude poor farmers / widen inequality **B1**. (b) larger/richer farms adopted it and raised total output **B1**.

Exam-style 3.1 ■ 1 mark

The Green Revolution mainly increased the yields of

- A** luxury export crops
- B** staple grains like wheat and rice
- C** livestock only
- D** cash flowers

Solution 3.1

- A** luxury export crops
- B** staple grains like wheat and rice 
- C** livestock only
- D** cash flowers

Worked steps

- B.** it boosted staple grains (wheat, rice).

Exam-style 3.2 ■ 1 mark

A common environmental criticism of the Green Revolution is

- A** it used no water
- B** it damaged soil and water through chemicals
- C** it lowered all yields
- D** it ended irrigation

Solution 3.2

Method: Green Revolution methods

- A it used no water
- B it damaged soil and water through chemicals** ✓
- C it lowered all yields
- D it ended irrigation

Worked steps

- B. heavy chemical/irrigation use can degrade soil and water.**

Exam-style 3.3 ■ 1 mark

The Green Revolution transformed farming in Asia but barely reached parts of Africa.

- (a) State one reason for this uneven impact.
- (b) Explain one lasting benefit where it did take hold.

Solution 3.3

Worked steps

(a) lack of infrastructure, credit, water, or suitable seeds in some regions **B1**. (b) far higher food output helped feed growing populations and cut famine **B1**.