



Combating Desertification and Land Restoration Course: Rangelands, Dunes and Degradation Neutrality

Introduction:

Combating desertification and land restoration covering rangelands, dunes and degradation neutrality is a 5-day course for environment, agriculture, municipal and non-governmental project teams that ends with a Land Restoration Project Plan for a case degraded site. Organisations spend restoration budgets on planting that dies, grazing that returns and dunes that move again because the drivers of degradation were never diagnosed and results were never measured. Nominees already plan or supervise field projects in drylands and work through case studies built on real site data. CoreConcept Training Center delivers this combating desertification and land restoration course.

Course Objectives:

- Diagnose the drivers and processes of land degradation at a dryland site and record a field baseline
- Apply the land degradation neutrality response hierarchy and indicators to set restoration targets for a site or district
- Select rangeland grazing controls, dune fixation methods and water harvesting structures that match site conditions
- Specify native seed sourcing, nursery propagation and planting plans for vegetation rehabilitation and arid afforestation
- Design a restoration monitoring framework with field indicators, light satellite vegetation checks and review triggers
- Prepare community participation arrangements and a funding case for a land restoration project

Target Audience:

- Environment department teams responsible for land degradation programmes and protected rangelands
 - Agriculture and livestock extension teams responsible for grazing land, farmland soils and pastoral communities
 - Municipal teams responsible for green belts, peri-urban land and sand encroachment on roads and settlements
 - Non-governmental project teams responsible for designing, funding and reporting community restoration projects
 - Consultancy teams responsible for restoration feasibility studies and monitoring reports
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Course Outline:

Day 1: Land Degradation Drivers, Desertification Processes and Site Assessment

- Aridity Index Zoning of Arid, Semi-Arid and Dry Sub-Humid Lands
- Driver Analysis of Overgrazing, Woodland Clearing and Groundwater Over-Extraction
- Wind Erosion, Water Erosion, Crusting and Salinisation Process Diagnosis
- Field Land Degradation Assessment Using Transects and Soil Pits
- Degraded Site Baseline Record With Photo Points and Sketch Maps

Day 2: Land Degradation Neutrality and Sustainable Land Management Frameworks

- Land Degradation Neutrality Concept Under the Desertification Convention
- LDN Response Hierarchy of Avoid, Reduce and Restore Measures
- LDN Indicators for Land Cover, Productivity and Soil Carbon
- WOCAT Technology and Approach Database for SLM Option Screening
- Restoration Approach Spectrum From Natural Regeneration to Active Planting

Day 3: Rangeland, Dune, Vegetation and Water Harvesting Techniques

- Rangeland Carrying Capacity Estimation and Rotational Grazing Plans
- Sand Dune Fixation With Sand Fences, Checkerboards and Shelterbelts
- Native Seed Sourcing, Seed Banks and Nursery Propagation Schedules
- Micro-Catchment Water Harvesting With Zai Pits and Contour Bunds
- Soil Conservation Measures Using Mulching, Terracing and Organic Amendments

Day 4: Arid Afforestation, Monitoring, Participation and Restoration Finance

- Arid Afforestation Species Matching and Urban Green Belt Planting
- Monitoring Framework Using Field Indicators and Vegetation Index Trends
- Participatory Land Use Planning and Community Grazing Agreements
- Restoration Financing Options From Climate Funds and Blended Finance
- Failure Analysis of Seedling Mortality and Livestock Re-Entry

Day 5: Case Study: Degraded Site Land Restoration Project Plan

- Case Degraded Rangeland Data Pack Review and Problem Diagnosis
 - Case Intervention Selection Using the LDN Response Hierarchy
 - Case Monitoring Framework With Indicators, Baselines and Targets
 - Case Budget, Funding Sources and Community Roles Matrix
 - Land Restoration Project Plan Completion and Peer Review
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Skills You Will Gain:

- Land Degradation Diagnosis
- Grazing Capacity Planning
- Sand Dune Fixation Design
- Native Seed and Nursery Planning
- Water Harvesting Layout
- Restoration Indicator Design
- Participatory Land Use Planning
- Restoration Funding Proposals

Why Attend This Course:

- Deliver a Land Restoration Project Plan with a monitoring framework to the programme manager and the funding or partnership lead
- Decide which sites to protect, which to manage better and which to restore actively, using the neutrality response hierarchy
- Avoid repeated planting losses, wasted water harvesting works and grazing conflicts caused by undiagnosed degradation drivers
- Share site assessment sheets, indicator tables and community agreement templates with field and planning colleagues

Conclusion:

Back at work, the participant gives the programme manager and the funding or partnership lead a Land Restoration Project Plan that sets the site diagnosis, chosen interventions, monitoring indicators, community roles and budget for one degraded area. Managers use it to approve field works, open discussions with funders and agree grazing and access rules with local land users. After the first growing season, the unit should review seedling survival, ground cover, grazing pressure and water harvesting performance against the targets in the plan and adjust interventions where indicators fall short.

Frequently Asked Questions FAQ:

What should participants know before the combating desertification and land restoration course?

Participants should be familiar with field work in dry areas and with basic project planning. No ecology degree or software skill is expected. Bringing photos, maps or reports from a site in their own area helps them apply the case work to familiar land.

How does combating desertification and land restoration differ from a remote sensing or landscape maintenance course?

It plans and manages restoration of degraded rural and peri-urban land: diagnosis, grazing, dunes, seeds, water harvesting, finance and communities. Satellite imagery appears only as a light monitoring check, while ornamental planting, irrigation contracts and park upkeep belong to landscape courses.

Why does grazing control matter in combating desertification and land restoration?

Grazing control decides whether restoration lasts. Planting and seeding fail when livestock return before roots establish, so carrying capacity, rotation, resting periods and access rules agreed with herders must be set before and alongside any field intervention.

What do participants take back from the combating desertification and land restoration course?

Participants take back a Land Restoration Project Plan for a case degraded site, with a driver diagnosis, selected interventions, a monitoring framework with indicators and targets, community roles and a funding outline, ready to adapt to a site in their own organisation.