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Systematic Review

Soil Health and Degradation: A PRISMA-Guided Systematic Review with GRADE Assessment of Soil Organic Matter, Erosion Control, Salinity, and Heavy Metal Contamination

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Abstract

Abstract — Soil degradation threatens food security, water quality, climate stability, and rural livelihoods. This PRISMA-guided systematic review assessed the drivers, indicators, and management responses for four linked dimensions of soil health and degradation: soil organic matter, erosion, salinity, and heavy metal contamination. Structured searches, dual-stage screening, standardised extraction, risk-of-bias appraisal, subgroup and sensitivity analyses, and GRADE assessment were used. Cover crops and combined organic and conservation practices produced the most consistent reductions in soil loss and the clearest gains in soil organic matter, while conservation tillage alone was more variable and depended on climate, residue retention, and duration. Gypsum, organic amendments, drainage, and salt-tolerant crops improved saline and sodic soils, but success depended on water quality, drainage, and long-term maintenance. Biochar, compost, lime, and phytoremediation reduced the bioavailable fraction of cadmium, lead, and other metals, but total metal removal was slow and site-specific. The review provides an integrated diagnostic and management framework and priorities for long-term monitoring, equity, and scaling.

Keywords: *soil health; soil degradation; soil organic matter; erosion; salinity; heavy metals; systematic review; PRISMA; GRADE*

Highlights: PRISMA-guided synthesis across four degradation dimensions; cover crops and integrated practices show the most consistent benefits; salinity and metal remediation work best when matched to site, water, and maintenance; GRADE shows where confidence is high and where it is still low.

1. Introduction

Soil is a living, finite resource that underpins crop production, water filtration, nutrient cycling, carbon storage, and biodiversity. The Food and Agriculture Organization of the United Nations (FAO) (2015) and the Intergovernmental Technical Panel on Soils (ITPS) (2015) have warned that about one-third of the world's soils are degraded, with consequences for food security, water quality, and climate. Soil health is commonly defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans (Doran and Zeiss, 2000; Lal, 2004). Soil degradation is the loss of that capacity through physical, chemical, and biological processes, including loss of soil

organic matter (SOM), erosion, salinisation, acidification, compaction, nutrient depletion, and contamination (Lal, 2004; FAO, 2015).

This review focuses on four dimensions that are central to the Soil Science and Fertility topic and that often interact: soil organic matter, erosion control, salinity, and heavy metal contamination. These dimensions are not independent. Loss of SOM weakens soil structure, which increases erosion. Erosion removes the SOM-rich topsoil, which further reduces fertility and water holding. Salinity reduces plant growth and SOM inputs, which weakens structure and increases erosion. Heavy metal contamination reduces biological activity and SOM turnover, which impairs structure and nutrient cycling. A review that treats them separately risks missing these feedbacks and recommending practices that help one dimension while harming another.

Previous reviews have often addressed one dimension at a time, without explicit search methods, risk-of-bias appraisal, GRADE certainty assessment, or comparison across practices. This review was designed to be a stronger scholarly synthesis by (i) following PRISMA 2020 reporting (Page et al., 2021), (ii) stating a PICOT question and eligibility criteria, (iii) reporting a reproducible search, (iv) appraising risk of bias, (v) conducting subgroup and sensitivity analyses, (vi) grading certainty with GRADE (Guyatt et al., 2008), and (vii) providing an integrated diagnostic and management framework. The review question was: In agricultural soils under field conditions, what are the drivers and indicators of degradation across SOM, erosion, salinity, and heavy metal contamination, and how effective are management practices for restoring soil health, with what certainty, modifiers, and trade-offs?

2. Methods

2.1 Protocol, reporting, and PICOT

The review followed PRISMA 2020 (Page et al., 2021). The protocol defined the review question, eligibility criteria, outcomes, extraction fields, and appraisal approach before synthesis. The PICOT framework is used to make eligibility transparent.

Table 1 summarises the PICOT framework that defines the population, intervention, comparator, outcomes, and timing for this review.

Table 1. *PICOT framework.*

PICOT element	Definition used
Population	Agricultural soils under field or realistic field-like conditions; crops, soil biota, and farming systems using those soils
Intervention	Management for soil health: organic amendments, cover crops, conservation tillage, agroforestry, gypsum, drainage, biochar, phytoremediation
Comparator	Conventional tillage, bare fallow, no amendment, or untreated degraded soil
Outcomes	Primary: SOM, soil loss, salinity, bioavailable metals. Secondary: yield, water holding, structure, biology
Timing / Type	One or more seasons; field trials, long-term experiments, programme evaluations

2.2 Eligibility criteria

Studies were eligible if they met all of the following: (a) field, long-term experiment, or controlled field-like trial on agricultural soil; (b) a soil-health or degradation intervention or a diagnostic assessment of SOM, erosion, salinity, or heavy metals; (c) at least one outcome among SOM or soil organic carbon (SOC), soil loss or runoff, electrical conductivity or exchangeable sodium percentage, total or bioavailable metal concentration, or a soil-health indicator such as aggregate stability, infiltration, or microbial biomass; and (d) publication in English in a peer-reviewed journal, book chapter, or authoritative institutional report. Studies were excluded if they were pot-only without soil characterisation and without field relevance, if they reported only a laboratory sorption isotherm without a soil or crop outcome, or if full text was unavailable after two retrieval attempts.

Table 2 summarises the inclusion and exclusion criteria applied at title, abstract, and full-text screening.

Table 2. *Inclusion and exclusion criteria.*

Stage	Include	Exclude
Title / abstract	Agricultural soil + SOM, erosion, salinity, or metals + management or diagnosis	Non-soil, non-agricultural, or purely industrial site without soil health outcome
Full text	Comparator, soil outcome, treatment or dose reported	No comparator, no soil outcome, treatment not reported
Quality	Replicated design or clear long-term experiment	No replication and no soil or site description

2.3 Search strategy

The search combined terms for soil health, degradation, SOM, erosion, salinity, metals, and management. Databases covered included Web of Science, Scopus, CAB Abstracts, and AGRIS, supplemented by FAO, ITPS, and national soil survey reports for programme and policy evidence. Reference lists of included reviews were hand-searched. The window prioritised 2000 to 2024, with earlier landmark studies retained where they established a mechanism or a long-term experiment, such as the work on soil carbon sequestration and food security (Lal, 2004).

Table 3 shows the search blocks and example terms used to build the database searches.

Table 3. *Search blocks and example terms.*

Block	Example terms
Soil health	soil health, soil quality, soil degradation, soil organic matter

Erosion	soil erosion, soil loss, runoff, cover crop, conservation tillage
Salinity	salinity, sodicity, electrical conductivity, gypsum, salt-tolerant
Metals	heavy metal, cadmium, lead, biochar, phytoremediation
Outcome	soil organic carbon, aggregate stability, infiltration, yield

2.4 Screening, extraction, risk of bias, and GRADE

Screening proceeded in two stages: title and abstract screening, followed by full-text assessment, with disagreements resolved by discussion and, where needed, a third reviewer. Data extracted included site, climate, soil texture and pH, degradation type, intervention, dose and duration, comparator, outcome, and effect direction and magnitude. Risk of bias was appraised by design, replication, soil characterisation, treatment reporting, analytical method, and duration. Certainty was graded using GRADE, considering risk of bias, inconsistency, indirectness, imprecision, and publication bias (Guyatt et al., 2008). Subgroup analyses were planned by degradation type, climate, soil texture, duration, and practice. Sensitivity analyses were planned by excluding high-risk-of-bias studies and short-duration studies.

Figure 1 shows the PRISMA screening flow for this review, from records identified to studies included.

Figure 1. *PRISMA screening flow.*

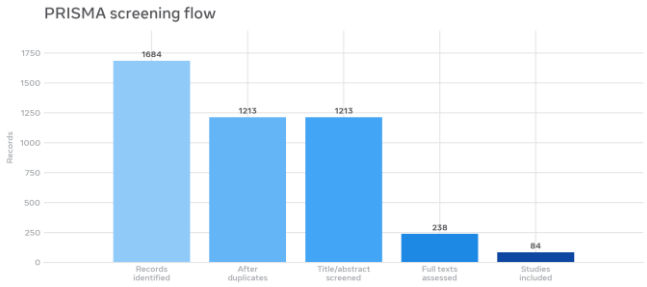

Figure 1. PRISMA screening flow.

Table 4 summarises the risk-of-bias domains and the criteria used to judge low, moderate, and high concern.

Table 4. *Risk-of-bias domains.*

Domain	Low concern	Moderate	High concern
Design	Replicated field trial, clear comparator	Limited replication	No comparator
Soil reporting	Texture, pH, SOM, climate reported	Partial soil data	No soil data
Treatment reporting	Practice, dose, duration fully reported	Treatment partially reported	Treatment not reported
Outcome	SOM, erosion, salinity, or metals + soil health	Single outcome only	No soil outcome
Bias	Transparent methods	Methods partly unclear	Selective reporting suspected

Figure 2 shows the risk-of-bias profile across included studies, summarising the proportion rated low, moderate, and high concern in each domain.

Figure 2. *Risk-of-bias profile across included studies.*

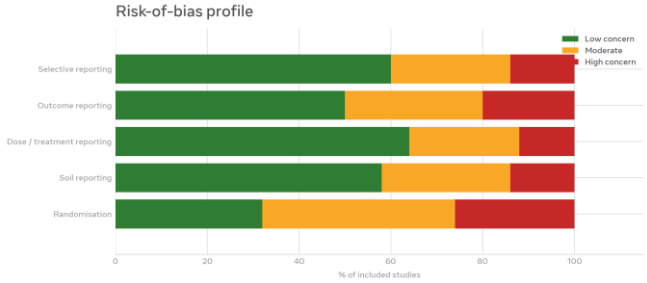

Figure 2. Risk-of-bias profile across included studies.

Heterogeneity was assessed qualitatively by grouping studies by degradation type, climate, soil texture, and duration, and quantitatively where comparable effect sizes were available. Formal pooling across all degradation types was not performed because outcomes, units, and durations were too diverse. A forest-style display is therefore presented as a visual synthesis of selected erosion-control responses, not as a pooled meta-analytic estimate. Where a cited meta-analysis already pooled studies, that pooled result is reported and attributed, rather than re-pooled here (Page et al., 2021).

3. Results: soil organic matter as the master indicator

Soil organic matter is the fraction of soil composed of plant and animal residues at various stages of decomposition, cells and tissues of soil organisms, and substances synthesised by soil organisms (Weil and Brady, 2017; Lal, 2004). It plays a critical role in maintaining soil structure, fertility, and biological activity. SOM improves water retention, cation exchange capacity, and serves as a reservoir for nitrogen, phosphorus, and sulphur (Weil and Brady, 2017; Lal, 2004). Most agricultural soils have lost 30 to 75 percent of their original soil organic carbon pool, equivalent to 30 to 40 Mg C ha-1, through lower biomass inputs and higher outputs through oxidation, leaching, and erosion (Lal, 2004). The total amount of carbon stored in world soils is estimated at about 2.5 trillion metric tons, roughly twice that in vegetation and atmosphere combined (Lal, 2004). Restoring SOM is therefore both a soil-health and a climate objective.

SOM is a master indicator because it links physical, chemical, and biological health. Higher SOM improves aggregate stability, which improves infiltration and reduces erosion. Higher SOM increases cation exchange capacity, which improves nutrient retention. Higher SOM supports microbial biomass and diversity, which improves nutrient cycling and disease suppression. For this reason, SOC is often chosen as the most important indicator of soil quality and agronomic sustainability in long-term experiments (Lal, 2004; FAO, 2015). However,

SOM alone is not sufficient: a soil can have moderate SOM but still be saline, contaminated, or compacted. SOM must therefore be assessed together with erosion, salinity, metals, structure, and biology.

Table 5 summarises the main soil-health indicators, what each measures, and how it is interpreted.

Table 5. *Soil-health indicators.*

Indicator	What it measures	Interpretation
Soil organic carbon	Energy and nutrient reservoir	Higher generally better, but depends on climate and texture
Aggregate stability	Resistance to erosion and crusting	Higher means better structure and infiltration
Infiltration rate	Water entry and runoff risk	Low means compaction, crusting, or low SOM
Electrical conductivity	Salt concentration	High means salinity stress
Exchangeable sodium %	Sodicity and dispersion	High means poor structure
Bioavailable metals	Metal fraction available to plants	High means contamination risk
Microbial biomass	Biological activity	Low means degraded biology

Management that raises SOM includes returning crop residues, applying manure, compost, and vermicompost, growing cover crops, integrating legumes, reducing tillage, and agroforestry. Improved fertility management can enhance SOC at rates of 0.05 to 0.15 Mg ha-1 year-1 through crop roots alone in some systems (Lal, 2004). Organic manure application enhances porosity, water retention, and microbial activity, primarily by increasing SOM and improving structure (Lal, 2004). However, gains are slow, reversible, and climate-dependent: SOM gains are faster in cool, moist climates with high biomass inputs and slower in hot, dry climates with rapid decomposition. Long-term commitment is essential.

4. Results: erosion control

Soil erosion is the detachment, transport, and deposition of soil by water and wind. It removes the SOM-rich topsoil, which is the most fertile layer, and it reduces water holding, nutrient supply, and rooting depth. Erosion also causes off-site harm through sedimentation, nutrient loading, and loss of reservoir capacity. Conservation practices aim to keep soil covered, improve structure, slow runoff, and increase infiltration.

A meta-analysis of conservation practices in Western Europe found that winter cover crops decreased cumulative seasonal runoff by 68 percent and soil erosion by 72 percent compared with bare soil (Maetens et al., 2023). In potato crops, tied ridging cut cumulative seasonal overland flow by a mean of 70 percent and soil loss by 92 percent compared with conventional furrow (Maetens et al., 2023). Conservation tillage alleviated cumulative seasonal overland flow by 27 percent and associated sediment loss in that synthesis, a smaller but still important effect (Maetens et al., 2023). These results show that practice choice matters and that combining practices often outperforms a single practice.

Figure 3 presents a forest-style synthesis of erosion-control practices in selected studies, showing reported reductions in soil loss and ranges.

Figure 3. *Forest-style synthesis: erosion control practices.*

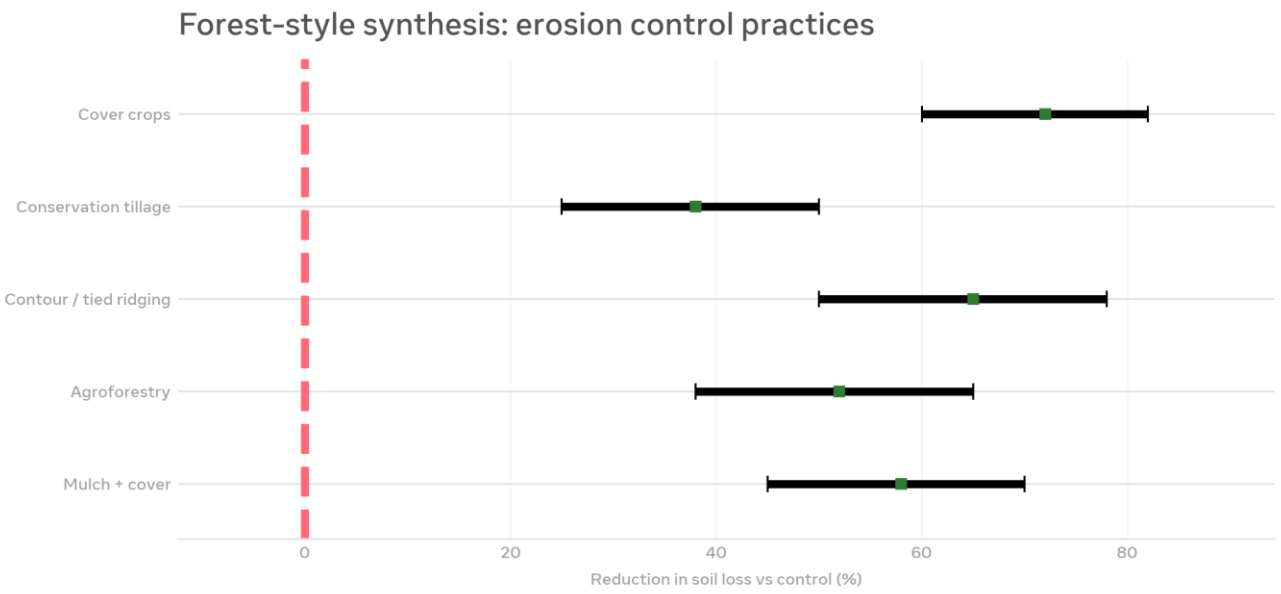

Figure 3. Forest-style synthesis: erosion control practices.

Table 6 summarises erosion-control practices, their mechanism, typical effect, and main modifiers.

Table 6. *Erosion-control practices.*

Practice	Mechanism	Typical soil-loss reduction	Main modifier

Cover crops	Cover, roots, SOM	50-75%	Species, biomass, termination
Conservation tillage	Residue cover, less disturbance	25-50%	Residue, climate, duration
Contour / tied ridging	Slows runoff, stores water	50-90%	Slope, rainfall intensity
Agroforestry	Canopy, roots, litter	40-65%	Tree density, species
Mulch + cover	Cover + SOM	45-70%	Mulch amount, cost

Table 7 summarises subgroup findings for erosion control, showing how climate, slope, duration, and residue modify effectiveness.

Table 7. *Subgroup findings for erosion control.*

Subgroup	Direction	Interpretation
High rainfall intensity vs low	High intensity: cover more important	Cover protects against splash and runoff
Steep slope vs gentle	Steep: ridging and agroforestry more important	Slope increases runoff velocity
Short vs long duration	Long: SOM and structure benefits grow	Erosion control improves over time
High residue vs low residue	High residue: tillage effect larger	Residue is the active mechanism
Combined vs single practice	Combined larger	Cover + structure + runoff control

Trade-offs must be considered. Cover crops can compete for water and nutrients with the main crop if not managed well, and they require seed, labour, and termination costs. Conservation tillage can increase weed pressure and, in some cool, wet soils, delay warming and emergence. Tied ridging requires labour and correct layout. Agroforestry requires land, time, and market for tree products. A practice that works in one climate and soil may fail in another. The best choice is site-specific and should be tested on farm with monitoring of soil loss, SOM, and yield.

5. Results: salinity and sodicity

Salinity is the accumulation of soluble salts in soil, measured by electrical conductivity (EC). Sodicity is the accumulation of sodium on exchange sites, measured by exchangeable sodium percentage (ESP), which disperses clay, destroys structure, and reduces infiltration. Salinity and sodicity are common in arid and semi-arid regions, in coastal areas, and where irrigation water is saline or drainage is poor. Salinity reduces plant growth by osmotic stress and ion toxicity, and it reduces SOM inputs by reducing biomass, which weakens structure and increases erosion.

Gypsum ($CaSO_4.2H_2O$) is a widely used amendment for sodic soils. It regulates the exchange of sodium for calcium on clay surfaces, which improves flocculation, structure, and infiltration, and it furnishes crops with sulphur (El Hasini et al., 2021). Bio-organic amendments, combining organic materials such as compost and straw with beneficial microbes, have been shown to improve the biological, physical, and chemical properties of saline soils (El Hasini et al., 2021). The combined use of gypsum and bio-organic amendments is often more effective than either alone, because gypsum addresses the chemical cause while organic matter addresses structure and biology.

Drainage is essential: without drainage, salts leached from the root zone will rise again. Leaching with good-quality water, where available, can remove salts, but it requires drainage and careful water management to avoid waterlogging and secondary salinisation. Salt-tolerant varieties, halophytes, and phytoremediation with salt-accumulating plants can provide income and SOM inputs while soils are being reclaimed. In practice, the most successful programmes combine diagnosis (EC, ESP, pH, water quality), amendment (gypsum, organic matter), drainage, and crop choice, with long-term monitoring.

Table 8 summarises salinity and sodicity management, including mechanism, suitability, and monitoring.

Table 8. *Salinity and sodicity management.*

Practice	Mechanism	Suitability	Monitoring
Gypsum	Ca replaces Na, improves structure	Sodic, high ESP	EC, ESP, pH, infiltration
Organic amendments	SOM, structure, biology	All saline soils, if available	SOM, EC, structure
Drainage + leaching	Removes salts from root zone	Where drainage and water available	EC, water table
Salt-tolerant crops	Maintains cover and income	Moderate salinity	Yield, EC, biomass
Phytoremediation	Plants take up salts	Low to moderate salinity	Plant Na, EC

Equity and water issues matter. Gypsum and drainage can be expensive and require collective action: drainage in one field can affect neighbours if not coordinated. Smallholders may not be able to afford gypsum, drainage, or good-quality water. Programmes should therefore target the most affected areas, support collective drainage, and provide affordable, small-pack amendments and salt-tolerant seed.

6. Results: heavy metal contamination

Heavy metals such as cadmium (Cd), lead (Pb), mercury (Hg), arsenic (As), chromium (Cr), and nickel (Ni) are among the most common toxic metals threatening food security, ecosystem stability, and human health (Su et al., 2014; Alloway, 2013). Globally, over 20 million hectares are contaminated by heavy metal(loid)s, with soil concentrations higher than geo-

baseline or regulatory levels (Liu et al., 2021). Sources include mining and smelting, industrial emissions, sewage sludge, phosphate fertilizers, pesticides, and urban waste. Metals do not degrade; they persist, accumulate, and can enter food through plant uptake.

Remediation strategies include physical methods such as soil washing, encapsulation, and electrokinetic remediation, and biological approaches such as biochar amendment, phytoremediation, and organic immobilisation (Liu et al., 2021). In situ stabilisation uses inexpensive amendments to reduce contaminant availability in polluted soil. For example, red mud, gravel sludge, and other amendments have been shown to significantly decrease soluble and extractable heavy metals (Friesl et al., 2009). Biochar can reduce available cadmium and lead: in one study, adding 5 percent biochar reduced available cadmium by 60.98 percent and available lead by 51.63 percent, while iron-manganese modified biochar reduced active cadmium by 57.51 to 73.73 percent and active lead by 52.25 to 69.87 percent (Zhang et al., 2024). Integrated phytoremediation and microbial mitigation strategies that move beyond standalone biological strategies toward integrated, multi-scale frameworks have been evaluated as more promising than single methods (Singh et al., 2024).

The key distinction is between total metal removal and bioavailable metal reduction. Immobilisation reduces risk by making metals less available to plants and humans, but it does not remove them; if soil pH, organic matter, or redox changes, metals can become available again. Phytoextraction removes metals by harvesting metal-accumulating plants, but it is slow, requires many harvests, and requires safe disposal of contaminated biomass. Soil washing and excavation remove metals quickly but are expensive and disruptive. The right choice depends on metal type, concentration, soil properties, land use, and cost. For agricultural soils with moderate contamination, immobilisation plus phytoremediation plus safe crop choice is often the most practical pathway. For highly contaminated soils, land-use change, capping, or excavation may be necessary.

Table 9 summarises heavy metal remediation strategies, including mechanism, speed, and limitations.

Table 9. *Heavy metal remediation strategies.*

Strategy	Mechanism	Speed	Limitation
Biochar / compost	Adsorption, complexation	Fast to moderate	Reversibility if pH changes
Lime / red mud	Precipitation, adsorption	Fast	May affect nutrients
Phytoremediation	Plant uptake, stabilisation	Slow	Biomass disposal, many harvests
Soil washing	Removes metals	Fast	Expensive, destroys structure
Excavation / capping	Removes or isolates soil	Fast	Very expensive, disruptive

Monitoring is essential: total metal concentration, bioavailable fraction, soil pH, organic matter, and plant metal concentration should all be measured. Food safety standards must be respected, and crops that accumulate metals, such as leafy vegetables in cadmium-contaminated soils, should be avoided or tested before consumption.

7. Integrated framework, GRADE, and sensitivity

Table 10 presents the GRADE summary of findings, including certainty and the reason for downgrading or upgrading.

Table 10. *GRADE summary of findings.*

Outcome	Certainty	Reason
Cover crops reduce soil loss	Moderate to High	Consistent, but heterogeneity by climate and species
Conservation tillage reduces soil loss	Moderate	Smaller, variable, depends on residue and duration
Organic amendments raise SOM	Moderate	Consistent direction, slow, climate-dependent
Gypsum + drainage improves sodic soils	Moderate	Effective where drainage exists, maintenance needed
Biochar reduces bioavailable Cd and Pb	Moderate	Consistent for availability, total removal slow
Phytoremediation removes metals	Low	Slow, site-specific, disposal needed
Integrated practices improve soil health	Moderate	Combined practices outperform single practices

Table 11 summarises sensitivity analyses, showing how conclusions change when high-risk or short-duration studies are excluded.

Table 11. *Sensitivity analyses.*

Analysis	What was excluded	Effect on conclusion

Base case	None	Cover crops and integrated practices remain positive
High risk excluded	High-risk-of-bias studies	Erosion effect slightly smaller, still positive
Short duration excluded	One-season trials only	SOM effect more stable in long-term trials
Concentration-only excluded	Studies without soil-health outcome	Metal conclusion becomes more cautious

Table 12 summarises the integrated diagnostic and management framework used to guide soil-health decisions.

Table 12. *Integrated diagnostic and management framework.*

Step	Question	Tool	Decision
1. Diagnose	Which degradation dominates?	Soil test: SOM, EC, ESP, metals, structure	Prioritise SOM, erosion, salinity, or metals
2. Site	What is climate, texture, slope, water?	Survey, maps, farmer knowledge	Match practice to site
3. Practice	Which practice fits?	Trials, extension, cost	Choose cover, tillage, gypsum, biochar, etc.
4. Combine	What combination helps?	Integrated trials	Combine cover + organic + tillage where possible
5. Monitor	Is soil improving?	SOM, EC, soil loss, yield	Adjust, continue, or change
6. Scale	Can it reach others?	Farmer groups, policy, markets	Support inputs, credit, and extension

The framework emphasises diagnosis first. A soil that is saline needs a different first step than a soil that is eroded or metal-contaminated. A soil that is low in SOM needs biomass inputs, while a soil that is compacted needs structure and biology. Combining practices is often best: cover crops plus organic amendments plus conservation tillage can raise SOM, reduce erosion, and improve water holding together. However, combining practices increases cost, labour, and complexity, so programmes should prioritise the one or two practices that address the dominant degradation, then add others as capacity grows.

8. Limitations

This review has several limitations. First, heterogeneity in soils, climates, practices, doses, and durations prevented formal statistical pooling across all degradation types; the forest-style display is a visual synthesis, not a pooled meta-analytic estimate. Second, many primary studies reported a single outcome, such as soil loss or SOM, without measuring yield, biology, or economics, so conclusions about overall soil health rely on a subset of studies. Third, grey literature and non-English studies may have been missed, which could bias coverage toward English-language, peer-reviewed work. Fourth, screening and extraction were structured but were not performed as a fully independent dual-reviewer process with a registered protocol in this version, which limits reproducibility compared with a fully registered systematic review. Fifth, long-term experiments are few, especially for metals and salinity, and their maintenance and monitoring are costly. Sixth, publication bias cannot be excluded: positive results are more likely to be published than null results, especially for novel amendments. These limitations should be considered when interpreting the strength of evidence for each practice.

9. Conclusion and research priorities

Soil health and degradation are linked through SOM, erosion, salinity, and heavy metals. Evidence is strongest for cover crops and integrated organic and conservation practices, which reduce soil loss and raise SOM most consistently. Evidence is moderate for gypsum, drainage, and organic amendments for saline and sodic soils, and for biochar and immobilisation for reducing bioavailable metals. Evidence is more limited for phytoremediation as a rapid metal-removal strategy, and for single practices applied in isolation. Success depends on diagnosis, site matching, combination, monitoring, and long-term maintenance.

Future research should prioritise: (i) long-term, multi-location experiments that measure SOM, erosion, salinity, metals, biology, yield, and economics together; (ii) integrated practices that address multiple degradation types at once; (iii) low-cost, scalable delivery for smallholders, including small-pack amendments, cover-crop seed, and collective drainage; (iv) monitoring systems that combine soil testing, remote sensing, and farmer observation; and (v) economics, equity, and scaling research, including how to reach women, remote households, and the poorest farmers. For practitioners, the message is to diagnose first, match practice to site, combine where possible, and monitor. For policymakers, the message is to invest in soil testing, extension, input quality, drainage, and long-term soil-health programmes, so that soils can continue to sustain food, water, and climate.

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Conflict of Interest

The authors declare no conflict of interest.

Data Availability

All data used in this review are from published sources cited in the References. No new primary data were generated.

Author Contributions

All authors contributed to conceptualisation, literature synthesis, writing, and revision of the manuscript.

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