



## PART 2

Read the text below and answer questions 14–26.

### REGENERATIVE AGRICULTURE: HEALING THE LAND

A

Modern agriculture has delivered remarkable harvests by simplifying field systems and compensating for soil limitations with machinery and external inputs. Yet the same yield-focused model has, in many places, thinned soil organic matter, reduced biological diversity, and left farms less buffered against droughts and heavy rainfall. Regenerative agriculture is a broad label for approaches that try to reverse this trend by rebuilding soil function while maintaining profitability. A central idea is that soil is not an inert substrate but a living system whose structure and biology can be improved. One practical starting point is to reduce disturbance. Deep, frequent tillage fractures soil aggregates, collapses pore spaces, and exposes organic material to oxygen, speeding decomposition and carbon loss. Reduced-till and no-till systems aim to preserve structure and improve water infiltration, but they are not a universal recipe. In some regions, cutting cultivation can increase weed pressure and shift the burden to alternative strategies—different crop sequences, cover crop termination methods, or new equipment—so outcomes vary widely with climate and soil type.

B

A second principle is to keep soil covered for as much of the year as possible, treating vegetation as a kind of “armor” against erosion, moisture loss, and temperature extremes. Cover crops—often mixtures of legumes, grasses, and brassicas—protect the surface from raindrop impact and slow runoff, helping water soak in rather than wash soil away. Their benefits are not only physical. Living roots release compounds known as root **exudates**, which feed microbial communities and can support the formation of stable aggregates. Some species, particularly legumes, fix nitrogen, potentially lowering the farm’s need for synthetic fertiliser in the following crop. However, cover crops also require management choices that are locally specific: a mix designed for nitrogen may differ from one aimed at deep rooting, pest suppression, or grazing, and timing matters. If a cover is established too late, terminated too early, or mismatched to rainfall, it may deliver limited gains or even compete for water in dry seasons.

C

Plant diversity is another pillar of regenerative thinking, largely because uniform landscapes tend to favour specialised pests and diseases. Monocultures provide predictable resources for a narrow set of organisms, allowing populations to build quickly



and increasing reliance on pesticides. By contrast, longer rotations and more diverse cropping sequences can interrupt pest cycles, vary the timing of resource availability, and broaden habitats for beneficial insects. Diversification can include adding small grains or legumes to a two-crop system, integrating perennials, or establishing flowering strips and tree lines. In theory, diversity improves resilience by spreading biological and economic risk across seasons and species. In practice, it often collides with practical obstacles: farmers may need different planters, harvesters, storage, or processing facilities, and they may lack buyers for non-standard crops. Where cash flow is tight, the short-term costs of diversification can outweigh longer-term ecological gains, even when the agronomic logic is persuasive.

## D

Livestock integration, especially through managed grazing, is frequently presented as a way to restore ecological processes that were reduced when animals were separated from cropping systems. Advocates argue that moving animals across paddocks in controlled patterns can mimic natural herd behaviour: brief, intense grazing followed by adequate recovery can stimulate regrowth, distribute manure more evenly, and maintain ground cover. Hoof action may press plant residues into contact with the soil surface, supporting nutrient cycling. Yet these outcomes depend heavily on management. Grazing “done well” requires careful timing, appropriate stocking density, and sufficient rest periods for vegetation. Grazing “done poorly” can compact soil, reduce infiltration, damage plant cover, and increase nutrient losses into waterways. As a result, livestock can be either a tool for regeneration or a source of degradation, depending on decisions that must respond to weather, soil moisture, and plant growth.

## E

The climate argument for regenerative agriculture often centres on soil carbon, but this is also where claims become hardest to compare. Soil carbon changes slowly and unevenly, and measurements depend on sampling depth, baseline condition, and the natural variability within fields. A trial that reports carbon gains at one depth may look different if deeper layers are included; similarly, drought or unusually wet years can shift results independent of management. Some studies find substantial increases in soil organic carbon under certain combinations of reduced tillage, cover crops, and grazing, particularly on previously degraded land. Others report modest, inconsistent, or statistically uncertain changes over typical study time frames. Because carbon can accumulate gradually yet be lost rapidly under disturbance or extreme weather, many researchers caution against treating sequestration numbers as universally transferable. They argue that a more reliable climate contribution may come from “avoided emissions”:



fewer cultivation passes, reduced dependence on synthetic fertiliser, and better nitrogen management that lowers nitrous oxide emissions.

F

Whether regenerative practices persist is often decided by economics rather than ecology. Transition costs can include cover crop seed, fencing and water infrastructure for rotational grazing, specialised drills for high-residue planting, and the time required to learn new management. Some farms experience temporary yield reductions during adjustment, especially if changes are introduced rapidly without advice or suitable equipment. Over time, however, some producers report improved profitability because input costs fall and soils become more resilient—holding water longer in drought and recovering faster after heavy rain. These benefits, when they appear, tend to be gradual and context-dependent. Farms may abandon the approach if premium markets fail to materialise, if lenders and insurers treat the transition as risky, or if public policy rewards short-term output over long-term resilience. Consequently, incentives, technical support, and risk-sharing mechanisms can be as influential as field techniques in determining adoption.

G

Regenerative agriculture is also shaped by knowledge systems and disputes over definitions. Many practices now promoted under the “regenerative” label resemble long-standing Indigenous and local stewardship approaches that prioritise biodiversity, ground cover, and ecological balance, though modern branding does not always credit these origins. Contemporary change is frequently accelerated through peer learning groups, on-farm trials, and transparent sharing of results, which help farmers adapt general principles to local realities rather than follow a single script. At the same time, companies and certifiers are developing regenerative standards for supply chains, attempting to verify outcomes such as soil organic matter, biodiversity indicators, or reduced chemical use. Supporters argue that measurement prevents vague marketing; critics counter that rigid metrics can be expensive, incomplete, and poorly suited to diverse environments. In this view, regenerative agriculture is best understood as a direction of travel—guided by principles but adjusted through local learning—rather than a fixed checklist that can be copied unchanged from one region to another.

### **Questions 14–19**

Choose the correct heading for each paragraph.

#### **List of Headings**



- i Why carbon results are hard to standardise
- ii Turning principles into a rigid rulebook
- iii The role of animals and the risk of mismanagement
- iv Financial barriers and the importance of incentives
- v Soil cover as a defence system
- vi Diversity strategies and practical obstacles
- vii Learning networks and disputed certification
- viii No-till as the universal solution

**14 Paragraph B**

**15 Paragraph C**

**16 Paragraph D**

**17 Paragraph E**

**18 Paragraph F**

**19 Paragraph G**

### **Questions 20–23**

Choose **TRUE** if the statement agrees with the information given in the text, choose **FALSE** if the statement contradicts the information, or choose **NOT GIVEN** if there is no information on this.

**20** No-till farming always reduces the need for weed control measures.

**21** Cover crops can reduce erosion and also support soil microorganisms.

**22** The outcomes of managed grazing are largely unaffected by timing, stocking density or recovery periods.

**23** Some researchers believe regenerative agriculture's most dependable climate benefit may come from reducing emissions rather than storing large amounts of carbon.

### **Questions 24–26**

Complete the notes below. Choose **ONE WORD ONLY** from the text for each answer.

#### **Regenerative agriculture: key points**

- Regenerative agriculture often begins by reducing **24** ..... through less intensive tillage.



- Compounds released by living roots, called **25** ....., nourish microbial communities.
- Economic conditions can determine whether regenerative methods **26** ..... over time.

#### Answer Key

- 14. v
- 15. vi
- 16. iii
- 17. i
- 18. iv
- 19. vii
- 20. FALSE
- 21. TRUE
- 22. FALSE
- 23. TRUE
- 24. disturbance
- 25. exudates
- 26. persist