



**LAND MANAGEMENT, ENVIRONMENT & SOLID-WASTE:
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MICRO-CREDENTIAL

LAND MANAGEMENT IN CENTRAL ASIA

8.- State Role in Land Resource Management

Reading

Government Regulation of Land Resources



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Preface

Land is never only soil, area, and boundaries. In public administration it is also a legal object, an economic asset, a spatial base for settlement and infrastructure, an ecological system, and a social resource that affects livelihoods, food security, and intergenerational justice. Because so many interests converge on land at the same time, land management cannot be understood only as a technical activity. It is necessarily linked with government regulation, institutional design, legality, accountability, and public policy.

This reading was prepared from the lecture sequence on state policy and land resource management. The sequence begins with the logic of state land policy, then moves to regulation of land relations, government management mechanisms, legal foundations, state-user interaction, institutional responsibilities, and finally a synthetic review of the state's role. The aim of this document is to turn those lecture themes into a fuller reading text that students can study before or after class.

The course book uploaded by the user provides the conceptual backbone. Its table of contents is especially useful because it shows how land resource management should be approached as a system: theoretical foundations, land fund structure, stages of development, methods and mechanisms, regional and local administration, state land control, information support, and comparative experience. The present document follows that spirit, but it also updates the discussion with recent official sources on land governance, land tenure, climate pressure, digital registration, and land administration reform in Uzbekistan and Central Asia.

The text is written in clear academic English. It is not intended to replace statutes, regulations, or professional legal advice. Instead, it helps students build a disciplined understanding of how to read the land sphere: first by identifying the public problem, second by locating the legal basis, third by recognizing the institution that has competence, fourth by tracing the management mechanism, and fifth by evaluating the effects on users, territory, and sustainability.

Source anchor: Course book *'Yer resurslarini boshqarish'* (2018), especially the English contents and annotation pages; World Bank LGAF overview; FAO VGGT overview.

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1. Framing government regulation of land resources

Government regulation of land resources means the organized public activity through which the state defines the legal status of land, allocates competence among institutions, creates procedures for decision-making, records rights and restrictions, plans land use, monitors change, enforces compliance, and uses economic or administrative instruments to guide behavior. The term “regulation” should not be understood narrowly as prohibition. In the land sphere, regulation includes facilitation as well as restraint. It creates the conditions under which lawful use becomes visible, predictable, and reviewable.

The starting point is simple. Land is finite, spatially fixed, and simultaneously demanded by agriculture, housing, infrastructure, transport, industry, recreation, and environmental protection. Those uses often compete with one another. If no public framework exists, decisions may be taken by power, habit, or informal bargaining rather than by transparent rules. That situation produces insecurity, conflict, short time horizons, and misuse of land whose effects may remain for decades. For this reason, a land system requires public institutions even when private initiative and market exchange are important within that system.

The World Bank’s Land Governance Assessment Framework treats land governance as a field where rights, planning, state land management, taxation, dispute resolution, and public information must be assessed together rather than in isolation. This is useful for teaching because it reminds students that a land problem is rarely only a technical problem. A boundary dispute may appear to concern surveying, but the deeper issue may be defective registration, inconsistent procedures, or weak review. A land degradation problem may appear ecological, but the deeper issue may be insecure tenure, poor incentives, or fragmented institutions. A slow transfer process may appear administrative, but the deeper issue may be legal complexity or lack of digital integration.

The lecture sequence used in this course adopts exactly this systems logic. State land policy explains why the state acts. Regulation of land relations explains the legal link between people and land. Government management mechanisms explain how policy is translated into action. Land management and legislation explain legal sources and procedures. State and land users explain the everyday interaction between authority and lawful use. Institutional responsibilities explain who is competent to do what. The review of the state’s role then asks whether the system is balanced, effective, and legitimate.

This reading therefore approaches government regulation of land resources as a structured field of study with five recurring questions. First, what public interest is at stake? Second, which legal norms govern the issue? Third, which institution has competence? Fourth, what management mechanism is used? Fifth, what effect does this produce for users, territory, and sustainability? Students who learn to ask these five questions can interpret most land administration issues more clearly than those who memorize isolated definitions alone.

The broader international context also matters. United Nations sustainable development work has long treated integrated planning and management of land resources as a cross-sectoral issue rather than a purely agrarian one. FAO's voluntary guidelines on tenure similarly frame secure and equitable access to land as fundamental for food security, poverty reduction, and responsible resource use. These are not abstract ideas. They help explain why land governance today is discussed together with climate resilience, investment, digital public services, and rural livelihoods. In Uzbekistan and Central Asia, that linkage is especially visible because land, water, irrigation, settlement, and ecological stress are tightly connected.

Key study question

When you encounter any land problem, do not ask only "What happened on the parcel?" Ask also "What is the public interest, what is the legal basis, who is competent, and what management mechanism is being used?"

Source anchor: *Course book chapters on theoretical foundations and management mechanisms; World Bank Land Governance Assessment Framework overview; FAO VGGT overview; UN sustainable development materials on integrated land management.*

2. Why land resources require public regulation

Land resources require public regulation because land is unlike most ordinary goods. A parcel can be bought, leased, used, protected, improved, or damaged, but it cannot be moved to another location and it cannot be expanded at will. Every decision on land therefore has a territorial effect. A road, an irrigation canal, a protected zone, a settlement boundary, or a production cluster all require spatial coordination. Private initiative alone does not solve that coordination problem because each actor sees only part of the territory and usually pursues a limited objective. Public regulation exists to connect those separate actions to a wider spatial order.

A second reason is the durability of land-related consequences. When soil is salinized, when erosion accelerates, when a settlement expands without planning, or when legal records do not match actual use, the costs are not short-lived. The burden can fall on future users,

neighboring communities, public budgets, and ecosystems. This is why constitutions and land codes often treat land differently from movable property. The issue is not only who uses the parcel today, but also whether the rules of use preserve long-term productive, social, and ecological value.

A third reason is that rights over land are social facts only when they are publicly recognized. A person may physically occupy land, but physical occupation alone does not provide secure tenure. For rights to be stable, other actors must know what the right is, what its boundaries are, what restrictions apply, and how disputes will be decided. Registration, cadastre, zoning, permitted-use rules, environmental limits, servitudes, and review procedures all transform a private claim into a legally visible and publicly intelligible status. That is why public records are not a bureaucratic luxury; they are part of the infrastructure of rights.

A fourth reason is the public-interest character of land. The Constitution of Uzbekistan states that land and other natural resources constitute national wealth and must be rationally used and protected by the state. Even where users enjoy lawful possession, ownership, lease, or use rights, those rights operate within a larger constitutional and legislative framework. The state is expected to protect legality, fairness, environmental quality, and the orderly use of territory. This does not mean that every land decision should be centralized. It means that land governance cannot be reduced to private discretion alone.

A fifth reason is economic. Productive investment depends on confidence. Farmers invest more rationally when tenure is secure and when the rules affecting cultivation, drainage, infrastructure access, and registration are predictable. Urban and industrial investors also need clarity on zoning, permitting, infrastructure alignment, and dispute risk. The World Bank's land governance work repeatedly emphasizes that a well-functioning land sector supports growth, social development, and environmental protection at the same time. Weak governance, by contrast, creates hidden costs: repeated verification, informal payments, litigation, underinvestment, and inefficient land use.

Finally, modern land regulation must respond to climate and resource stress. Uzbekistan's Country Climate and Development Report notes that stronger land tenure security, better soil conservation, climate-smart agriculture, and a clear investment roadmap are important for adaptation and productivity. The same report argues that integrated landscape management and climate-smart technologies could substantially raise crop production while saving water over time. Once climate pressure is recognized, the logic of land regulation becomes even

clearer: public institutions are needed not merely to distribute land, but also to safeguard resilient land use under changing conditions.

Key idea

Land regulation is justified not because the state distrusts land users, but because land is spatially fixed, socially important, legally visible only through public recognition, and vulnerable to long-term degradation.

Source anchor: *Constitution of Uzbekistan (Lex.uz, 2023 version); World Bank LGAF overview; World Bank Uzbekistan Country Climate and Development Report (2023).*

3. State land policy and the public interest

State land policy can be understood as the set of public goals, legal principles, institutional arrangements, and practical instruments through which the state guides the allocation, use, protection, and transformation of land. Policy is more than legislation, and legislation is more than administration. Policy sits above both. It expresses why land is being governed and what outcomes are considered desirable. In teaching terms, policy answers the “for what purpose?” question before the legal and technical questions are addressed.

In most countries, state land policy combines at least three major aims: efficiency, sustainability, and equity. Efficiency means that land should be used productively and in forms that reduce avoidable transaction costs. Sustainability means that land use today should not destroy long-term soil, water, ecosystem, or spatial value. Equity means that the distribution and administration of land-related opportunities should be lawful, transparent, and not arbitrarily discriminatory. These aims may reinforce one another, but they can also pull in different directions. For example, an economically attractive project may conflict with ecological limits, or a rapid administrative decision may conflict with due-process needs. Good policy does not eliminate such tensions; it manages them openly.

Public interest is the key category linking these aims. The public interest is not a vague slogan. In land matters it can be translated into identifiable concerns: food security, orderly settlement, infrastructure placement, environmental protection, protection against degradation, prevention of conflict, fiscal transparency, disaster risk reduction, and the credibility of rights and records. A state that regulates land only as an administrative inventory will fail, because land governance is ultimately about how society decides which of these public interests deserve protection and how conflicts among them should be resolved.

The course book's management framework is useful here because it treats land policy as a system of methods and mechanisms rather than as a single command. The policy toolbox includes land legislation, cadastre, registration, forecasting, planning for rational use, land protection, design of land organization, economic instruments, control, and information support. Each tool does something different. Laws define rights and limits. Cadastre identifies parcels and facts. Registration gives legal publicity. Planning coordinates territory. Monitoring reveals change. Economic instruments influence incentives. Control and review protect legality. If one tool is missing, policy becomes less coherent.

In recent years Uzbekistan has increasingly discussed land policy in terms of reform, security of land rights, and modernization of administration. FAO reported in 2025 that land governance reforms in Uzbekistan were moving toward stronger tenure security, development of a market for land use rights, improvement of land-relations management, and revision of the Land Code. In the same report, FAO also warned that the legal framework remained complex and fragmented in important respects. This is a good example of what policy analysis should look like at student level: it recognizes progress and constraint at the same time.

World Bank materials on climate-smart agriculture in Uzbekistan add another important policy dimension. A 2025 summary note described stronger tenure security, more flexible crop choice, and reform of the crop placement system as important for adaptation and more efficient land use. This shows that land policy is not merely about static control of parcels. It can reshape the opportunity structure within which farmers and other users plan, invest, and respond to changing environmental conditions.

Students should therefore remember that state land policy is neither identical with state ownership nor identical with detailed bureaucratic intervention. It is a framework for directing land use toward public purposes under law. A good policy does not simply tell users what they may not do. It also gives them intelligible categories, predictable procedures, reliable records, and incentives compatible with rational use. In that sense, policy is both normative and enabling.

Policy lens

Whenever you read a land rule, ask which policy aim it primarily serves: efficiency, sustainability, equity, or a combination of the three.

Source anchor: Course book chapter on management mechanisms; FAO strengthens land governance in Uzbekistan (2025); World Bank agriculture and climate change policy dialogue note (2025).

4. Regulation of land relations

Regulation of land relations concerns the legal and institutional order through which rights, duties, restrictions, procedures, and remedies are attached to land. The phrase “land relations” is wider than ownership. It includes ownership where the law allows it, but it also includes lease, permanent or temporary use, possession, servitudes, public restrictions, environmental obligations, neighborhood relations, acquisition for public needs, inheritance, registration, and dispute settlement. To regulate land relations is to make these connections visible, reviewable, and enforceable.

In classroom discussion, students often treat rights as the core of land relations and everything else as secondary. This is understandable, but incomplete. A land right has meaning only in relation to at least four additional elements. First, there must be a lawful source of the right, such as statute, administrative decision, contract, inheritance, privatization, or another legal ground recognized by law. Second, there must be an object of the right, meaning a parcel or real-estate unit identified with enough certainty. Third, there must be content: what the holder may do, must do, and must not do. Fourth, there must be a procedure for recognition, change, suspension, or termination. Without those elements, a “right” remains too vague for administration or judicial protection.

The regulation of land relations therefore performs several functions at once. It defines categories of land and categories of users. It determines which authority is competent to allocate or recognize a right. It establishes documentation and evidence standards. It tells administrators when a decision is valid and when it can be challenged. It sets environmental and planning limits. It also provides a path for legal change. A transfer, registration correction, lease renewal, conversion of use, or public acquisition each requires a legally defined sequence rather than improvisation.

FAO’s voluntary guidelines on tenure are particularly helpful for understanding the quality dimension of regulation. They emphasize secure tenure rights and equitable access across different forms of tenure, including public, private, communal, customary, and informal contexts. For students in Central Asia this broad approach is important because it shows that sound regulation is not only about recording a formal right already recognized by the state. It is also about designing governance arrangements that reduce exclusion, arbitrariness, and conflict. Good regulation improves trust in the legal system because people can understand how decisions are made and how they may be reviewed.

In Uzbekistan, the legal sphere around land relations includes the Constitution, the Land Code, laws on state land cadastre, laws on state registration of rights to real estate, and multiple implementing regulations and decrees. From a study perspective, the key insight is that land relations are never regulated by one document alone. Students should expect a hierarchy of sources. Constitutional principles establish land as national wealth and require rational use and state protection. The Land Code provides the sector's basic legal structure. Cadastre and registration laws organize the infrastructure of legal visibility. Administrative acts and service regulations then operationalize procedures.

Recent reform signals also illustrate the dynamic character of land relations. The World Bank's 2025 policy dialogue note reported that Uzbekistan had submitted amendments to the Land Code in May 2024 to remove the minimum farm-yield requirement and mandatory Farmers' Council membership for maintaining land rental contracts. The same note reported the abolition of the crop placement system for all crops in 2023. Whether one studies these reforms from an economic or legal perspective, the lesson is the same: land relations are regulated not only by stable foundational acts but also by periodic reform intended to adjust incentives, improve flexibility, and strengthen a more transparent land-use framework.

Students should thus avoid two mistakes. The first is to treat land relations as a matter of individual entitlement only. The second is to treat them as administrative control only. Regulation of land relations sits between these extremes. It recognizes users, protects legitimate expectations, and allows economic activity, but it also places those rights inside a public order that defends legality, territorial coherence, and rational use. This balanced understanding is central to modern land management.

Analytical rule

A land relation always includes at least five legal questions: who holds the right, over what object, with what content, on what legal ground, and under which procedure.

Source anchor: *FAO Voluntary Guidelines on the Responsible Governance of Tenure; Constitution of Uzbekistan; Land Code of Uzbekistan; Law on State Registration of Rights to Real Estate (2022); World Bank policy note on agriculture and climate change (2025).*

5. Government management mechanisms

Government management mechanisms are the practical means through which land policy and land legislation become real administrative action. In the course materials, mechanisms include cadastre, regulation of land relations, forecasting, planning for rational use and protection, land management design, economic measures, control, and information support.

The value of this approach is that it teaches students to move beyond abstract definitions. A state may have a policy and a law, but unless there is a mechanism to implement them, the policy remains declarative.

A first mechanism is cadastre and registration. Cadastre compiles spatial, quantitative, qualitative, and valuation-related information about parcels and land categories. Registration gives legal publicity to rights and transactions. Together they allow the state, users, and third parties to know what exists, where it is, who holds what status, and what restrictions may apply. Without these systems, governance becomes opaque. Public institutions cannot plan accurately, users cannot verify rights efficiently, and courts or review bodies must operate with defective information.

A second mechanism is monitoring and forecasting. Monitoring is the systematic observation of land condition and change over time. It helps detect degradation, unauthorized change of use, salinization, erosion, settlement expansion, and mismatches between records and practice. Forecasting extends this logic into the future. It is not fortune telling; it is a planning instrument that asks how land demand, urban growth, irrigation pressure, climate risks, infrastructure expansion, and ecological constraints may evolve. Good public management requires both present knowledge and forward-looking judgment.

A third mechanism is planning and land-use organization. Planning identifies where certain uses are appropriate, how incompatible uses should be separated or managed, how public infrastructure should be aligned, and how environmental sensitivity should be respected. Land management design translates those choices into parcel arrangements, territorial projects, or organizational schemes. In agricultural regions, planning may concern irrigation, drainage, access roads, crop patterns, and protection measures. In urban and peri-urban zones, planning may concern settlement boundaries, infrastructure corridors, green areas, industrial sites, and service access.

A fourth mechanism is control and enforcement. A rule without implementation is only a statement. Control mechanisms inspect legality, detect violations, order correction, and, where necessary, trigger sanctions or remedial action. They also help maintain equality before the law. If some users comply while others benefit from non-compliance, the legitimacy of the entire land system weakens. Control should not be imagined only as punishment. It also includes preventative supervision, administrative guidance, record correction, and institutional learning based on recurring errors.

A fifth mechanism is the economic mechanism. Land taxes, fees, rents, valuation, service payments, incentives, compensation rules, and other financial tools affect user behavior. Economic instruments can encourage efficient and lawful use, discourage holding land idle, support public revenue, and help align private decisions with public goals. At the same time, poorly designed economic tools can produce injustice or perverse incentives. For that reason, economic mechanisms should be analyzed together with legal clarity and social impact, not separately.

A sixth mechanism is information support and digital service delivery. The course book already emphasized information support as a management component. This is even more important today. Digital cadastre, integrated service platforms, geospatial data, interoperable public records, and accessible registration services can reduce administrative burden and improve transparency. Uzbekistan's recent regulatory steps on composite public services for registration and related transactions illustrate the growing importance of user-oriented service design in land governance.

These mechanisms operate across governance levels. Strategic direction is set at the state level, implementation often occurs at regional and district levels, and actual use occurs at the user level. A mechanism works well only when these levels communicate. A national database without local updating fails. A local decision without national legality fails. A user obligation without technical guidance also fails. Students should therefore think of mechanisms not as isolated tools, but as parts of an implementation chain.

Mechanism logic

Policy sets goals. Law defines authority and procedure. Mechanisms organize action. Performance depends on how well those three layers connect.

***Source anchor:** Course book chapters 4-7 on mechanisms, control, and information support; Law on the State Land Cadastre; Law on State Cadastres; regulatory materials on public-service integration from Lex.uz.*

6. Legal foundations of land management

The legal foundations of land management form a hierarchy, and students should learn that hierarchy early. At the top are constitutional principles. In Uzbekistan, the Constitution states that land and other natural resources are national wealth and must be rationally used and protected by the state. This establishes two foundational ideas. First, land has a public character beyond any individual transaction. Second, state protection and rational use are constitutional expectations rather than optional policy preferences.

Below the constitutional level stands the Land Code. For teaching purposes, the Land Code should be seen as the central sectoral act that structures categories of land, legal grounds of use, rights and duties, competence, procedures, and safeguards. Students do not need to memorize every article in the first instance. What matters is that they understand the role of the code: it is the legal architecture within which lower-level regulation, administrative decisions, and user behavior must fit. A code is a framework, not just a list of rules.

Alongside the code are infrastructure laws that make land administration operational. The Law on the State Land Cadastre provides the legal basis for maintaining cadastral information. The Law on State Cadastres gives the broader framework for state cadastre systems. The 2022 Law on State Registration of Rights to Real Estate provides a more modern and explicit legal foundation for registration. From a management perspective, these acts matter because rights are not secure merely because a person believes they exist. Security depends on legally organized visibility, traceability, and reviewability.

Administrative regulations, decrees, and resolutions translate these higher sources into working procedures. They may regulate service delivery, institutional coordination, digital integration, evidentiary requirements, or implementation details. This level is crucial because many everyday land problems emerge not from the absence of broad principles, but from friction within procedures: duplicated applications, unclear deadlines, mismatched databases, incomplete records, or uncertainty about which institution must act first. Students should therefore read procedural regulation with the same seriousness they give to substantive law.

At the same time, the legal foundation of land management is not static. It changes in response to reform agendas, economic transition, environmental stress, and the demand for better service delivery. FAO reported in 2025 that revision of the Land Code in Uzbekistan was underway as part of broader land-governance reform. A World Bank policy note from 2025 described specific reform steps aimed at strengthening land tenure security, increasing flexibility in farm decision-making, and permitting transfer of lease rights. Even without examining each amendment in detail, students should understand the larger lesson: land law must be stable enough to support confidence, but adaptable enough to respond to changing policy needs.

Legal foundations also determine how public interest and user rights are balanced. If the law is too vague, administration becomes arbitrary. If it is too fragmented, users cannot predict outcomes. If it is over-centralized, local realities may be ignored. If it is under-specified,

institutions overlap or avoid responsibility. Good legal design therefore requires clarity, internal consistency, lawful delegation, accessible procedures, and possibilities for complaint and review.

One of the most important academic habits in this field is to distinguish between legal basis and policy justification. A policy may appear desirable, but if the legal basis is missing or defective, implementation remains vulnerable. Conversely, a rule may exist formally, but if its policy purpose is weakly articulated, the rule can be difficult to apply consistently. Strong land governance requires both. Students who learn this distinction are better prepared for real administrative analysis.

Hierarchy reminder

In land governance, always read from top to bottom: constitutional principle -> code or law -> infrastructure law -> implementing regulation -> administrative decision.

Source anchor: *Constitution of the Republic of Uzbekistan (2023 version on Lex.uz); Land Code of Uzbekistan (1998); Law on the State Land Cadastre (1998); Law on State Cadastres (2000); Law on State Registration of Rights to Real Estate (2022); FAO 2025 reform report.*

7. State and land users

The relationship between the state and land users is one of the most practical themes in land management because it shows how public authority appears in ordinary land use. A land user is not simply a passive recipient of commands, and the state is not merely a controller standing above society. The relationship is interactive. The state defines categories, grants or recognizes rights, records legal status, monitors compliance, and protects public interests. Land users cultivate, build, maintain, invest, pay taxes or fees, respect restrictions, and may challenge unlawful decisions. The quality of land governance becomes visible in this everyday interaction.

It is helpful to distinguish among different legal positions of users. Some users may enjoy ownership where law permits it. Others may hold lease rights, permanent or temporary use rights, servitudes, or other legally recognized interests. Each category carries a different bundle of powers and duties. A user may have the right to possess and use land, but not to change its designated purpose without authorization. Another user may have limited access rights over another parcel, but not control over the parcel itself. Legal analysis begins by identifying the category correctly.

With rights come obligations. Lawful land use normally requires using land according to its legal purpose, respecting boundaries, observing planning and environmental restrictions, paying applicable taxes or lease payments, maintaining records where required, and avoiding actions that degrade land or harm neighboring rights. These obligations are not external additions to a right; they are part of the right's legal content. This is an important point for students. A land right is never a purely free-floating power. It exists within a regulated public order.

From the user's perspective, the state should provide several minimum guarantees. Procedures should be knowable. Decisions should be based on legal competence. Records should be reliable. Service delivery should be reasonably accessible. Review and complaint mechanisms should exist. Compensation and due process should be respected where public needs require intervention. If those guarantees are weak, users face uncertainty and become less willing to invest or comply. If those guarantees are strong, users can act with greater confidence, and the state gains legitimacy.

From the state's perspective, the relationship should generate lawful visibility. Public institutions need to know who uses land, under what title, for what purpose, and within what restrictions. This is why cadastre and registration are so central to state-user relations. They translate everyday land use into a legal and administrative language that can be checked, planned, taxed, and protected. Where records are missing or out of date, both the user and the state operate with reduced certainty.

Recent reform discussions in Uzbekistan reflect the importance of this relationship. FAO's 2025 report emphasized stronger tenure security and more market-oriented management of land use rights, while the World Bank's climate-related policy note stressed that secure tenure enables longer-term and more sustainable decisions by farmers. The implication is straightforward: users are more likely to manage land rationally when they face clear rules, stable expectations, and incentives that reward good practice.

Students should therefore think of the state-user relationship not as a conflict by definition, but as a structured legal relationship that must be designed carefully. Too little state presence creates uncertainty, informality, and weak protection. Too much rigid control can undermine initiative, adaptation, and responsiveness to local conditions. The challenge of land management is to create a lawful balance in which users have enough security to act

productively and responsibly, while the state retains enough authority to protect public interests and territorial order.

Practical formula

Good land governance gives users security, clarity, and review; it gives the state visibility, legality, and the ability to protect public interests.

Source anchor: Course materials on state and land users; FAO VGGT principles; FAO land governance in Uzbekistan report (2025); World Bank CCDD and policy note on tenure security.

8. Institutional responsibilities

Institutional responsibility explains how the land sphere is divided among public bodies. This is one of the most important topics for practice because even a good law fails when competence is unclear. Citizens and organizations need to know which body adopts a rule, which body allocates or authorizes land, which body maintains records, which body monitors compliance, and which body reviews complaints. Administrative delay and conflict often arise not because there is no law, but because several institutions touch the same issue without a clear distribution of responsibility.

The course sequence distinguishes between bodies of general competence and bodies of special competence. This distinction is analytically helpful. General-competence bodies deal with land together with many other public matters. They shape broad policy direction, approve general programs, coordinate across sectors, and connect land issues to wider state priorities such as development, infrastructure, agriculture, finance, or environmental management. Special-competence bodies focus on professional or technical land functions: cadastre, mapping, registration, land-control tasks, surveying, or specialized service delivery.

A further distinction is by level. National institutions usually provide strategic direction, framework legislation, national databases, general standards, and sectoral coordination. Regional and district bodies often implement decisions in a territorial context, connect national rules with local conditions, and handle many day-to-day service functions. Local realities matter greatly in land governance, so territorial institutions must not be ignored in favor of only national-level analysis. Users often encounter the state first at the implementation level, not at the legislative one.

Legislative, executive, technical, and judicial or quasi-judicial responsibilities must also be separated conceptually. Legislative functions define the legal framework. Executive functions apply law and issue decisions. Technical functions produce data, maps, records, and

verification. Judicial and review functions resolve disputes, hear complaints, and ensure legality. In practice these functions interact, but confusion among them is dangerous. A body that both creates unclear rules and later judges its own actions without meaningful review creates an accountability problem.

Registration and cadastre responsibilities deserve special emphasis because they strengthen legal certainty across the entire system. When parcel identification, record maintenance, and rights registration are handled with clear competence, other institutions can plan and decide more consistently. When those responsibilities are weak or fragmented, every later process becomes harder: taxation, land-use planning, investment verification, public acquisition, environmental supervision, and dispute resolution all suffer. This is why institutional design in land governance is not an abstract topic; it affects the whole administrative chain.

Control and monitoring institutions also play a protective role. They observe changes in land use, identify violations, provide evidence for enforcement, and reveal systemic weaknesses. Review and dispute-settlement bodies complete the system by offering correction when users believe a decision is unlawful or unfair. Without these protective institutions, users have fewer reasons to trust the legal order.

The main institutional pathologies are well known. Competence may overlap. Functions may be duplicated. Data may sit in separate systems that do not communicate. Local offices may lack capacity. Central rules may be too rigid for territorial realities. Some institutions may carry responsibility without sufficient authority, while others possess authority without clear accountability. A good institutional design seeks the opposite: clear competence, coordination rules, interoperability of information, accessible services, and lawful review. Students should learn to diagnose institutional problems by asking not only what an institution is called, but what function it actually performs, under what legal basis, with what information, and with what accountability.

Institutional test

If you cannot identify the competent body, the legal basis of its action, and the review path against its decision, then the institutional map is still incomplete.

Source anchor: *Course book chapters on regional, district, and city land management; lecture materials on institutional responsibility; Lex.uz framework acts concerning cadastre, registration, and administrative service improvement.*

9. Cadastre, registration, planning, and information systems

Cadastre and registration form the information backbone of land governance. Many students learn early that cadastre records information about land and registration records rights, but the deeper insight is that these systems turn territory into a legally usable and administratively manageable reality. A parcel without clear identification is difficult to tax, transfer, monitor, protect, or include in a coherent land-use plan. A right without registration may exist in social practice, but it is much harder to defend against third parties or integrate into an orderly land market or public decision-making process.

The course book treats the land cadastre as both a mechanism and a source of information. That dual role remains valid. Cadastre is a mechanism because it structures how data are collected, organized, and updated. It is an information source because it provides legal, spatial, quantitative, qualitative, and in some systems valuation-related data for state and non-state use. In the classroom, students should see cadastre not as an archive of static facts but as an operating infrastructure that supports policy, legality, and service delivery.

Registration performs a related but distinct function. It gives public visibility and legal effect to recognized rights, restrictions, and relevant transactions or legal states. For users, this is closely connected with tenure security. For the state, it supports transparency and orderly administration. For markets and finance, it reduces uncertainty. For courts and dispute-settlement bodies, it supplies a formal evidentiary basis. Where registration is incomplete or delayed, all these functions are weakened.

Official reporting from Uzbekistan has shown why this matters in practice. A government report on tasks for the efficient use of land resources publicly identified incomplete documentation, unclear legal status for certain agricultural lands, differences between documented and actual land areas, and cases where land that had effectively become populated or industrial territory continued to appear in reports as agricultural land. Even without focusing on the exact numbers, the lesson is powerful: when records do not match reality, public planning, budgeting, service delivery, and legal protection all become less reliable.

Information systems are therefore not secondary to land governance; they are central to it. Modern public administration increasingly depends on interoperable digital systems, geospatial layers, updated parcel data, and user-accessible services. Lex.uz materials on composite public services and registration reform point toward a public-service model in which related procedures are integrated rather than scattered across institutions. This matters

for both efficiency and legality. The easier it is to trace a right through an integrated and reliable information system, the lower the risk of error, duplication, and user frustration.

Planning depends on these same information foundations. A planning authority cannot make rational decisions about agricultural use, settlement growth, protected areas, drainage, or infrastructure corridors if the data base is incomplete or contradictory. Monitoring also depends on information quality. Salinization, erosion, unauthorized construction, conversion of land use, and territorial expansion can be observed and managed only where data are updated and interpretable.

Students should pay special attention to the difference between data possession and data governance. An institution may hold a large volume of data but still govern poorly if information is outdated, inaccessible, inconsistent, or not connected to decision procedures. Good data governance requires legal rules for updating, sharing, verifying, correcting, and using information in decisions that affect rights and public interests. In this sense, information systems are not only technical platforms; they are part of the rule of law in the land sphere.

Why records matter

When records are weak, rights are harder to protect, planning is less rational, public statistics become unreliable, and enforcement becomes selective.

***Source anchor:** Course book chapters on cadastre and information support; Law on the State Land Cadastre; Law on State Registration of Rights to Real Estate; Government of Uzbekistan report on efficient use of land resources; World Bank LGAF overview.*

10. Economic instruments, control, and dispute resolution

Economic instruments influence land use through prices, payments, incentives, and public finance. Taxes, rents, fees, valuation rules, compensation, and sometimes subsidies or targeted incentives can encourage lawful and efficient use or discourage waste, speculation, and degradation. Students should remember, however, that economic instruments never work in isolation. A tax system built on unreliable records will not perform fairly. A compensation rule applied through weak procedure will not generate trust. A rental market without legal clarity may widen inequality rather than improve allocation. For that reason, economic tools must always be read together with legality and information quality.

The economic mechanism of land management is especially important where land must support both production and public revenue. Rational land taxation can encourage reporting, improve public finance, and make territorial governance more transparent. Rents and lease

payments can also shape user incentives. Yet fairness matters. If economic burdens are detached from actual land condition, legal status, or productive capacity, users may resist compliance or shift into informal practice. Sound land governance therefore requires not only financial instruments, but credible administrative foundations for applying them.

Control and enforcement complement economic instruments. They protect legality by checking whether land is used according to its designated purpose, whether obligations are respected, and whether harmful or illegal change has occurred. The course book's chapter on state land control is valuable precisely because it shows that control is part of management, not an afterthought. No land system remains orderly without supervision. But supervision should itself be lawful, proportionate, and evidence-based. Arbitrary or inconsistent enforcement damages legitimacy just as much as no enforcement at all.

Monitoring bodies, inspectors, cadastral authorities, local administrations, and courts or review bodies may each play part of the control chain. Monitoring detects. Administration verifies. Competent authorities decide. Review bodies correct. This chain illustrates a broader principle: enforcement is not a single event. It is a process. A violation must be identified, documented, assessed under the relevant norm, addressed through an authorized decision, and, where necessary, reviewed through complaint or judicial procedure. Students who understand enforcement as a sequence are less likely to oversimplify practical cases.

Dispute resolution is the corrective side of land regulation. Disputes may arise from boundary uncertainty, overlapping claims, registration errors, unauthorized occupation, disagreement over compensation, conflicts between actual and designated use, or disagreements over administrative competence. A mature land system does not expect zero disputes. Instead, it provides channels through which disputes can be resolved lawfully and with procedural fairness. Courts are one part of this structure, but administrative review and complaint mechanisms can also be important.

Control, economic instruments, and dispute resolution are linked by accountability. A user is more likely to comply with taxes, planning rules, or environmental obligations when the system is understandable, evidence-based, and reviewable. Conversely, users lose trust when they perceive selective enforcement or when the path to complaint is obscure. This is why good land governance protects both public authority and user rights at the same time.

Recent reform debates in Uzbekistan illustrate the relationship between incentives and regulation. The World Bank's 2025 policy note emphasized that stronger tenure security,

greater flexibility in crop choices, and the possibility of transfer of lease rights are important for efficiency and climate adaptation. In other words, governance reform can reduce the need for purely coercive control by improving the incentive environment itself. The best-administered land systems are not those that inspect most often, but those that combine clear rights, accurate records, workable economic incentives, and proportionate enforcement.

Enforcement principle

The goal of enforcement is not punishment for its own sake. It is restoration of legality, protection of public interests, and equal application of the rules.

Source anchor: Course book chapters on state land control and economic mechanisms; World Bank policy note on recent agriculture and climate-related land reforms in Uzbekistan (2025); LGAF overview.

11. Sustainability, climate pressure, and the Central Asia context

Government regulation of land resources cannot be fully understood in Central Asia without considering environmental pressure, water dependence, and climate vulnerability. In arid and semi-arid settings, land governance is inseparable from irrigation, drainage, salinity control, pasture management, desertification risk, and the effects of drought and heat on production systems. For this reason, land management in the region should not be treated as a static cadastral exercise. It is part of a broader strategy of territorial resilience.

The course book already recognizes this by linking rational use, land protection, forecasting, and comparative experience. Recent international materials reinforce the point. The World Bank's Uzbekistan Country Climate and Development Report identifies land tenure security, soil conservation, climate-smart agriculture, and integrated landscape management as important parts of the country's adaptation and productivity agenda. Its argument is significant for students because it connects governance and ecology directly: better land institutions are not only legal improvements; they also support more resilient use of land and water resources.

A World Bank note from 2025 on agriculture and climate change in Uzbekistan adds further detail. It describes increasing climate stress, water scarcity, salinity and degradation challenges, and the importance of farmer education, regional-scale responses, drainage maintenance, and more flexible land-use decisions. This reinforces a key teaching message: sustainability in land governance is not achieved by one environmental clause in a law. It requires a package of tenure security, information, extension, infrastructure, regional coordination, and adaptive policy design.

FAO's work on tenure offers another important insight. The voluntary guidelines on tenure and later FAO work on integrated land and water governance stress that access to land and water should be governed together where possible. This is particularly relevant in irrigated systems, where land without reliable water access may have little practical value, and water without secure land relations may be used inefficiently or inequitably. Students in Central Asia should therefore resist the habit of studying land and water as two unrelated subjects.

UNCCD materials provide the regional and international framing. Central Asia has been a prominent region in discussions of land degradation neutrality, drought, and restoration. UNCCD's regional fact sheet on Central Asia reported that by the end of 2023 all countries in the region were expected to have completed land degradation neutrality target-setting. The importance of this is not only diplomatic. It means that land governance is increasingly evaluated against measurable restoration and degradation targets, not only against traditional administrative indicators.

ADB materials also support the regional relevance of sustainable land management. ADB publications on Uzbekistan and Central Asia have repeatedly linked climate change, natural capital, agriculture, land degradation, and green transformation. Even when specific projects focus on irrigation, transport, or rural development, land remains a cross-cutting concern because nearly every territorial investment changes land use, land value, or land-related risk distribution. Students should therefore see development policy and land governance as closely connected.

In practical terms, a sustainability-oriented land regime does at least six things. It secures rights sufficiently to encourage long-term care. It records land status and change. It coordinates land and water considerations. It identifies degradation and risk early. It aligns incentives with rational use. And it provides institutions capable of responding when ecological stress changes the conditions of use. Sustainable land governance is thus not anti-development. On the contrary, it is one of the conditions for durable development in a region where land and water are under growing pressure.

Regional lesson

In Central Asia, land governance should be read together with water, salinity, drought, settlement growth, and restoration goals.

Source anchor: Course book chapters on rational use and protection; World Bank CCDD for Uzbekistan (2023); World Bank agriculture and climate change note (2025); FAO VGGT and integrated land-water governance materials; UNCCD Central Asia fact sheet; ADB Uzbekistan strategy materials.

12. Reform directions and state role review

The final task of this reading is to bring the entire picture together. By this stage, the role of the state in land resource management should appear more concrete. The state is a rule-maker, a registrar, a planner, a monitor, an enforcer, a service provider, a coordinator, and a protector of public interests. But the state is also limited by law. It must act through competence, procedure, evidence, and review. The quality of the state's role depends not on how much power is exercised in the abstract, but on whether the system is coherent, transparent, and capable of supporting lawful and sustainable land use.

A good review begins with balance. If the state's role is too weak, predictable problems appear: unclear rights, poor records, boundary conflict, informal allocation, selective enforcement, short investment horizons, and under-protection of the environment. If the state's role is too rigid or overly centralized, other problems appear: slow decisions, weak responsiveness to local conditions, over-bureaucratization, reduced initiative, and low trust in public services. The challenge is not to choose between "more state" and "less state," but to design the right state role for the land sector.

That design can be evaluated through several practical principles. The first is legality: every intervention should rest on a clear norm and a competent authority. The second is intelligibility: users should be able to understand the categories, procedures, and obligations that affect them. The third is record reliability: rights and territorial facts should be documented and updated. The fourth is proportionality: regulation should not impose unnecessary burdens unrelated to public need. The fifth is reviewability: users must have access to complaint and dispute-resolution channels. The sixth is sustainability: land governance should support long-term productivity and ecological stability rather than short-term extraction only.

Current reform discussions in Uzbekistan reflect many of these principles. Official and international materials highlight stronger tenure security, digitalization of services, improvement of registration and cadastral systems, revision of the legal framework, and more flexible conditions for productive land use. At the same time, those materials also warn against fragmentation, outdated norms, and information mismatches. This mixed picture is

academically productive. It teaches students that reform is not a single event but an ongoing process of institutional learning and legal adjustment.

For classroom purposes, the most useful review question may be this: can a student explain a land problem by tracing the full chain from public interest to law, institution, mechanism, user impact, and sustainability effect? If the answer is yes, the topic has been understood at more than a memorization level. If the answer is no, the student should revisit the chain and identify the missing link.

Government regulation of land resources is therefore best understood as a system of lawful coordination. It organizes rights, protects public interests, improves spatial order, supports investment, and responds to environmental limits. The state's role is not exhausted by ownership or by policing. It is fundamentally about making land use visible, predictable, reviewable, and sustainable. That is the central lesson of the entire module sequence.

Final takeaway

The best land-governance systems are not those with the most rules, but those in which rules, records, institutions, procedures, and public purposes fit together.

Source anchor: Synthesis of modules LM-W08-V50 to LM-W08-V56; course book chapters on mechanisms, control, and information; FAO 2025 reform report; World Bank LGAF and Uzbekistan CCDR.

Appendix A. Analytical checklist for classroom use

Use the following checklist when analyzing any land-governance case, policy, or dispute. The checklist is intended for essay writing, seminar discussion, and exam preparation.

- 1. Public problem: What public interest is involved: food security, settlement order, infrastructure, environment, revenue, social stability, or another concern?
- 2. Legal basis: Which constitutional principle, code provision, law, or regulation governs the issue?
- 3. Object: What parcel, territory, category of land, or land-related right is under discussion?
- 4. Subject: Which users, institutions, communities, or public bodies are involved?
- 5. Competence: Which body has authority to decide, register, inspect, approve, or review?
- 6. Procedure: What sequence of steps should lawfully occur?
- 7. Information: What cadastral, registration, mapping, or factual data are needed?
- 8. Rights: What powers does the user or holder possess?
- 9. Obligations: What duties, restrictions, taxes, or environmental limits apply?

- 10. Mechanism: Which management mechanism is central in the case: planning, registration, monitoring, control, economic instrument, or another?
- 11. Risk: What could go wrong if records are weak or competence is unclear?
- 12. Review: What complaint, appeal, or judicial path exists if the decision is contested?
- 13. Sustainability: How does the issue affect long-term land quality, water use, or territorial resilience?
- 14. Reform angle: Does the case reveal a gap that could be solved by better law, procedure, coordination, data, or service design?
- 15. Final judgment: Does the current arrangement appear legal, efficient, fair, and sustainable?

Source anchor: This checklist is a teaching synthesis built from the course book and the full module sequence.

Appendix B. Seminar questions and independent study tasks

- Explain why land governance cannot be reduced either to technical surveying or to private contract alone.
- Using the concept of public interest, compare a case of agricultural land use with a case of urban expansion.
- Describe the difference between cadastre and registration and explain why both are needed.
- Discuss the distinction between policy, law, institution, and management mechanism using one example from Uzbekistan.
- Assess whether stronger tenure security can improve both investment and sustainability. Under what conditions?
- Why is institutional clarity as important as legal clarity in land administration?
- How can digital information systems improve legality, transparency, and service delivery in the land sphere?
- Discuss the relationship between land governance and climate adaptation in Central Asia.
- Why may weak records increase not only legal conflict but also public-finance and planning problems?
- Choose one recent reform signal reported by FAO, the World Bank, or official government materials and explain what land-governance problem it is trying to solve.

Independent writing assignment: choose one district- or region-level land-management problem in Uzbekistan or another Central Asian country and analyze it with the 15-point checklist above. Your paper should identify the public problem, legal framework, competent institutions, mechanisms of implementation, user effects, and sustainability implications.

Source anchor: Seminar tasks derived from the conceptual structure of modules LM-W08-V50 to LM-W08-V56.

Glossary

Cadastral: A legally organized system for recording spatial, quantitative, qualitative, and related information about land parcels and other real-estate objects.

Competence: The legally defined authority of a public body to act, decide, register, inspect, or review within a specified field.

Control: The supervisory function through which legality, compliance, and proper land use are checked and corrected.

Due process: The requirement that decisions affecting rights must follow lawful procedures, evidence standards, and review opportunities.

Economic instrument: A financial or value-related tool such as tax, fee, rent, valuation rule, or incentive used to influence land use behavior.

Efficiency: In land policy, the aim of using land and administrative resources productively while reducing avoidable costs and delays.

Enforcement: The process through which violations are identified, assessed, and addressed through competent public action.

Information support: The data, records, maps, and information systems used to guide land-management decisions.

Institutional responsibility: The allocation of specific land-governance tasks among different public bodies and levels of administration.

Land degradation: A decline in the productive, ecological, or functional quality of land caused by natural processes, misuse, or weak management.

Land governance: The way rules, institutions, and processes determine access to land, control over land, use of land, and resolution of land-related disputes.

Land management: The organized planning, administration, and regulation of land resources, land use, and land relations.

Land relation: A legally relevant relationship between a person, institution, or community and a land parcel or land-related right.

Land tenure security: The degree to which people can rely on the recognition, protection, and stability of their land-related rights.

Legal basis: The norm or set of norms that authorizes and structures a public or private land-related action.

Monitoring: The systematic observation of land condition, land use, or land-related change over time.

Parcel: A defined unit of land identified for legal, cadastral, administrative, or planning purposes.

Planning: The public process of organizing territorial uses and coordinating activities in space according to lawful objectives.

Policy: A framework of public goals and instruments that guides state action in the land sphere.

Public interest: The set of societal concerns that justify state action in land governance, such as legality, food security, orderly settlement, infrastructure, environmental protection, and fairness.

Registration: The official recording of legally recognized rights, restrictions, and other real-estate statuses in an authorized public system.

Restriction: A legal limit on how land may be used, transferred, built upon, or accessed.

Sustainability: The principle that land use should preserve long-term productive, ecological, and social value rather than exhaust it.

Tenure: The legal or socially recognized arrangement by which people and institutions hold, use, control, or transfer land.

User right: A legally recognized power to possess, use, lease, own, access, or otherwise benefit from land within the limits of law.

References

1. Rahmonov, Q., Narbayev, Sh. K., and Muqimov, Z. M. Yer resurslarini boshqarish [Land Resources Management]. Tashkent, 2018. User-uploaded course book.

2. Constitution of the Republic of Uzbekistan. Current version available on Lex.uz (English interface).
3. On Approval of the Land Code of the Republic of Uzbekistan, No. 598-I, 30 April 1998. Lex.uz.
4. On the State Land Cadastre, No. 666-I, 28 August 1998. Lex.uz.
5. On State Cadastres, No. 171-II, 15 December 2000. Lex.uz.
6. On State Registration of Rights to Real Estate, No. LRU-803, 28 November 2022. Lex.uz.
7. On Measures to Further Improve the Public Administration System in the Sphere of Public Services, DP-89, 17 March 2022. Lex.uz.
8. Food and Agriculture Organization of the United Nations (FAO). Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.
9. FAO. Voluntary Guidelines on Tenure | Governance of Tenure overview page.
10. FAO. Integrated land use management systems in Uzbekistan - Part 1. Open Knowledge Repository entry.
11. FAO. Governance of tenure in the context of integrated land and water management. 2023 materials.
12. FAO. FAO strengthens land governance in Uzbekistan. News release, 9 October 2025.
13. World Bank. Land Governance Assessment Framework overview page.
14. World Bank. Uzbekistan Country Climate and Development Report. 2023.
15. World Bank. Agriculture and Climate Change Policy Dialogue in Uzbekistan (P502563): Summary Note of Recent Actions on Agriculture and Climate Change in Partnership with the Ministry of Agriculture. 2025.
16. World Bank. Supporting Uzbekistan's Development - country brief, including sustainable land and water management references.
17. Asian Development Bank (ADB). Uzbekistan Country Partnership Strategy, 2024-2028.
18. ADB. Uzbekistan Country Climate Action Plan, linked to the 2024-2028 country partnership strategy.
19. ADB. Uzbekistan: Land Improvement Project - evaluation materials.
20. United Nations Convention to Combat Desertification (UNCCD). Regional factsheet on Central Asia. 2023.
21. UNCCD. Uzbekistan Land Degradation Neutrality target-setting and related country materials.

22. United Nations Sustainable Development. Land Management background materials under Agenda 21 and SDG 15.

Supplementary Appendix C. Short applied case studies

Case study 1: record mismatch and category correction. Imagine a district in which a block of land is still recorded as agricultural in reporting systems, but in practice part of the territory has already become a settlement zone with industrial or service activity. This is not a hypothetical issue only; official reporting in Uzbekistan has publicly acknowledged cases where documented categories did not match actual land use. How should such a problem be analyzed? The first step is not punishment, but diagnosis. Which records are inconsistent: cadastral maps, planning documents, local decisions, tax files, or registration records? The second step is competence analysis: which institutions have authority to verify the factual situation, revise records, and align land category information with reality? The third step is legal analysis: what procedure exists for changing category, correcting information, or recognizing the actual status of land use? The fourth step is public-interest analysis: how does the mismatch affect budget revenue, service provision, planning, and legal certainty? This case teaches that land governance requires informational integrity. Category errors are not minor technical defects; they distort the whole system.

Case study 2: tenure security and adaptive farming decisions. Consider a lawful agricultural user who faces increasing climate variability, water stress, and salinity pressure. If the user expects that land access is insecure, that planting decisions remain tightly constrained, or that rental conditions can be altered unpredictably, long-term soil care and investment become less attractive. A World Bank note on agriculture and climate policy in Uzbekistan highlights the opposite lesson: stronger tenure security and more flexible crop choice improve the ability of farmers to respond to market and climate conditions. The governance question is therefore not only whether the user has a right in the abstract, but whether the design of that right supports adaptive and sustainable behavior. Students should examine how tenure security, administrative flexibility, extension support, and irrigation or drainage conditions interact. This case shows that land regulation can either inhibit resilience or help create it.

Case study 3: salinity, drainage, and institutional coordination. A third case concerns degraded or salinity-affected land where no single institution can solve the problem alone. Monitoring may detect declining quality. Agricultural authorities may advise on production changes. Water-management bodies may be central to drainage and irrigation conditions. Local

authorities may handle territorial implementation. Environmental bodies may identify broader ecological implications. If each institution acts alone, the result may be fragmented and ineffective. But if competence is coordinated, records are shared, and the public objective is clear, the state can organize a more coherent response. This is exactly why institutional responsibility and management mechanisms must be studied together. Many ecological land problems are, in practice, coordination problems inside public administration.

How to use these case studies

For each case, students should identify the public interest, the legal basis, the competent institutions, the key mechanism, the information needed, and the likely impact on users and sustainability.

Source anchor: *Government of Uzbekistan report on efficient use of land resources; World Bank policy note on agriculture and climate change in Uzbekistan; course materials on institutions and mechanisms.*

Supplementary Appendix D. Comparative matrix for revision

The following matrix can be used for exam revision, group discussion, or rapid comparison of land-governance instruments.

Instrument or issue	Main public purpose	Typical institution(s)	Risk if weak
Constitutional principle	States the public status of land and frames rational use and protection	Legislature / constitutional order	Arbitrary policy or loss of public-interest orientation
Land Code and sectoral laws	Define core rights, duties, categories, and procedures	Legislature and competent executive bodies	Legal fragmentation and uncertainty
Cadastre	Provides parcel and land information	Cadastre and mapping authorities	Invisible or inconsistent territorial facts
Registration	Publicizes rights and legal statuses	Registration authorities	Weak tenure security and dispute risk
Planning	Coordinates territorial uses and infrastructure	Planning, local, and sectoral bodies	Spatial conflict and incompatible uses
Monitoring	Detects change, degradation, and unauthorized use	Monitoring and control bodies	Late response and weak evidence
Economic instruments	Shape incentives and revenue	Finance, tax, land, and local bodies	Idle use, unfair burden, weak compliance
Review and dispute resolution	Corrects errors and protects rights	Administrative review bodies and courts	Low trust and prolonged conflict

The matrix shows that land governance should be studied horizontally, not only vertically. Students often revise by topic in isolation - law in one box, institutions in another, sustainability in a third. A stronger approach is to compare each instrument through the same questions: what public purpose does it serve, who applies it, and what failure appears when it

is weak? This method is particularly useful in oral examinations because it helps students answer with structure rather than with disconnected facts.

Source anchor: Synthesis of the full module sequence and the course book's chapter structure.

Reference and web addresses

- Lex.uz Constitution of the Republic of Uzbekistan: <https://lex.uz/en/docs/6451070>
- Lex.uz Land Code of the Republic of Uzbekistan: <https://lex.uz/en/docs/6816142>
- Lex.uz Law on the State Land Cadastre: <https://lex.uz/en/docs/6816227>
- Lex.uz Law on State Cadastres: <https://lex.uz/en/docs/6817154>
- Lex.uz Law on State Registration of Rights to Real Estate: <https://lex.uz/en/docs/6907412>
- Lex.uz public services improvement act DP-89: <https://www.lex.uz/en/docs/6354950>
- FAO Voluntary Guidelines overview: <https://www.fao.org/tenure/voluntary-guidelines/en/>
- FAO land governance toolbox / VGGT page: <https://www.fao.org/land-water/land/land-governance/land-resources-planning-toolbox/category/details/en/c/1043060/>
- FAO strengthens land governance in Uzbekistan (2025): <https://www.fao.org/europe/news/detail/fao-strengthens-land-governance-in-uzbekistan/en>
- FAO Integrated land use management systems in Uzbekistan - Part 1 entry: <https://openknowledge.fao.org/handle/20.500.14283/cc6132en>
- World Bank Land Governance Assessment Framework: <https://www.worldbank.org/en/programs/land-governance-assessment-framework>
- World Bank Uzbekistan Country Climate and Development Report portal: <https://www.worldbank.org/en/country/uzbekistan/publication/ccdr>
- World Bank Agriculture and Climate Change Policy Dialogue in Uzbekistan note (PDF): <https://documents1.worldbank.org/curated/en/099062525093527338/pdf/P502563-edea6e50-988a-4652-8280-5ea3374ef0fc.pdf>
- World Bank country brief on support for sustainable land and water management: <https://www.worldbank.org/en/country/uzbekistan/brief/supporting-uzbekistans-development>
- ADB Uzbekistan Country Partnership Strategy search result and linked publication page: <https://www.adb.org/search0/country/uzbekistan>

- UNCCD regional factsheet on Central Asia:
<https://www.unccd.int/resources/factsheets/regional-factsheet-central-asia>
- UN sustainable development background on land management:
<https://www.un.org/esa/sustdev/sdissues/land/land.htm>