



MICRO-CREDENTIAL

LAND MANAGEMENT IN CENTRAL ASIA

1.- Introduction to Land Resources and Land Management

Role of Land Resources in Economic Development

LM-W01-V03



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TIAME
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Why land resources matter for development

Economic core

Land supports production, location, energy systems, and infrastructure.

Textbook lens

Land is both a production factor and a national resource.

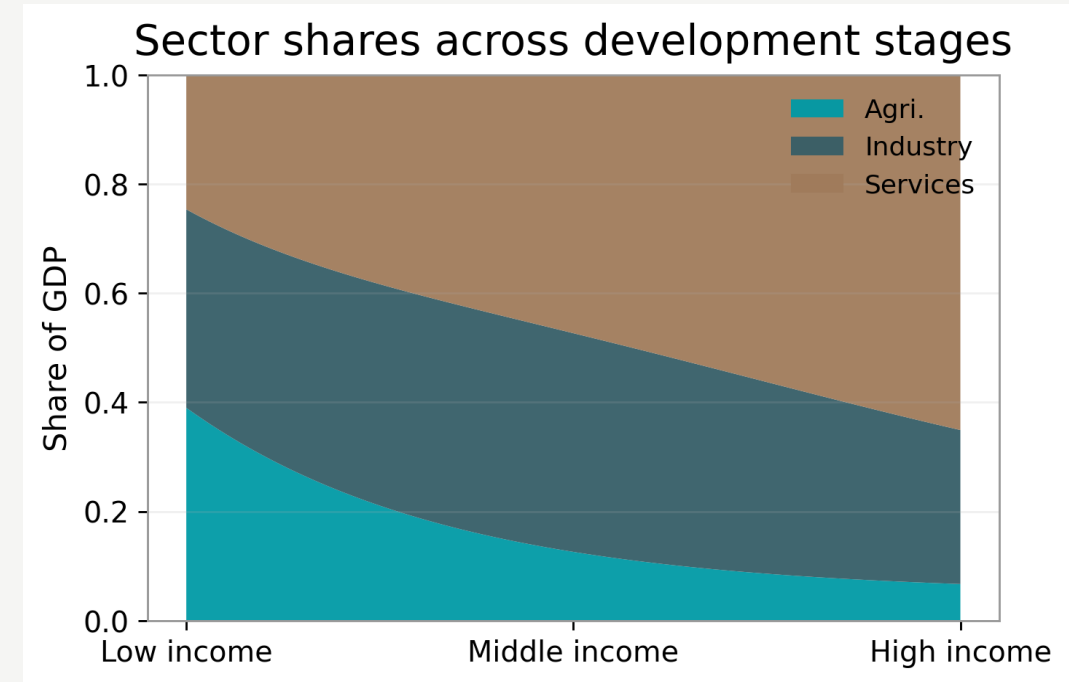
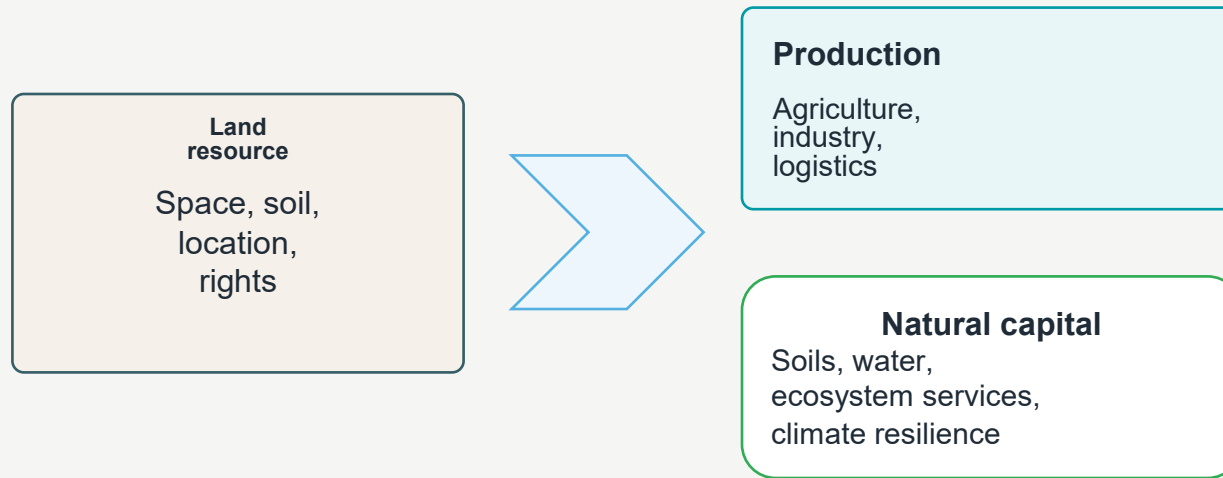
Analytical aim

Connect land use with productivity, equity, and resilience.

Expected outcome

Evaluate land policy beyond short-run market price or legal form.

Land contributes through four development channels



Land is both national wealth and natural capital

The textbook treats land as a key material asset and a production means; the World Bank adds that sustainable development must be judged through wealth, not GDP alone.

Production factor

In agriculture, land remains the primary means of production.

National wealth

Land is part of the national asset base and therefore a public concern.

Beyond GDP

Sustainability depends on whether wealth per capita, including natural capital, is maintained.

Land underpins agriculture, food security, and rural livelihoods

FAO perspective

Land-use planning should match people's needs while safeguarding natural resources and ecosystem services for present and future generations.

Development question

How can countries raise output without exhausting fertile soils, water, and rural resilience?

Productive soils

Support crop yields, livestock systems, and farm incomes.

Competing demand

Food, forests, cities, and infrastructure all compete for land.

Rural livelihoods

Land quality strongly shapes poverty reduction, jobs, and food-system stability.

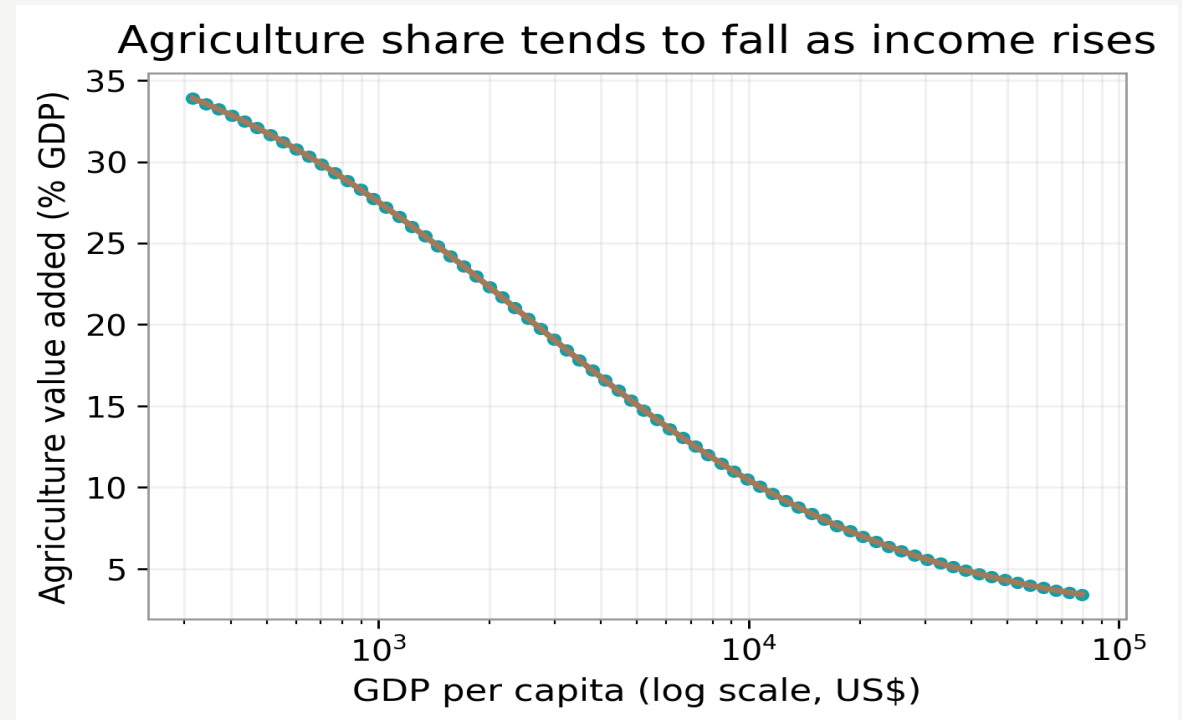
Land is also the platform for cities and infrastructure

Infrastructure

Roads, utilities, industry, energy, and housing all require land access.

Development risk

Poorly managed conversion creates disputes, delays, and expensive urban form.



Efficient land use is multi-dimensional, not purely economic

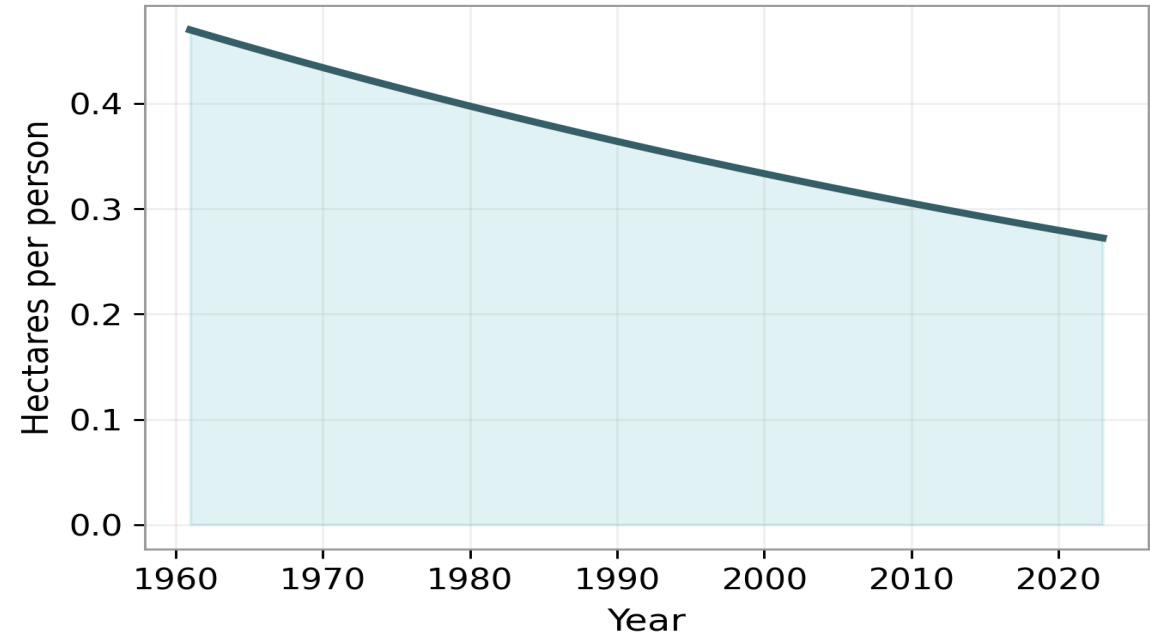
Economic efficiency

Higher productivity,
lower waste,
better allocation.

Ecological efficiency

Maintains soil, water,
biodiversity,
and resilience.

Arable land per person: long-run decline



Poor land use creates hidden costs; restoration creates returns

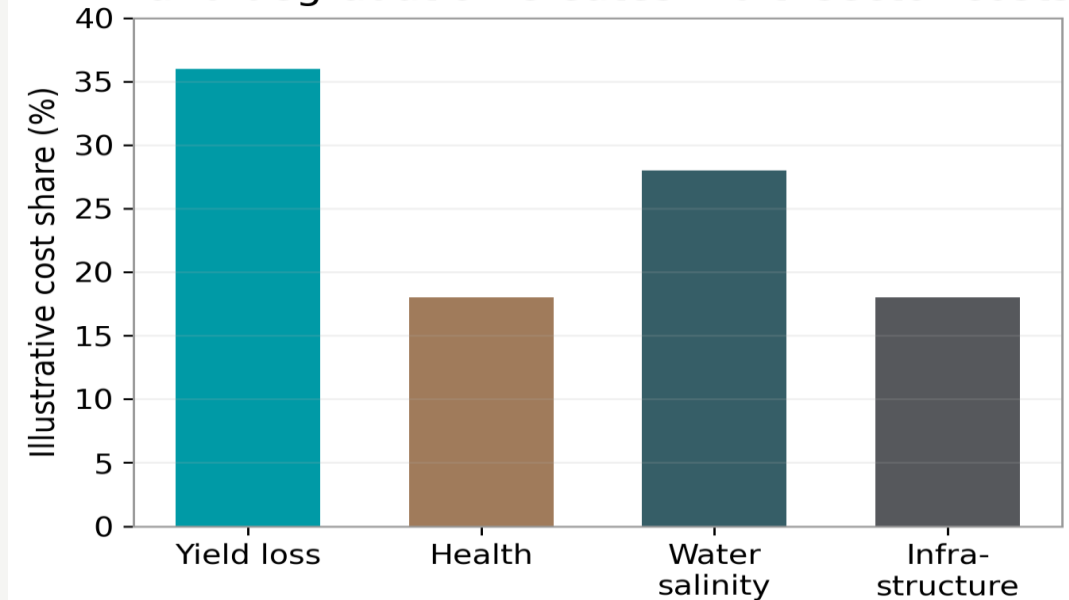
Hidden ecological costs

Erosion, salinity,
habitat loss,
water stress.

Hidden social costs

Displacement,
weaker access,
livelihood loss.

Land degradation creates multi-sector costs



Economic case for restoration

UNCCD highlights that every \$1 invested in restoring degraded land can generate roughly \$7-\$30 in economic returns.

Secure rights shape investment, credit, and inclusion

Global gap

The World Bank estimates that about 70% of the world lacks secure land rights.

Investment incentive

Secure tenure encourages longer-term investment and land improvement.

Women and vulnerable groups

Weak rights often mean lower access to assets, credit, and opportunity.

Social stability

Land security reduces displacement risk and conflict exposure.

Without tenure security, land cannot fully function as a development asset.

Cadastre and registration turn land into usable economic information

Records and maps

Reliable parcel data lowers uncertainty and improves planning quality.

Transactions

Registration systems reduce time, friction, and informality in land markets.

Public finance

Cadastre supports fairer valuation and stronger property taxation.

Operational evidence

World Bank pilots show gains in tax revenue and faster registration services.

A sound governance system aligns productivity with public interest

Rights and recognition

Clarify legitimate rights and protect them in law and practice.

Planning and zoning

Guide land to uses that fit capability, needs, and risk levels.

Public oversight

Monitor land use, compliance, and public land management.

Land information

Make records, maps, and data accessible and trustworthy.

Dispute resolution

Provide credible channels for resolving competing claims.

Why it matters

Institutions determine whether land supports growth, inclusion, and protection.

A practical test for land decisions in economic development

Productive?

Does it raise output or improve economic function?

Inclusive?

Does it respect rights and avoid unjust exclusion?

Protective?

Does it safeguard soil, water, and resilience?

Fiscally sound?

Does it reduce long-run public costs rather than shift them?

If one answer is “no”, growth may be immediate but not sustainable.

Why this helps

This converts theory into a practical tool for project appraisal, land-use planning, and classroom case analysis.

Why the topic is especially important in Central Asia

Irrigation interdependence

Use on one parcel can affect drainage, recharge, and neighboring output.

Salinity and reclamation

Misuse today may create long and costly recovery burdens for the territory.

Drylands and pastures

Overuse weakens household resilience, livestock productivity, and stability.

Urban fringe

Expansion choices affect service cost, access, and loss of productive land.

In water-scarce regions, land policy quickly becomes regional economic policy.

Key takeaways from LM-W01-V03

Takeaway 1

Land supports development through production, location, natural capital, and public finance.

Takeaway 2

Rational land use must combine economic, social, ecological, and long-run efficiency.

Takeaway 3

Secure rights and strong governance turn land from a passive resource into a development asset.



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