Social Development Studies, 2026, Volume 2, Issue 3
https://www.bbwpublisher.com/journal/SDS
Online ISSN: 3083-3868
Print ISSN: 3083-3876

Governance Vulnerability in China's Complete Community Construction: Risk Sources and Resilience Pathways

Dongyao Liang[1], Xinyu Liu[1], Simin Chen[2], Hongliang Zeng[1]*

[1]School of Architecture and Civil Engineering, Huizhou University, Huizhou 516007, Guangdong, China
[2]School of Architecture and Urban Planning, Guangdong University of Technology, Guangzhou 510006, Guangdong, China

Author to whom correspondence should be addressed.

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: China's complete community initiative has moved rapidly from policy design to large-scale implementation, yet the governance capacity of communities has not grown at the same speed. This paper argues that the main constraint on complete community construction is no longer the supply of facilities but the vulnerability of community governance itself. Drawing on vulnerability and resilience research, the paper identifies three sources of governance vulnerability: conflicts over facility siting driven by perceived negative externalities, the uneven capacity of socially vulnerable groups to participate in and benefit from renewal, and the institutional and fiscal fragility of pilot-based construction. It then proposes a resilience-building pathway that combines risk perception assessment, social vulnerability mapping, adaptive participatory governance and diversified operation funding. The paper calls for a shift from construction-oriented to governance-oriented complete community policy.

Keywords: Complete community; Community governance; Social vulnerability; Negative externalities; Risk perception; Urban resilience

Online publication: June 30, 2026

1. Introduction

Since the Ministry of Housing and Urban-Rural Development (MOHURD) issued the Guide for Complete Residential Community Construction in December 2021 [1], complete community construction has become one of the most visible instruments of China's urban renewal action. A national pilot programme covering 106 communities was launched in July 2023 [2], and provinces have followed with their own pilot lists and construction standards. The physical agenda is ambitious: within a walking distance of five to ten minutes, residents should reach public services, commercial facilities, municipal infrastructure, activity space, property management and community governance.

Early results are encouraging. Playgrounds, canteens for the elderly, pocket parks and renovated infrastructure have appeared in many pilot communities, and the physical environment of older neighbourhoods has visibly improved. Yet field observations and media reports increasingly point to a different kind of problem. Facilities that were built with considerable effort sit idle. Services introduced during the pilot period are withdrawn when subsidies end. Residents object to the siting of waste stations, care facilities or parking structures, and some projects stall under the pressure of neighbourhood opposition. Property management companies struggle to collect fees, and community organisations lack the staff and money to maintain what construction has delivered.

These symptoms suggest that the bottleneck of complete community construction is shifting from hardware to governance. A community can be physically complete and institutionally fragile at the same time. If the governance system cannot absorb conflict, distribute costs and benefits fairly, and sustain operation after the construction teams leave, the achievements of renewal will erode quickly.

This paper examines the governance side of complete community construction through the lens of vulnerability. Vulnerability research, developed in hazards and climate studies, understands vulnerability as the combination of exposure to stress, sensitivity to its effects and the capacity to adapt [3]. Community resilience, its positive counterpart, refers to the ability of a community to absorb disturbance and reorganise while retaining its essential functions [4,5]. We ask three questions. Where does governance vulnerability in complete community construction come from? How can it be assessed before it turns into open conflict or project failure? And what governance arrangements can turn a vulnerable community into a resilient one?

The paper is a conceptual contribution grounded in policy analysis and in the authors' ongoing research on risk perception and social vulnerability assessment of urban public facilities in Huizhou, Guangdong. Section 2 clarifies the concept of governance vulnerability in this context. Section 3 analyses three sources of vulnerability: negative externalities of facility siting, social vulnerability of residents, and institutional fragility of pilot-based construction. Section 4 proposes a resilience pathway. Section 5 concludes.

2. Understanding governance vulnerability in complete communities

Governance vulnerability is not the same as poor governance. A community may have active staff, reasonable funding and modern facilities, and still be vulnerable if its governance arrangements cannot cope with a foreseeable shock: a controversial facility proposal, the withdrawal of a subsidy, a sudden change in population. Following the vulnerability framework used in environmental and climate research [3,6], we describe governance vulnerability in complete communities as a function of three elements.

The first is exposure: the stresses that complete community construction brings into a neighbourhood. Construction disturbs established routines, redistributes space, and introduces new facilities whose benefits and burdens are unevenly spread. The second is sensitivity: the degree to which residents and local organisations are affected by these stresses. An ageing population, a high share of tenants, or a history of distrust towards authorities all raise sensitivity. The third is adaptive capacity: the resources that governance actors can mobilise to respond, including money, staff, information, legitimacy and channels for participation.

Vulnerability is high when exposure and sensitivity are high and adaptive capacity is low. **Figure 1** summarises this framework. This framing matters for practice because it redirects attention. Instead of asking whether a facility meets the construction standard, it asks whether the governance system can carry the facility through its life cycle: siting, construction, operation, maintenance and eventual adaptation.

The concept also connects two strands of research that have so far developed separately. The first is the study of negative externalities and locally unwanted land uses, which explains why facilities that are beneficial at the city scale can face intense opposition at the neighbourhood scale [7,8]. The second is social vulnerability research, which shows that the capacity to cope with stress is unevenly distributed across social groups [9,10]. Complete community construction sits exactly at the intersection of these two strands, and this intersection is where its governance risks concentrate.

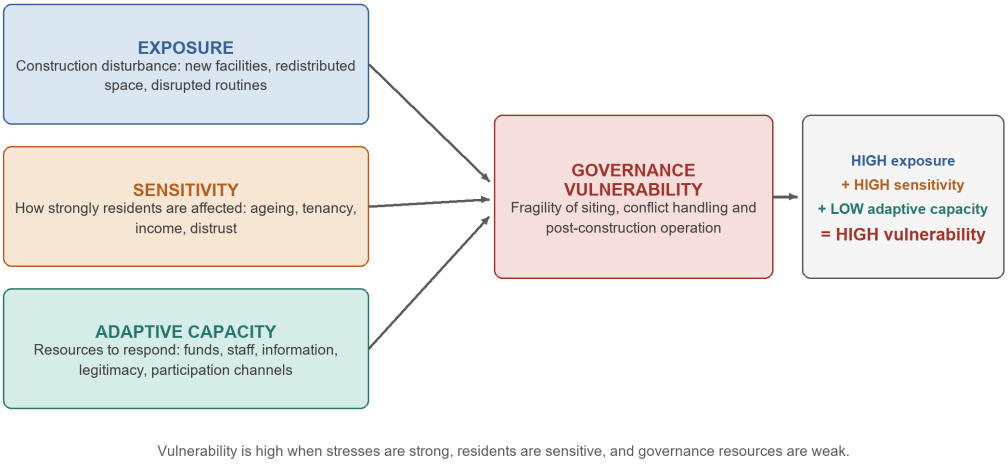


Figure 1. Governance vulnerability framework: exposure, sensitivity and adaptive capacity.

3. Three sources of governance vulnerability

Governance vulnerability in complete community construction arises from three interacting sources, mapped in **Figure 2**.

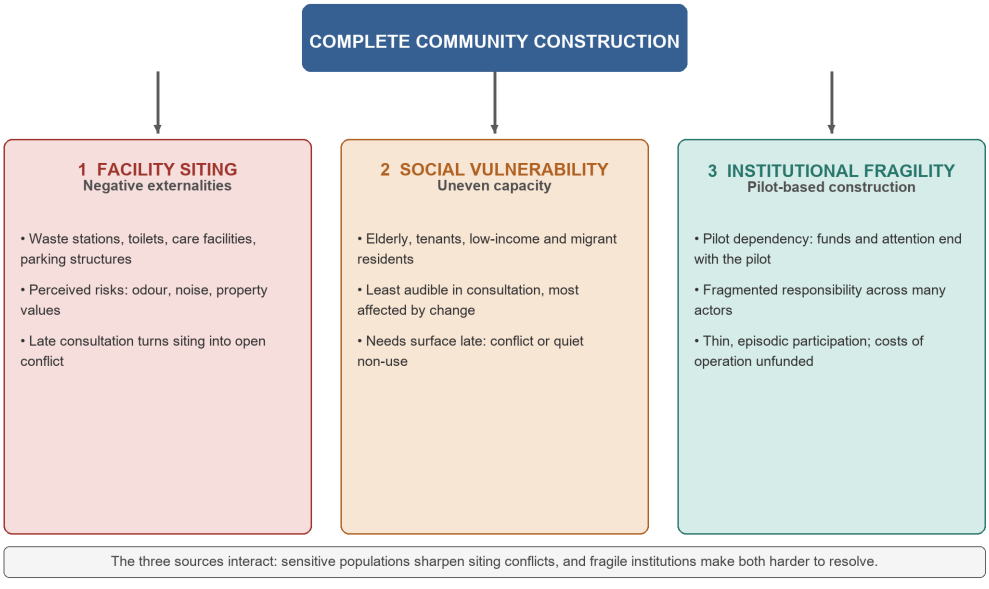


Figure 2. Three sources of governance vulnerability in complete community construction.

3.1. Facility siting and perceived negative externalities

Complete community construction brings facilities closer to residents, and proximity is usually celebrated as its core achievement. Yet proximity cuts both ways. Some facilities that the construction standard encourages, such as waste collection points, public toilets, care institutions for people with disabilities, medical stations or parking structures, are precisely the kinds of facilities that generate perceived negative externalities: odour, noise, traffic, safety concerns and feared effects on property values. Research on locally unwanted land uses has long shown that opposition to such facilities is not simply selfishness; it reflects genuine, if sometimes exaggerated, risk perception, and it grows when decisions are made without transparent information and fair procedures [7,8].

In complete community projects, this dynamic appears in a compressed form. Construction timetables are tight, pilot assessments reward visible outputs, and siting decisions are often finalised before residents are meaningfully consulted. A waste station that is technically well located can still trigger petitions if residents learn about it only when construction begins. Once opposition mobilises, projects are delayed, relocated or abandoned, and the community's trust in subsequent projects is damaged.

Risk perception research suggests that people judge risks not only by probability and consequence but also by voluntariness, controllability and fairness [11]. A facility imposed without consultation feels riskier than the same facility chosen through participation. This insight has a practical implication: the governance of siting is as important as the technical quality of siting, and procedures that share information early and distribute costs visibly can reduce conflict before it hardens.

3.2. Social vulnerability of residents

The second source of vulnerability lies in the population itself. Complete community construction is explicitly oriented towards everyday life and vulnerable groups, especially the elderly and children. Yet the capacity of these groups to articulate needs, take part in consultation and make use of new facilities is uneven.

Social vulnerability research has demonstrated that age, income, health, education, housing tenure and social networks jointly determine how strongly people are affected by change and how well they can adapt [9,10]. In many older neighbourhoods targeted by complete community construction, these factors concentrate. Elderly residents may need the new canteen most but be least able to attend a consultation meeting about it. Tenants and migrant workers may use public space intensively but have no formal channel to speak about it, because consultation runs through homeowners' organisations. Low-income households may depend on informal services, such as street vendors or repair stalls, that renovation removes in the name of order.

The result is a paradox. The groups with the highest sensitivity to construction are often the least audible in governance. When their needs surface late, they surface as conflict or as quiet non-use: the elegantly renovated space that stays empty because it was designed for an imagined user. A community in which a large share of residents cannot voice or absorb change is a sensitive community in the technical sense, and sensitivity translates directly into governance vulnerability.

Social capital partially compensates for this. Neighbourhoods with dense networks of trust and association can organise support, spread information and absorb shocks collectively [12]. Many complete community pilots invest in exactly this: volunteer teams, community activities, neighbourhood festivals. But social capital takes time to accumulate, and it can also exclude. Strong networks among long-term

homeowners may further marginalise tenants. Measuring who is vulnerable, rather than assuming it, is therefore a precondition for fair construction.

3.3. Institutional and fiscal fragility of pilot-based construction

The third source of vulnerability is built into the way complete community construction is organised. It proceeds largely through pilots, campaigns and project-based funding. This model is effective at producing visible results quickly, but it carries structural weaknesses.

First, pilot logic creates dependency. During the pilot period, money, attention and political support are abundant; when the pilot ends, communities return to normal budgets and staffing, and the new facilities must survive on local resources. Operation and maintenance costs, which the construction standard acknowledges but does not fund, fall on property management companies, residents or community organisations. Research on community operation in Zhejiang's future communities documents precisely this pattern: paradoxes in sustainable operation arise when construction is campaign-driven, but operation must be market- or community-based [13].

Second, responsibility is fragmented. Complete community construction involves housing authorities, planning agencies, subdistrict offices, residents' committees, property companies, social organisations and residents. No single actor owns the whole chain from construction to operation, and coordination costs rise with every additional actor. When something goes wrong, responsibility is easily deflected.

Third, participation remains thin. Although the policy vocabulary emphasises co-construction and shared governance, in practice many decisions are still made top-down and consultation is late and formal. Community planners, where they exist, help to translate between residents and authorities [14], but they are not yet a universal institution. Without routine channels for participation, every project becomes a separate negotiation, and governance capacity cannot accumulate from one project to the next.

These weaknesses matter because they determine what happens after construction. A community that cannot fund maintenance, assign responsibility and resolve disputes will gradually lose the physical completeness that construction created. Institutional fragility is thus the deepest layer of governance vulnerability.

4. From vulnerability assessment to resilience building

If governance vulnerability has identifiable sources, it can also be assessed and reduced. We propose a pathway with three steps, which together shift complete community policy from construction-oriented to governance-oriented. **Figure 3** illustrates this pathway.

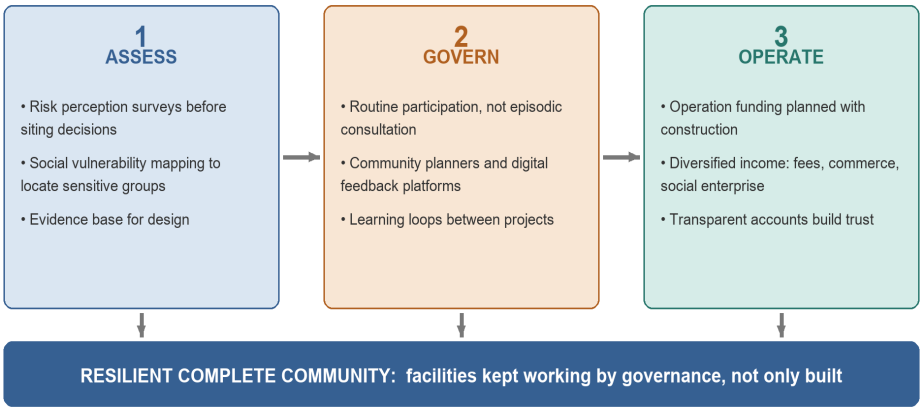


Figure 3. A resilience-building pathway for complete communities.

4.1. Assess risk perception and social vulnerability before construction

The first step is measurement. Before siting decisions are finalised, communities can conduct rapid risk perception surveys around planned facilities, asking residents what they worry about, how they judge fairness, and what information or compensation would increase acceptance. Combined with social vulnerability mapping, which uses census and survey data to locate groups with high sensitivity and low adaptive capacity, this produces an evidence base for design. Vulnerability assessment of urban public facilities, an emerging research area, provides methods that can be adapted to the community scale. The cost of such assessment is small compared with the cost of a stalled project or an idle facility.

4.2. Build adaptive and participatory governance

The second step is institutional. Communities need routine, not episodic, participation: standing consultation mechanisms, community planners with stable roles, and digital platforms through which residents can report problems and track responses. Adaptive governance research emphasises learning, feedback and shared decision-making [15]; in complete communities this means treating each project as an experiment whose outcomes are monitored and whose lessons modify the next project. Participation also redistributes risk perception: facilities chosen through visible, fair procedures encounter less resistance, because voluntariness and fairness shape acceptance [11].

4.3. Secure sustainable operation

The third step is fiscal. Operation funding should be planned together with construction funding, not after it. Possible sources include reasonable service fees, community commercial income, public welfare funds and social enterprise partnerships. The lesson from future community operation research [13] is that no single source is sufficient; resilience lies in diversification. Transparent accounts, in turn, support the trust on which fee collection and volunteering depend. Community resilience scholarship similarly emphasises that economic resources, social capital, information and organisational competence reinforce one another [5].

5. Conclusion

Complete community construction has delivered real improvements to the physical environment of Chinese neighbourhoods. Its next challenge is governance. This paper has argued that the vulnerability of community governance arises from three sources: conflicts over facility siting driven by perceived negative externalities, the uneven capacity of socially vulnerable groups to participate and benefit, and the institutional and fiscal fragility of pilot-based construction. These sources interact: sensitive populations make siting conflicts sharper, and fragile institutions make both harder to resolve.

The policy implication is a shift in emphasis. Construction standards and pilot assessments should be complemented by governance assessment: risk perception and social vulnerability surveys before construction, routine participatory institutions during it, and planned, diversified operation funding after it. A complete community, in the end, is not only a place where facilities are within walking distance, but a community whose governance can keep them working. Measuring and building that capacity is where research and practice should meet next.

Funding

Huizhou Philosophy and Social Sciences Planning Project (Project No.: 2025ZX117); Guangdong Provincial College Students' Innovation and Entrepreneurship Training Program (Project No.: S202510577115 & S202410577119X)

Disclosure statement

The authors declare no conflict of interest.

References

[1] Ministry of Housing and Urban-Rural Development of China, 2021, Guide for Complete Residential Community Construction. Beijing: MOHURD.

[2] Ministry of Housing and Urban-Rural Development of China et al., 2023, Notice on the Pilot Work of Complete Community Construction in 106 Communities.

[3] Intergovernmental Panel on Climate Change, 2022, Climate Change 2022: Impacts, Adaptation and Vulnerability. Cambridge: Cambridge University Press.

[4] Cutter SL, Barnes L, Berry M, et al., 2008, A Place-Based Model for Understanding Community Resilience to Natural Disasters. Global Environmental Change, 2008, 18(4): 598–606.

[5] Norris FH, Stevens SP, Pfefferbaum B, et al., 2008, Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. American Journal of Community Psychology, 41(1–2): 127–150.

[6] Turner BL, Kasperson RE, Matson PA, et al., 2003, A Framework for Vulnerability Analysis in Sustainability Science. Proceedings of the National Academy of Sciences, 100(14): 8074–8079.

[7] Dear M, 1992, Understanding and Overcoming the NIMBY Syndrome. Journal of the American Planning Association, 58(3): 288–300.

[8] Schively C, 2007, Understanding the NIMBY and LULU Phenomena: Reassessing Our Knowledge Base and Informing Future Research. Journal of Planning Literature, 21(3): 255–266.

[9] Cutter SL, Boruff BJ, Shirley WL, 2003, Social Vulnerability to Environmental Hazards. Social Science Quarterly, 84(2): 242–261.

[10] Wisner B, Blaikie P, Cannon T, et al., 2004, At Risk: Natural Hazards, People's Vulnerability and Disasters. 2nd ed. London: Routledge.

[11] Slovic P, 1987, Perception of Risk. Science, 236(4799): 280–285.

[12] Putnam RD, 2000, Bowling Alone: The Collapse and Revival of American Community. New York: Simon & Schuster.

[13] Wang JT, Wu JB, Zhang Q, 2025, Paradoxes in Sustainable Community Operation and Their Resolution Strategies: A Case Study of Future Communities in Zhejiang Province. Planners, 41(8): 82–88.

[14] Liu JY, 2026, Reshaping the Logic of Community Renewal and Planning Empowerment: Reflections on the 15th Five-Year Plan for Urban Renewal. Urban Planning Society of China.

[15] Folke C, Hahn T, Olsson P, et al., 2005, Adaptive Governance of Social-Ecological Systems. Annual Review of Environment and Resources, 30: 441–473.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.