Policy Brief

Ashank Desai Centre for Policy Studies
Indian Institute of Technology Bombay
Insight • Dialogue • Impact

Revamping Urban Planning Practice for Resilience

Ecologically Sound, Context-Specific, Bottom-up and Inclusive Planning

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Executive Summary

Currently cities are facing newer challenges due to climate change in the form of extreme events, urban flooding, rising heat and water stress. Yet, urban planning practice in India continues to rely on development plans that are based on dated colonial-era modernist planning tools that are unable to address our urban issues. Public participation is limited to inviting public suggestions and objections after the plan is ready. This policy brief argues for a shift in urban planning practice from the current exclusive land-use focus to one that addresses the city as an open socio-ecological system. It proposes a change from the top-down expert mode of plan preparation to one that is bottom-up, inclusive and ecologically sound. Institutionalising these principles within urban planning processes can help Indian cities become more resilient, inclusive and responsive to the communities and ecosystems that sustain them.

Introduction

Master Plans or Development Plans of Indian cities are usually a 'numbers game', based on demographic projections over a long horizon of 10 or 20 years. Plan preparation is a top-down expert activity conducted within the ambit of state-level town-planning laws, using a conventional set of planning tools and 'template' solutions that get replicated in all cities, almost regardless of contextual differences. Drawing on the author's experience of preparing multiple regional and development plans, on the on hand and specifically the experience of preparing a bottom-up participatory Master Plan in a small Kerala town (see case study below), on the other, this policy brief argues for a completely different plan-preparation process that centres local knowledge in combination with multi-disciplinary expert knowledge.

Plans are focused on establishing visual order (through geometry) and regulating future development in the city through development control regulations. As template solutions, that knowingly or unknowingly, derive from Western modernist planning models like the Garden city or Radiant city models, they are blind to the specificity of place, ecological considerations, and settlement history. Moreover, they acknowledge neither the acute urban inequality nor the widespread informality that is a feature of Indian cities. They, therefore, seek to dismantle both informal housing and livelihoods even though that is all that the majority can access. This sets up a severe contradiction with urban realities in our country, where over 90% of the workforce is informally employed and a significant number of people (from a quarter to three quarters of city populations) live in informal settlements. It does not help that people, in general, are typically absent from the Development Plan preparation process. Typically, they only get their first look at their own city's proposed Master Plan only after the plan proposals are ready and opened to the public for suggestions and objections. This is too little, too late.

The existing legal frameworks directing plan preparation imbue planning practice with key limitations. One, planning focuses mainly on safeguarding property rights. Two, it does recognize certain environmental and heritage assets, but only when they are already protected

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by law, for instance, legally notified forests, national parks and wildlife sanctuaries, the coastal zone, and built heritage assets or precincts. As a result, watersheds, hill slopes, rivers, springs, ground water and aquifers that are not protected by law but are ecologically valuable (and often, vulnerable) areas are rarely cognized or protected by plans. Three, local practices that have emerged over decades and centuries in response to local climate values, history, knowledges, and aspirations, also find no place in this expert exercise in spite of their significant social, economic and environmental value. And finally, four, since spatial plans are prepared in a universalist mode, they are unable to address all the issues that people face due to differences in age, caste, gender, ability and means. As a result, by and large, spatial plans are unable to respond constructively to concerns related to environment, heritage and marginalized communities. This is a significant limitation that needs to be overcome, especially given the multiple social and environmental crises that we are faced with.

While these goals are increasingly being accepted we do not have enough examples of how they might be met in practice. That is precisely what the case study below seeks to do. It describes a rare instance of participatory urban planning process, (co-led by the author) that combined citizen participation with multidisciplinary expert knowledges in creating a statutory Development Plan.

Case Study

Chittur-Thathamangalam is an old municipality in Palakkad district in central Kerala. Situated on an ancient trade route, the town has a rich cultural heritage and comprises of twin settlements along the banks of the Sokanasini River. Occupying 14 sq. km. and home to about 32000 people, nearly half of the land within municipal limits is under paddy supported by an extensive heritage water management system comprising 171 water bodies and irrigation canals. The Chittur-Thathamangalam Master Plan 2042 (People's Plan) was prepared by the municipality as a counter to the Draft Master Plan 2031. This Draft Plan was prepared by the state government's Town Planning Department without any real public participation and its proposals were contrary to local needs and aspirations.

A two-member Master Plan Expert Committee (MPEC) with the author and Dr. Jayaraj Sundaresan (LSE, UK) was constituted by the Municipality to lead the participatory process and help them prepare the Plan.

An expert-led participatory process was followed which was entirely conducted in Malayalam, the local language. The Plan did not simply critique the old plan but built up an alternative evidence base. Data collection included many steps that differed from the standard process. Sectoral experts were brought in from different fields, and included a climatologist, landscape planner, transport planner, urban designer, environmental (water supply/sanitation) expert, urban designer, social entrepreneurs. Also included were experts in the fields of solid waste management, geography, livelihoods, municipal finance, public facilitation, demography and GIS.

Over ten months, the process unfolded in three stages: first, a people's audit of the Draft Master Plan 2031; second, focus-group discussions and data updating; and third, a collective planning workshop or Shilpashala. Plan proposals were developed after review through a 'Mini-Public', a deliberative democratic forum where a diverse, representative group of citizens came together to learn, reason, and make recommendations on complex issues. The Peoples Plan 2042 that resulted from this process came into force after due process in July 2024.

The People's Plan provides an important example of how participatory planning can be incorporated into a formal urban planning process led by the municipality involving residents, elected representatives, planners and diverse experts. The approach generated data that conventional planning exercises cannot. Residents helped identify community spaces, traditional settlements, water bodies, livelihood locations, cultural practices that escape conventional planning data-capture methods. The process also demonstrated that participation does not require making a choice between community knowledge and technical expertise.

Instead, experts can help interpret and synthesise local knowledge while communities contribute information about how spaces

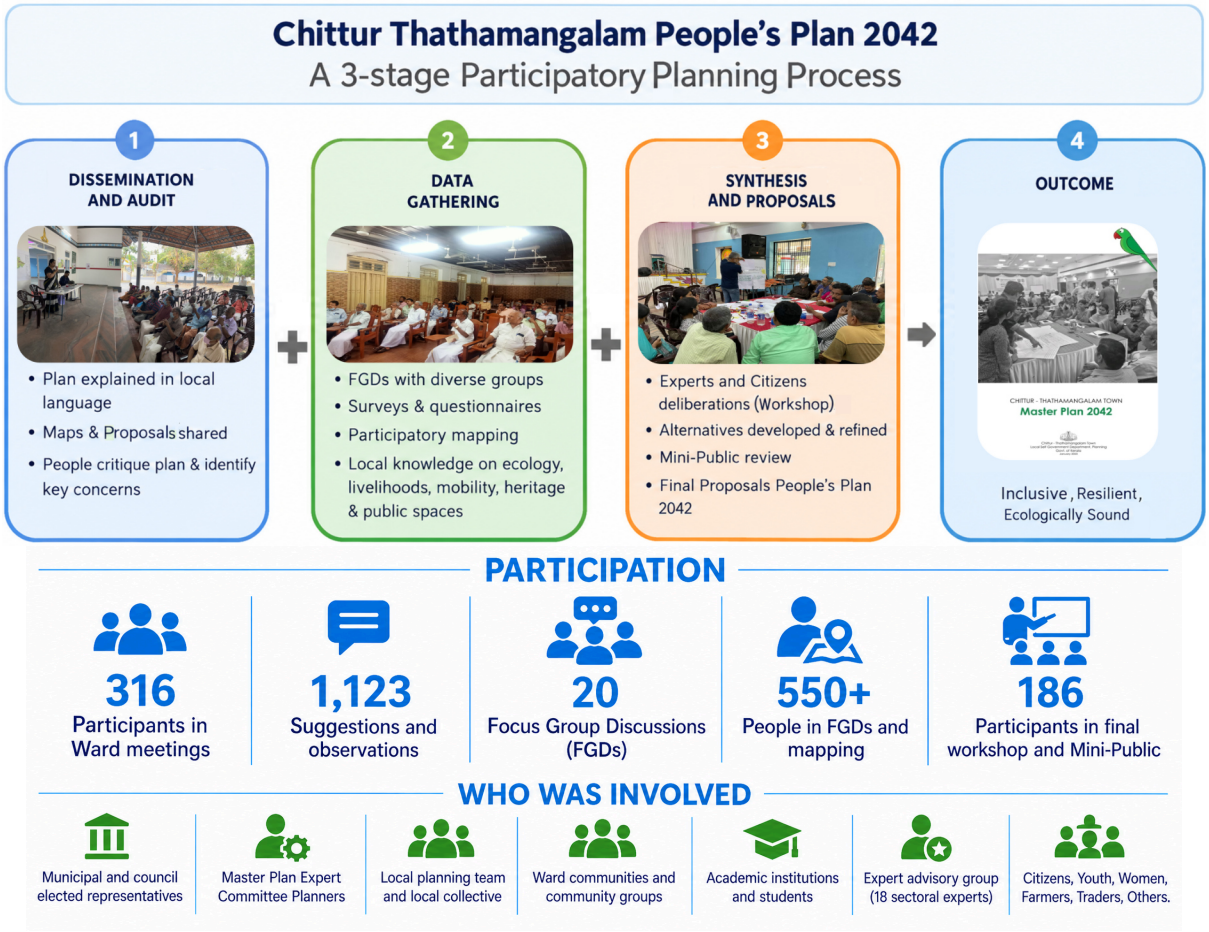


Figure 1: Three-stage participatory planning process for Chittur Thathamangalam People's Plan 2042

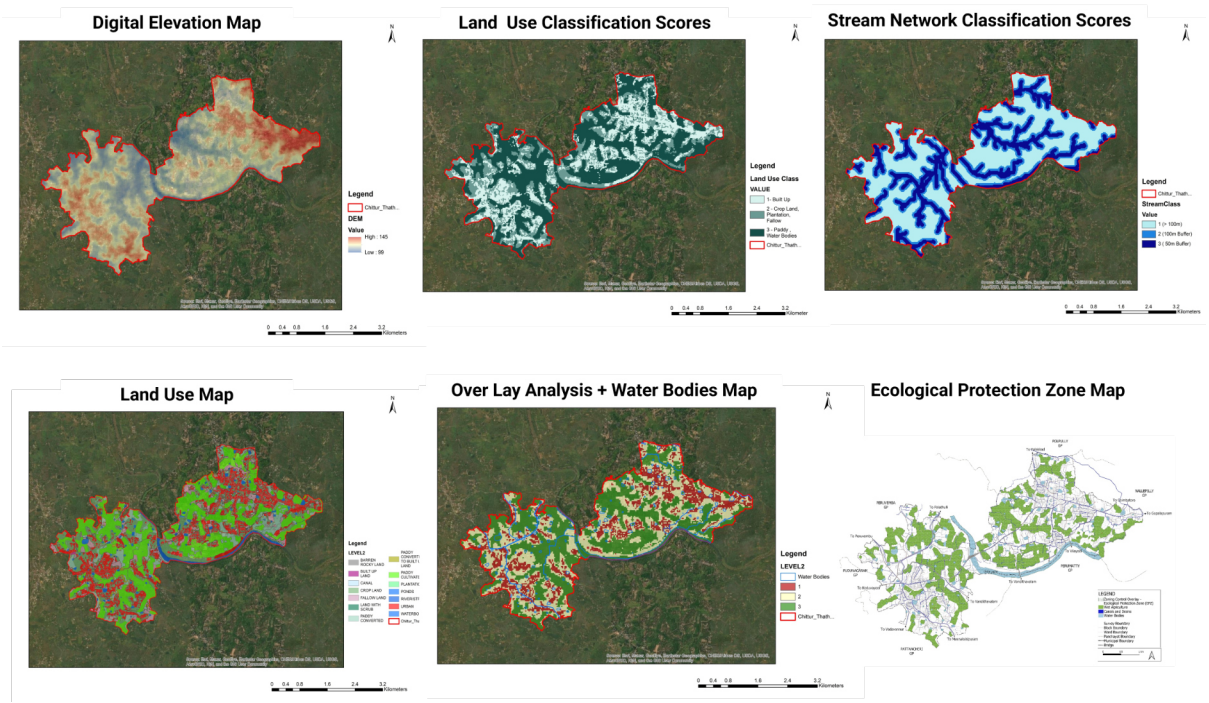


Figure 2: Demarcation of the Ecological Protection Zone (EPZ)

Geo-spatial analyses using Digital Elevation Model (DEM) and Land use data helped identify the critical correlation between drainage ecology, low-lying terrain and wet agricultural zones. Based on this, the EPZ was demarcated, which would ensure the town's climate resilience, through flood mitigation, aquifer recharge and environmental conservation.

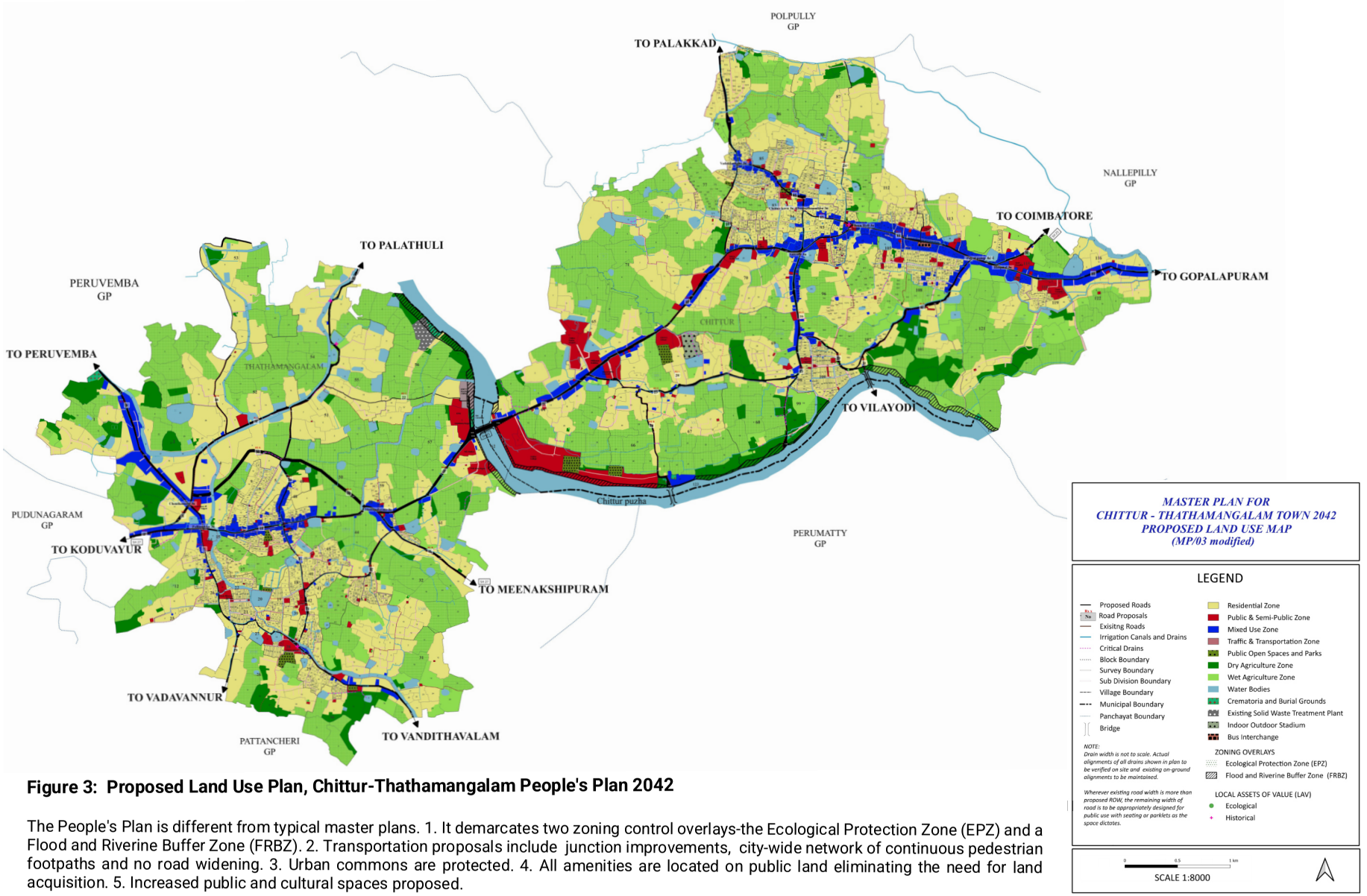


Figure 3: Proposed Land Use Plan, Chittur-Thathamangalam People's Plan 2042

The People's Plan is different from typical master plans. 1. It demarcates two zoning control overlays-the Ecological Protection Zone (EPZ) and a Flood and Riverine Buffer Zone (FRBZ). 2. Transportation proposals include junction improvements, city-wide network of continuous pedestrian footpaths and no road widening. 3. Urban commons are protected. 4. All amenities are located on public land eliminating the need for land acquisition. 5. Increased public and cultural spaces proposed.

function in everyday life, and what kind of place they would like the plan to lead to. This is particularly important in cities where informal activities, traditional occupations and community-managed resources form an integral part of the urban economy and landscape.

Key Policy Insights

1. Urban planning needs to be grounded in an ecological framework

Development Plans should consider ecological systems as part of urban infrastructure. Water bodies, drainage networks, groundwater recharge areas, vegetation, flood-prone areas and other ecological assets should be identified and incorporated into spatial planning as ecological assets of value.

2. Planning has to be contextual, anchored in local knowledge, local language and cognise commons

One-size-fits-all planning undermines local resilience. Standardised templates and tools governing zoning, road hierarchies and infrastructure solutions overlook local settlement patterns and livelihoods. Planning guidelines should therefore allow greater flexibility for locally appropriate solutions. Local residents possess knowledge of local conditions as well as culturally specific responses, be it traditional water harvesting systems to manage water flows or seasonal flooding, or common public spaces and cultural practices. Planning institutions need to recognise this as 'expert' knowledge and should develop mechanisms to systematically document and build future planning knowledge on this base. Urban commons like traditional gathering areas and community spaces, festival routes, and occupational commons need to be mapped and provided for in conventional land-use plans.

3. The urban plan preparation process has to be designed as a truly participatory and inclusive one

Citizens should be actively involved in all stages of plan preparation: identifying problems, collecting information, mapping, visioning and establishing priorities. The current practice of gathering public inputs on a completed draft plan has to be modified.

4. Informality should be cognised and planned for

Informal livelihoods and informal settlements are significant components of Indian urban life. Mapping them and gathering information on the everyday lives of those who work and live informally is central to making our cities better. This will enable planners to seek city-wide interventions that are appropriate and inclusive and address the root causes of informality.

5. Planners need to play an additional facilitating role

Technical planning expertise is essential to plan preparation. However, to prepare climate resilient plans, planners need to play a broader role by facilitating public participation, incorporating inputs from many different experts, translating local knowledge into planning frameworks and integrating community priorities into plan proposals.

Recommendations

1. Direct public participation, in the local language with an 'enabling' orientation, must be a basic starting point for all urban planning exercises.

2. The plan preparation process should be an expert-led bottom-up and participatory one where planners and sectoral experts play multiple important roles of facilitating, guiding the process as well as synthesizing people's aspirations.

3. Participation should be held in a minimum of three stages and in the local language

a. Initial stage: Getting people to understand what a plan is and explaining its tools. This stage should ideally be conducted through electoral ward level meetings.

b. Intermediate stage: Field data gathering through Focus Group Discussions (FGDs) and mapping exercises. Existing uses and land use activities including periodic customary uses and practices should be mapped spatially. Maps must be prepared using the local-language terms, and should include informal uses, public commons, ecological assets and water sources including 4th-order streams, springs, and

heritage water systems. The People's Biodiversity Register (PBR) mandated to be prepared by every local body in the country, under India's Biological Diversity Act, could be a good starting point for the mapping of informal livelihoods like street vending and informal housing must also be prepared. To plan for healthy cities, ward level mapping of mortality, morbidity, crime, accidents and hazards/ disasters is essential.

c. Proposals stage: Strategies and proposals synthesized from the FGDs and with experts to be presented to the community.

4. The Plan must be mandated to address climate resilience.

5. The Plan must be inclusive and centred on ecological sustainability.

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