

Governance as Service: A Study on the Construction of a "Identification–Diagnosis–Remediation" Full-Process System for Inefficient Industrial Land in Agricultural Development Zones

-- An Empirical Analysis based on Jiangsu Provincial Modern Agricultural Comprehensive Development Demonstration Zone

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Abstract

Under the dual constraints of the "Three Zones and Three Lines" (sanqu sanxian) territorial spatial planning and stringent controls on construction land quotas, the paradigm shift from "incremental expansion" to "stock quality improvement" in land resources has become a defining challenge of high-quality development. However, many agricultural development zones and county-level industrial parks encounter three interconnected challenges: the "mismatch" of industrial assessment criteria, the "fragmentation" of interdepartmental data, and the "paralysis" of governance tools. Grassroots parks usually lack the power for administrative approval and enforcement. How to effectively remediate inefficient land under such constrained conditions is an urgent practical issue. Taking the Jiangsu Provincial Modern Agricultural Comprehensive Development Demonstration Zone as a case study, and grounding the analysis in the "service provider" positioning of grassroots parks, this paper proposes a theoretical framework and practical pathway for constructing a "Identification–Diagnosis–Remediation" full-process system. The study argues that the core competency of grassroots parks lies not in "command-and-control" but in "knowledge and insight." By establishing a digital "One Enterprise, One File" (dang'an) ledger to break down data silos. Then use a multi-dimensional indicator system for precise identification. And put in place categorized, service-oriented governance pathways to revitalize land. In the end, we can achieve a closed-loop management system with "data-driven identification, multi-dimensional precise diagnosis, and categorized remediation." This offers a replicable "Agricultural Development Zone Solution" for similar parks tackling inefficient land use.

Keywords

Inefficient Industrial Land; Agricultural Development Zone; Identification–Diagnosis–Remediation; One Enterprise, One File; Service-oriented Governance.

1. Introduction

The 20th National Congress of the Communist Party of China explicitly called for "accelerating the green transformation of development models". And it called for "implementing a comprehensive conservation strategy." In 2025, the Ministry of Industry and Information Technology and the National Development and Reform Commission jointly issued the "Guidelines for High-Quality Development of Industrial Parks." The Guidelines mandate that parks develop in a "specialized, intensive, digital-intelligent, green, and standardized" manner. In 2026, the "15th Five-Year Plan" outline further proposed "coordinating the integrated supply

of both existing stock and incremental land". This signals a clear policy shift in construction land allocation. The shift is from focusing primarily on quota distribution to prioritizing the efficient use of existing stock, precise incremental allocation, and structural optimization. This change in policy underscores the declining returns of incremental expansion and makes 'stock quality improvement' a national strategic focus.

A clear policy direction does not always mean easy implementation. Agricultural development zones and county-level industrial parks face structural problems when dealing with inefficient industrial land. First, there is a gap in evaluation standards. The "per-mu output hero" system mainly targets large industrial enterprises. It fails to consider the special mix of agriculture and industry in these zones. [1] Second, data silos exist. Important information like tax records and electricity usage is held by different government departments. Park managers cannot get consistent access to this data. Third, governance has stalled. Grassroots parks lack legal power for administrative approval and enforcement. They cannot solve problems like idle land or illegal subleasing. As a result, they often see the problem but cannot fix it.

These challenges are serious in the Jiangsu Provincial Modern Agricultural Comprehensive Development Demonstration Zone (hereafter referred to as "the Agricultural Development Zone"). This area must promote the integration of modern agriculture and industry. At the same time, it needs to deal with a high share of traditional industries and low land-use efficiency. In 2025, the zone's GDP grew by only 3.2% year-on-year. This was 1.8 percentage points lower than the average of its administrative district. The added value of the secondary industry fell by 2.4% year-on-year. Alarming, 30%–40% of land-supplied enterprises within the zone generate per-mu tax revenues of less than RMB 20,000, with some contributing zero tax revenue. [2]

When grassroots parks have limited authority, the practical question is how they can still govern inefficient industrial land well. In the Jiangsu demonstration zone we studied, the answer did not come from asking for more power. It came from knowing the ground situation better than anyone else.

Most people assume a park must hold enforcement tools to act. Our fieldwork suggests otherwise. What the park lacked in statutory power, it could partly make up for in information. If managers know exactly who occupies each plot, how much tax and power each firm uses, and what stage that firm is at, they can intervene earlier and more precisely. That means the real capacity of a grassroots park is not control. It is knowledge. Not vague knowledge, but the kind built from tax records, cadastral maps, electricity meters, and repeated door to door checks. With those pieces integrated, even a park without penalty rights can match the right firm to the right policy, or push a laggard plot onto the remediation list. We started the paper from this premise. The three steps, Identification, Diagnosis, and Remediation, are not a top down regulatory chain. They are a way for under powered parks to turn scattered data into actionable judgments.

2. Conceptual Definition and Theoretical Foundations

2.1. Defining Inefficient Industrial Land

Inefficient industrial land refers to land whose economic, social, or spatial utilization efficiency is significantly below the regional average or planning expectations over a certain period. It appears as idle land, low output, high energy consumption, or low added value. In practice, identifying inefficient land usually involves key indicators such as per mu tax revenue, per mu output value, floor area ratio, and investment intensity.

However, the definition of inefficient land in agricultural development zones cannot simply copy the standards used in ordinary industrial parks. These zones contain both industrial enterprises and leading agricultural firms, agricultural product processors, and agriculture

related manufacturers. These entities differ from traditional industrial companies in terms of land use scale, production cycles, and tax contributions. If a single standard is applied to measure all these different types of entities, it may unfairly penalize well performing enterprises that have longer cultivation periods. Therefore, the identification process requires a differentiated evaluation system that fully considers the specific characteristics of different industries, scales, and development stages. [3]

2.2. Theoretical Framework

Theory of Intensive Land Use. This theory holds that efficiency can be improved by increasing inputs and optimizing allocation on limited land. In other words, when the input output ratio of a land unit falls below a set threshold, it can be classified as inefficient.

Theory of Information Asymmetry. In park governance, there is an information gap between the government and enterprises. Enterprises have deeper knowledge of their own operations and land use, while park management often relies on limited public data. This imbalance is a root cause of incomplete identification, difficult diagnosis, and obstacles in remediation. Therefore, institutionalized methods for collecting and integrating information need to be established to close this gap.

Theory of Service-Oriented Government. This theory suggests that the government's role should not just be a regulator, but rather a service provider. It emphasizes creating a good business environment through providing information, policy guidance, and platform building. For grassroots parks that lack enforcement power, the key is to accurately identify enterprise needs, proactively match policy resources, and build communication platforms, achieving governance through services. This is exactly what proactive action looks like.

2.3. The Logical Basis of the "Identification-Diagnosis-Remediation" System

This system is built on three hierarchical premises. First, identification is the prerequisite for remediation. Without precise identification, effective remediation is impossible. The core task is to quantify who is inefficient and to what degree through data collection and index evaluation. Second, diagnosis is the bridge to remediation. Identification addresses what, whereas diagnosis addresses why, such as operational challenges, property rights conflicts, planning inconsistencies, or intentional land banking. Different causes dictate different remedies. Third, the purpose of identification is remediation, and diagnosis ends with precise and categorized intervention. When authority is limited, remediation centers on guidance rather than coercion, promoting transformation via policy incentives, service integration, and resource provision. These three steps form an interlocking closed loop: Data leads to Evaluation, which leads to Diagnosis, which leads to Categorization, which leads to Intervention, which leads to Supervision.

3. The Triple Dilemmas of Inefficient Land Governance

The governance of inefficient industrial land in the Agricultural Development Zone is hindered by a triple bind, creating a vicious cycle of "easy to spot, rough to analyze, and difficult to resolve."

3.1. The Standard Mismatch Dilemma

The "per-mu output hero" evaluation framework at the national, provincial, and municipal levels is primarily designed for "industrial enterprises" (typically large-scale enterprises and those using 3 mu or more). Directly applying metrics like per-mu tax revenue and per-mu output to non-typical entities within the agricultural zone leads to distorted evaluation outcomes. Academic research corroborates that existing systems predominantly focus on economic and social benefits, lacking context-specific indexes for high-quality development,

which often results in a "one-size-fits-all" approach. [4] For instance, traditional concrete and building-material enterprises, which occupy large land areas with relatively low per-mu tax yields, cannot be fairly compared to high-precision manufacturing firms using the same yardstick. [5]

3.2. The Data Silo Dilemma

Tax data is difficult to obtain. Tax contributions are core evaluation indicators, but tax authorities enforce strict confidentiality protocols. Obtaining records requires multi-level approvals and data is often delayed by up to a month, with coarse granularity that cannot be easily tied to specific land parcels.

Electricity data channels are blocked. Power consumption data is a vital "barometer" of actual enterprise production activity. While the power utility holds real-time data, and the industry and information technology department monitors industrial economic operations, the park-level management lacks standardized data-sharing mechanisms and relevant statistical authority. The park relies on a street-level statistical station that only reports data for large-scale enterprises. Since numerous inefficient and idle land parcels are occupied by small-scale enterprises, the park cannot utilize power consumption data to identify cases of "suspended production and disguised subleasing."

Data collection from small-scale enterprises is difficult. There is a high volume of small-scale industrial, wholesale, retail, and catering entities, but no standardized reporting mechanism exists. The park must rely on limited manpower to contact accountants via phone, undermining data timeliness and accuracy, while also risking resentment from enterprises. The conflict between understaffing and data demands is intensifying.

3.3. The Governance Paralysis Dilemma

Affected by the macroeconomic downturn, traditional manufacturing and construction sectors in the zone have significantly contracted. Many business owners lack confidence in the real economy due to thin profit margins and high risks. Preferring the stable rental income of being an "industrial landlord," a considerable number have subleased or directly idled their factory premises. However, the most significant impediment is the severe lack of authority. The Environmental Protection and Safety Supervision Bureau, being an internal park agency, possesses no legal authorization or coercive means to halt unauthorized land-use changes. Government land acquisition is prohibitively costly and protracted. For parcels mired in debt disputes or multiple judicial seizures, the park is rendered helpless.

What ties the three problems together is a simple fact: the park simply does not know enough. Standards do not match because no one is sure what criteria fit. Data stays scattered because no one trusts the numbers from other departments. Nothing gets done because no one knows where to start. Each of these failures traces back to the same root. The park lacks complete, accurate, and timely information about its own enterprises and land parcels. This means the real solution is not about asking for stronger enforcement powers. It is about putting a systematic mechanism in place first. That mechanism is exactly what this paper tries to build. We call it the Identification, Diagnosis, and Remediation system. Its whole purpose is to turn fragmented data into something the park can actually act on.

4. Building a Precision Identification System for Inefficient Industrial Land

Precise identification requires figuring out who is inefficient and to what extent. To achieve this, data collection and indicator evaluation must move forward together.

4.1. One Enterprise, One File: Foundational Data Acquisition through a Digital Ledger

This step lays the groundwork for everything that follows. Borrowing the logic of personnel file management, the system creates a single digital record for each enterprise that brings together data from multiple sources. [6] Each file covers six areas:

Spatial Data: Land area, ownership, parcel boundaries, floor area ratio, building density.

Ownership Data: Holder of land use rights, source of those rights, remaining tenure, and any mortgage or seizure status.

Economic Data: Tax payments, output value, operating revenue, investment intensity, per-mu output.

Energy Data: Electricity consumption, water usage, energy intensity.

Operational Status Data: Number of employees, capacity utilization rate, order book status, and current concerns, which require field research to collect.

To break down barriers between government departments, the park should sign standardized data sharing agreements with tax authorities, power suppliers, and natural resources bureaus. These agreements need to specify how often data is exchanged, in what format, and under what confidentiality rules. [7] For smaller enterprises, a mix of regular site visits and voluntary reporting works best.

4.2. Multi-Dimensional Indicator Identification System

A one size fits all standard does not work here. A multi dimensional framework is needed instead. This paper proposes three tiers of indicators.

Bottom-Line Indicators (Veto Items): Ecological compliance, safety standards, and land idling beyond statutory periods.

Comprehensive Efficiency Indicators (Core Evaluation): Per-mu tax revenue, per-mu output, energy intensity, and FAR. Crucially, agricultural zones must incorporate industry correction coefficients to adjust for sector-specific variations and prevent cross-industry distortions.

Potential Correction Indicators (Dynamic Adjustment): Science and technology quotient, industry prospects, and cultivation periods for start-ups. This allows for course correction in evaluations, preventing temporarily struggling quality enterprises from being permanently labeled as inefficient.

4.3. Common Characteristics of Inefficient Land

"Land without output": Occupied land is idle, semi-idle, or operating at minimal capacity.

"Enterprises without tax": Minimal or zero tax contribution disproportionate to land occupation.

"Nominal ownership without actual productivity": The owner has sublet the premises, acting as a landlord with zero actual industrial output.

"Unclear ownership": Entangled in complicated mortgages, judicial seizures, or legal disputes.

5. Building an In-Depth Diagnosis System for Inefficient Industrial Land

If identification answers "who," diagnosis answers "why" —clarifying the root cause is essential for targeting remedies.

5.1. Diagnostic Dimensions

Enterprise Dimension: Whether inefficiency stems from external market forces (cyclical downturns) or poor internal management, and the owner's willingness to improve.

Property Rights Dimension: The clarity and transferability of land-use rights, and the existence of legal encumbrances.

Planning Dimension: The location, alignment with the zone's industrial plan, and current development intensity relative to requirements.

5.2. The "One Parcel, One Strategy" Diagnostic Model

Based on the above, inefficient land can be classified into four types:

Operational Difficulty Type: Viable businesses hamstrung by market, financial, or cyclical challenges. Core feature: "willing but unable."

Land Banking Type: Land acquired for speculation and subleasing, not industrial operation. Core feature: "able but unwilling."

Complex Property Rights Type: Parcels immobilized by debt and legal issues. Core feature: "unable to move despite willingness."

Planning Mismatch Type: Land uses incompatible with the zone's strategic direction. Core feature: "wrong trajectory." [8]

6. Building a Categorized Governance System for Inefficient Industrial Land

Under restricted authority, the core strategy is "governance through service and service through governance" -avoiding draconian blanket clearance in favor of precise service provision and policy guidance.

6.1. General Remediation Pathways

Technological Upgrading Assistance: For "operational difficulty" enterprises, support technological and managerial improvements.

Market-Based Transfer: For "land banking" or insolvent "operational difficulty" firms, guide the transfer of land/factories to higher-quality users.

Government Acquisition: Lawfully reclaim and redevelop land with "complex property rights" or "planning mismatch" issues.

6.2. Categorized Measures

For Operational Difficulty: The park plays a supportive role, helping to secure financing, widen market channels, or gain access to technology-upgrade subsidies. Core logic: "Lend a hand and help them up."

For Land Banking: Policy-based pressure—truthful efficiency ratings, preferential allocation of resources to high-performing firms, and supervisory interviews. Core logic: "Make inefficiency costly and efficiency profitable."

For Potential-Limited Firms (temporary difficulties): Establish dynamic monitoring mechanisms, updating evaluations as conditions improve. Core logic: "Give them time and space."

For Planning Mismatch: Implement a smooth transition by enforcing planning restrictions, rigorously assessing new projects, and motivating existing companies to follow the master plan. Core logic: "Control increments, guide the stock."

6.3. Safeguard Mechanisms

Organizational: Form a dedicated task force led by senior park officials.

Policy: Formulate differentiated incentive/disincentive policies within existing authority, and actively pursue higher-level financial/regulatory support.

Supervision: Implement an annual "One-Year Update" and "Three-Year Review" dynamic monitoring system for timely detection and intervention.

7. Conclusion

Using the Jiangsu Provincial Modern Agricultural Comprehensive Development Demonstration Zone as a case, this paper systematically analyzes the three-fold dilemmas (standards, data, governance) and proposes the "Identification–Diagnosis–Remediation" solution. The core findings are threefold:

First, the core competency of grassroots parks lies in knowledge and insight, not control. Confined by limited authority, the most crucial and feasible task is to systematically understand the true operational and land-use conditions of every enterprise. "One Enterprise, One File" is the means to eliminate information asymmetry, forming the basis for precise services and effective governance.

Second, "Identification–Diagnosis–Remediation" is a complete, sequential closed-loop. Each stage is indispensable; failure at any link undermines the entire governance effort.

Third, service-oriented governance is the optimal strategy under constrained authority. For struggling firms, service is governance; for land bankers, institutional design is governance; and for legally complex parcels, negotiation and coordination are governance.

Looking toward the "15th Five-Year Plan" period, the governance of inefficient industrial land will transition from sporadic campaigns to routine management. For this Agricultural Development Zone, the immediate priority is to start now, starting with filing-documenting every enterprise, clarifying the status of every parcel, and thoroughly analyzing each case of inefficiency. This will lead to annual updates and a digital platform enabling smart management "at the click of a button."

Our positions may be humble, but we are mindful of the national strategy. As grassroots park staff, we may lack policy-making power, but we have the duty to thoroughly master our assets; we may lack coercive enforcement, but we bear the responsibility to provide precise services. The governance of inefficient land is a sustained battle, but with steadfast direction, measured steps, and persistent effort, we will unlock the space and momentum essential for the zone's high-quality development.

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