Conversations on City Economy: Growth, Inclusion and Sustainability

Urban economies in flux: from the '*nexus*' of challenges to a '*connexus*' of opportunities in the global south

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ABSTRACT

As the world approaches 6 billion city-dwellers, questions arise on the challenges and opportunities, the 'perils and prospects' ahead for cities of the Global South. This short piece explores the urban-economic challenge as a ***'nexus'***, with multiple systems and their combinations all in flux – social, technology, economic, environmental, cultural and governance. Given the complexity and uncertainty of such a nexus, there are no objective models or forecasts – but we can explore potential pathways towards a positive '***connexus'***, where synergies between the various systems can lead towards positive transformation. With a basic mapping of such '*nexus-connexus'* dynamics, using the methods of 'Synergistics', one example from 'socio-eco-peri-urban' Chennai points to the potential pathways to mobilize such transformation.

INTRODUCTION

This chapter was completed on the so-called USA 'Liberation Day' of April 2nd 2025, when President Trump threw the global trading system into turmoil (Nadvi 2025). The likely near-term impacts could be a gaming of tariffs by international producers, with rapid relocations between nations, and large areas of industrializing cities suddenly obsolete and peripheral. However beyond the immediate chaos, there may be more positive potentials, for new patterns of South-South value chains, or a regrouping around a ex-USA global trading system – or even a rethink of capitalist production and consumption systems.

To explore such potential, we can picture the urban-economic challenge as a '*nexus'*, with multiple systems and their combinations all in flux – social, technology, economic, environmental, cultural and governance. Given the 'deeper complexity' and uncertainty of such a *nexus*, there are no objective models or forecasts: but we can explore potential pathways towards a positive '*connexus*', where synergies between the various systems lead towards positive transformation. For a basic

mapping of such '*nexus-connexus*' dynamics, based on the synergistic method (Ravetz 2020), three very simple questions generate a series of mappings: -

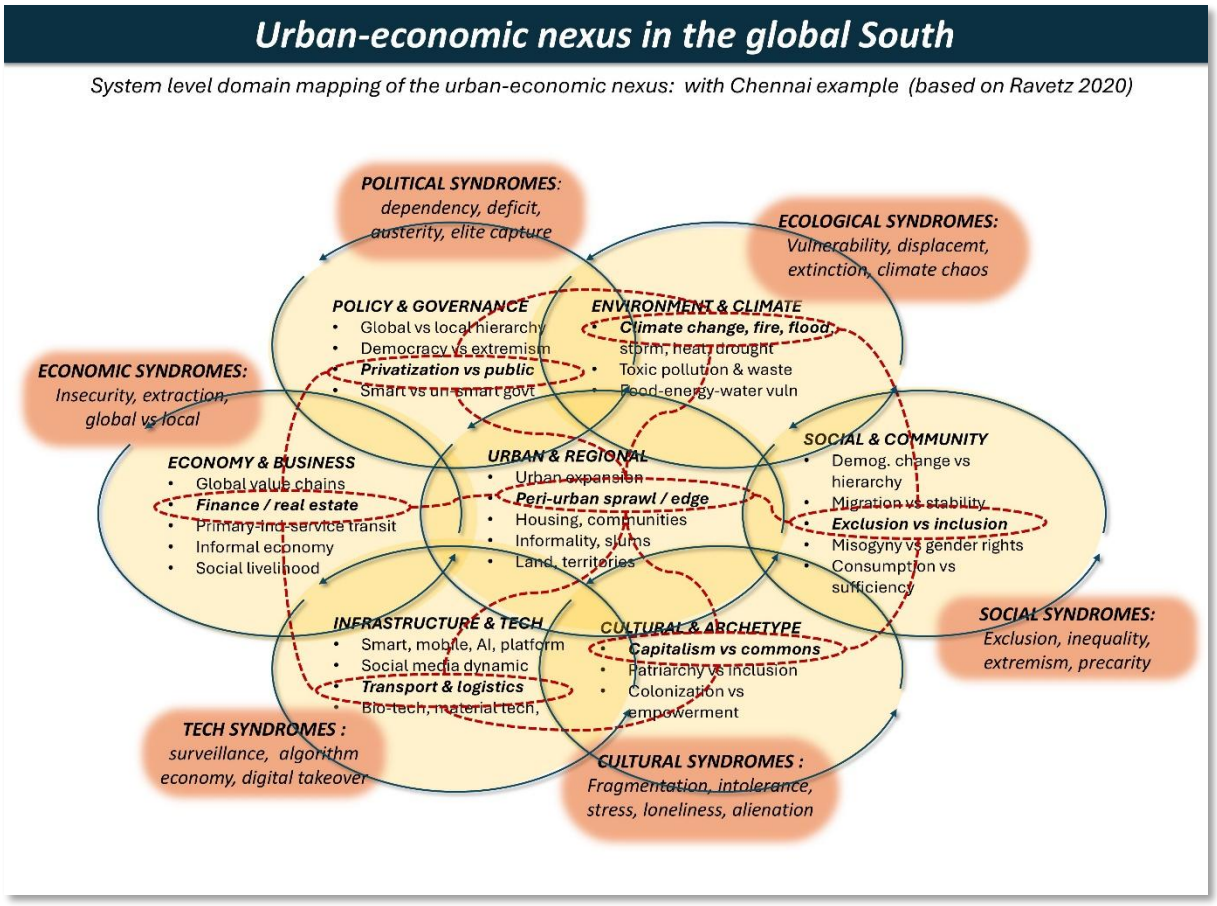
a) 'System mapping' of the *nexus* – what are the key dynamics and challenges?
b) 'Scenario mapping' – what are the likely alternative futures?
c) 'Synergy mapping' of the *connexus* – what are the key visions / opportunities for transformation? This can be framed as a '*collective urban-economic intelligence'*, i.e. the capacity for learning, communication, co-creation and co-production, with a wider community of stakeholders, deeper layers of value, and further horizons of change.

This synergy mapping stage shows first a case study, a 'socio-eco-peri-urban' example from Chennai, and then draws some implications for the system-level *connexus*.

MAPPING THE URBAN-ECONOMIC NEXUS

The urban-economic challenge can be seen as a 'nexus' – with multiple systems and combinations all in flux: social, technology, economic, environmental, cultural and governance – with the urban, the physical matrix, at the centre. As such this is a multi-system of 'deeper complexity', beyond any single rational model or framework. The synergistic approach starts with the base-mapping in Figure 1. This shows the key domains and factors of an urban-economic nexus: some of the most topical 'syndromes' and emergent effects: and a practical example overlaid on the general mapping.

Insert Figure 1



ECONOMIC SYNDROMES

For the urban economies of the global south, there is growing vulnerability to rapid financialization and digitalization, with challenges to local resilience in a globalized system. There is a continuing transition from agriculture to industry, and from industry to services, with growing dependency and vulnerability to global value chains. The real estate market drives urbanization, both in high-value global hubs, and in vast areas of suburban expansion. Most of the urban global south economies are predominantly informal, which increases hugely the challenge of governance and social protection. However, such informality may open up opportunities for new forms of social economy and community livelihood, now coming into view as the missing dimension of economic thinking.

As for the syndromes of the 'economic city', many critics have identified a broad range of economic precarity and insecurity, extraction, expropriation, and multiple conflicts: financial elites versus insecure workers, and global value versus local livelihoods.

URBAN SYNDROMES

While two thirds of the global population may be 'urban' by 2050, urbanization is not only about expansion but systems transformation. While the mega-cities dominate the agenda, there is typically

more population growth in the smaller cities and towns, and rapid change in the extended edge city / peri-urban, in the form of 'sub-altern', 'carceral' and 'aerotropolis' cities, with growing vulnerability and socio-ecological disruption (Mukhopadhyay et al 2016, Soja 2001: Kasarda & Lindsay 2011). The mainstream 'urban system' of residential, industrial and service zones, now appears much more complex and self-organizing.

Many urban syndromes emerge - housing systems under pressure between an extractive real-estate market, growing populations, and precarity of the majority. Likewise local communities and livelihoods are under pressure from globalized systems of industry, services and digital platforms. Multi-level systems thinking can be very useful here, as with (a) urban as a tangible 'on the map': (b) urban as relational flows: and (c) urban as multiple emergent systems (Ravetz & Sahana 2025). Such mapping can highlight potential opportunities for thriving local places, communities and livelihoods.

SOCIAL SYNDROMES

The social city agenda starts with the demographic and urban transition, from rural profiles to urban average age increases, families are smaller, lifestyles more mobile, while some retain links to former roots. Migration and mobility are a challenge for precarious livelihoods, along with urban opportunities for higher incomes and educational advancement. Over-arching all is the shadow of poverty, both in simple access to food and shelter, and in access to services and systemic opportunities (this applies to both global south and north): in such 'shadow settlements', large populations live in the urban peripheries with little or no security (Sood and Rath 2017).

Direct poverty is then combined with many forms of exclusion and marginalization, by divisions such as class, income, language, race or faith, or inter-sectional combinations of all these (Appiah 2018). The divisions are further exacerbated by the polarization of gender and minority communities, and the ongoing struggle for equality and social justice. In the background is the pattern of material consumption, driven by capitalist reproduction dynamics, where the material affluence of the north, as seen through global media, can drive material aspiration in the south.

TECH SYNDROMES

Meanwhile technology is changing the rules of the urban economic game, with platform economies, full digitalization, robotic production and custom consumption. Social media now dominates most forms of urban life, opening the door to extremist social movements, misogyny and intolerance: and also opening the door to mass surveillance and social engineering.

SMAC (Smart, mobile, AI, cloud) technologies are emerging as the mainstays of the urban economies both formal and informal. The platform businesses Airbnb and Uber, for instance, are the largest in their sector without owning a single hotel or taxi – pointing to a future with value chains completely separated from supply chains, where a local food shop may be managed from the other side of the

world. The applications to smart governance are immense, as are the possibilities of systems failure, cyber-attack, covert social engineering or hijack (Chatterji & Mukkai 2024).

ECOLOGICAL SYNDROMES

All this runs against the backdrop of environmental self-destruction, via climate change, air pollution, toxic overload, waste accumulation and gluco-toxic health collapse. Cities in the global south, and especially the coastal megacities are on the front line: with a new trend of 'global weirding', where cities alternate between flood and drought conditions, to exacerbate the challenge (Michaelides & Singer 2025). In most global south cities unplanned or informal development spills into the peri-urban areas, disrupting water and drainage systems and adding population into high-risk areas.

Food, energy and water systems are highly inter-connected, and ongoing urban expansion puts each at greater distance and vulnerability to climate-related events. Systemic risks and vulnerabilities are then multiplied by secondary effects such as energy wars or food spikes, invasive species or pandemics, other international tensions and conflicts.

CULTURAL SYNDROMES

Urban economies are increasingly driven by the layers of 'culture', as in the leisure / tourism industry, with choice destinations and curated 'experiences'. Behind this is the lived culture of communities or ethnic groups, with customs and rituals, social practices, events and festivals. And behind this are the archetypes which (it can be argued) shape these patterns, drive structural change, and respond to challenges or opportunities. The synergistic approach identifies three main overlapping archetypes, each a very long story, again for debate rather than answers.

- Capitalism can be seen as driven by accumulation of money, material goods and associated status.
- Patriarchy may be driven by misogyny and insecurity, traditional family patterns, and exalted by faith systems.
- Colonization / imperialism is driven by territory and material goods, by racism and nativism, and by the search for status and identity. The extreme combination of all three archetypes is seen with the current USA cultural agenda.

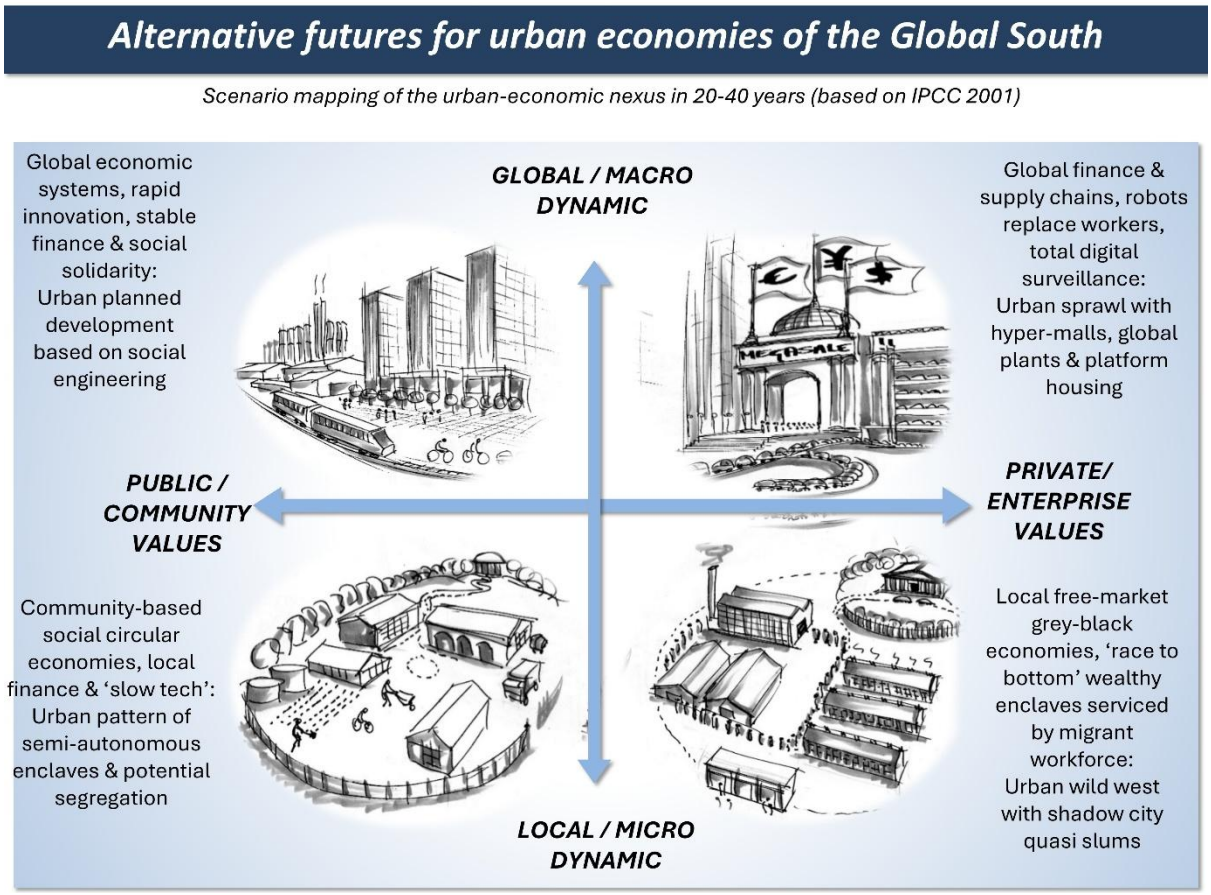
The point of such a catalogue is to demonstrate the dynamics of inter-sectional and emergent syndromes, i.e. the 'nexus' of urban-economic challenges. One example of socio-eco-peri-urban vulnerability is shown here from Chennai in Figure 1. Here, climate-related flooding impacts most on migrant slum dwellers with shacks on the river bank: patterns of exclusion are increased by capitalistic accumulation, and the 'smart' platform economies play into a real estate game: flood defences are rolled into urban dispossession, where the slum-dwellers are relocated to distant

'projects', all contributing to the elite capture of urban government (Ravetz et al 2022: Woiwode et al 2024).

SCENARIO MAPPING

The global urban south is changing fast: the profound uncertainties can be explored by alternatie future scenarios: Figure 2 shows one example with axes of 'global-local' and 'public-private', based on the IPCC 'SRES' report (IPCC, 2001: Ravetz 2020b).

(Insert Figure 2)



- ***'Global enterprise':*** global corporations, deregulated but highly organized, provide for all consumer needs, enabled by hyper-digital credit and social value accounting. Governments and public services are bought out by corporate providers, leading to underground networks of resistance.
- ***'Global community'***: businesses, supply chains and the resource base are closely regulated and managed through international cooperation. Inter-governmental organizations invest in advanced technology and protect liberties: backlash comes from anarchists, nationalists and free-marketeers.
- ***'Local enterprise'***: a more conventional business-led economy brings slower growth, with less global trade but more room for small entrepreneurs. There is also rising inequality and

intolerance, alongside many forms of grey-black economies: resistance comes from social justice and equality agendas.

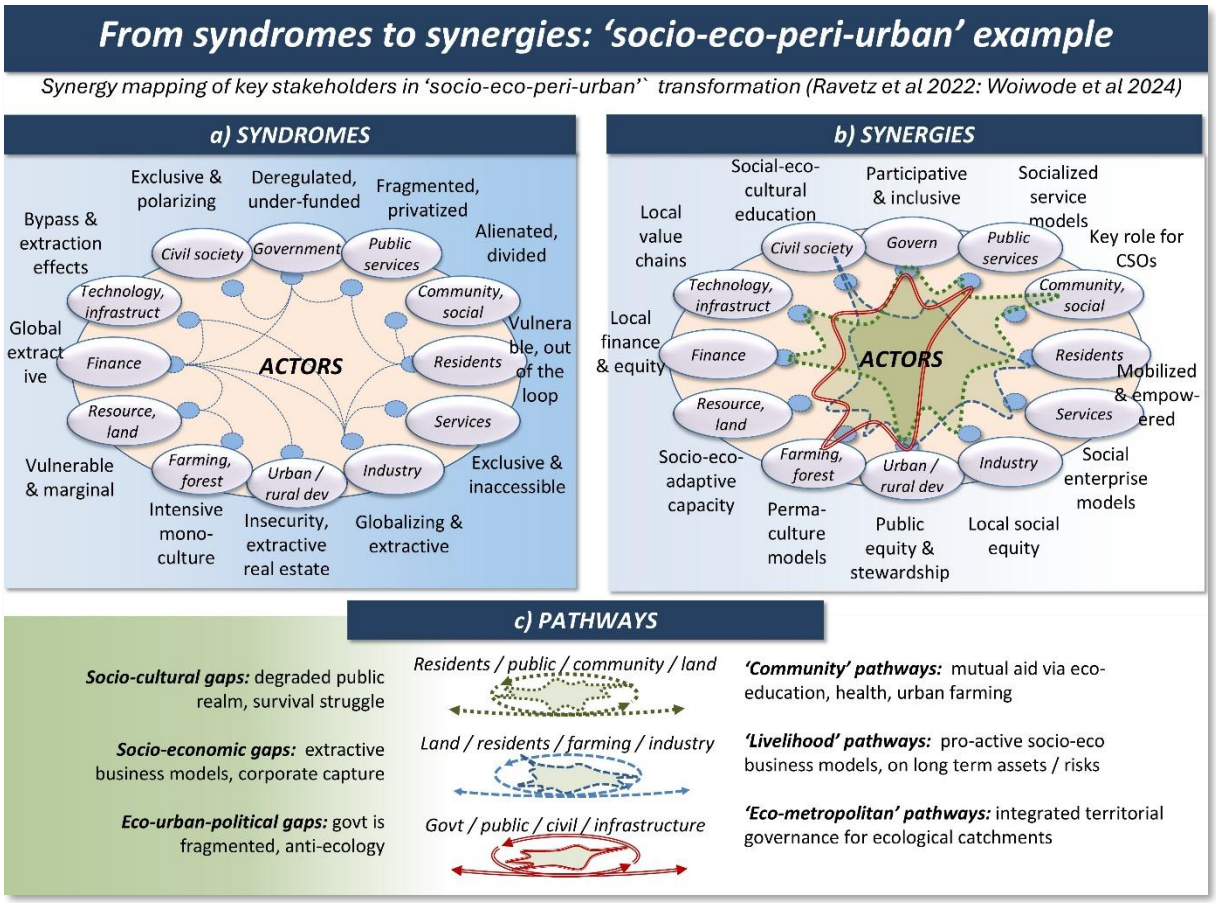
- ***'Local community'***: a social value agenda pushes businesses towards non-profit social enterprise and local community-based co-production. Growth and innovation is slower: some are not keen on slow food and local production, and there are attempts to hijack and sabotage such a system.

A larger study would then use these scenarios for systematic stress-testing of the next stages of 'synergy mapping' and then 'strategy mapping': here they provide general background to the following example.

EXAMPLE: 'SOCIO-ECO-PERI-URBAN' SYNERGY MAPPING

This Indian example shows how globalized finance and real estate can expropriate and bypass a peripheral village: and then, how alternative approaches can turn challenge to opportunity (Woiwode et al, 2024). The 'synergy mapping' at Figure 3 shows on the left, a stakeholder system based on dysfunctional relations of power and extraction: on the right, the same stakeholders with three potential synergies and positive feedback loops: and below, three types of 'pathways' which can realize the synergies.

(Insert Figure 3



Sriperumbudur is a small city in the Chennai hinterland, with three Special Economic Zones (SEZs) housing global giants such as Nokia and Saint Gobain. Real estate speculation has covered the landscape with gated communities and shopping complexes, turning water bodies into waste dumps, with land value skyrocketing around formerly agrarian communities. Nearby is the peri-urban village of Katchipattu, firstly deprived of water by nearby tourist development: young people then re-trained as engineers for the automotive branch-plants, but were quickly replaced by non-union migrants, with resulting unemployment, poverty, alienation and anti-social behaviour.

The ecological restoration agenda was then introduced via a community co-design program, as a focal point for social revitalization, restoring water bodies to maintain the micro-climate, reconnecting water with the village, reviving the waterscape to generate site-scale community assets, and building community skills in collective enterprise and social capital. The "Nook" is a self-designed learning centre, a 'school without teachers', a collaborative project for a user-designed learning centre, equipped with tools, technology, recycled materials, providing the youth with skills and resources to take charge of their own lives. A third strand aims at natural farming/community gardening, using storm drain waters to pass through a series of constructed wetlands, for nutritional and economic security. The nearby city is then a market for surplus produce, which helps to strengthen community bonds and linkages with the land.

MAPPING THE URBAN-ECONOMIC 'CONNEXUS'

So how to move from syndromes towards synergies? If the 'development' industry perpetuates inequality and dependency, there is an agenda for 'critical transformations' of systemic change, and the 'critical conjunctures', the moments of catharsis and emergence (Henderson & Jepson 2018). On the ground there are countless examples: in the South we see resource stewardship and rural livelihood networks, natural resources for ecological balance, industrial ecology and circular economy loops, and new forms of mutual aid and reciprocity. In the North there are socio-eco-economic value chains, via fair trade, commons and stewardship of many kinds. But are these enough for transformation?

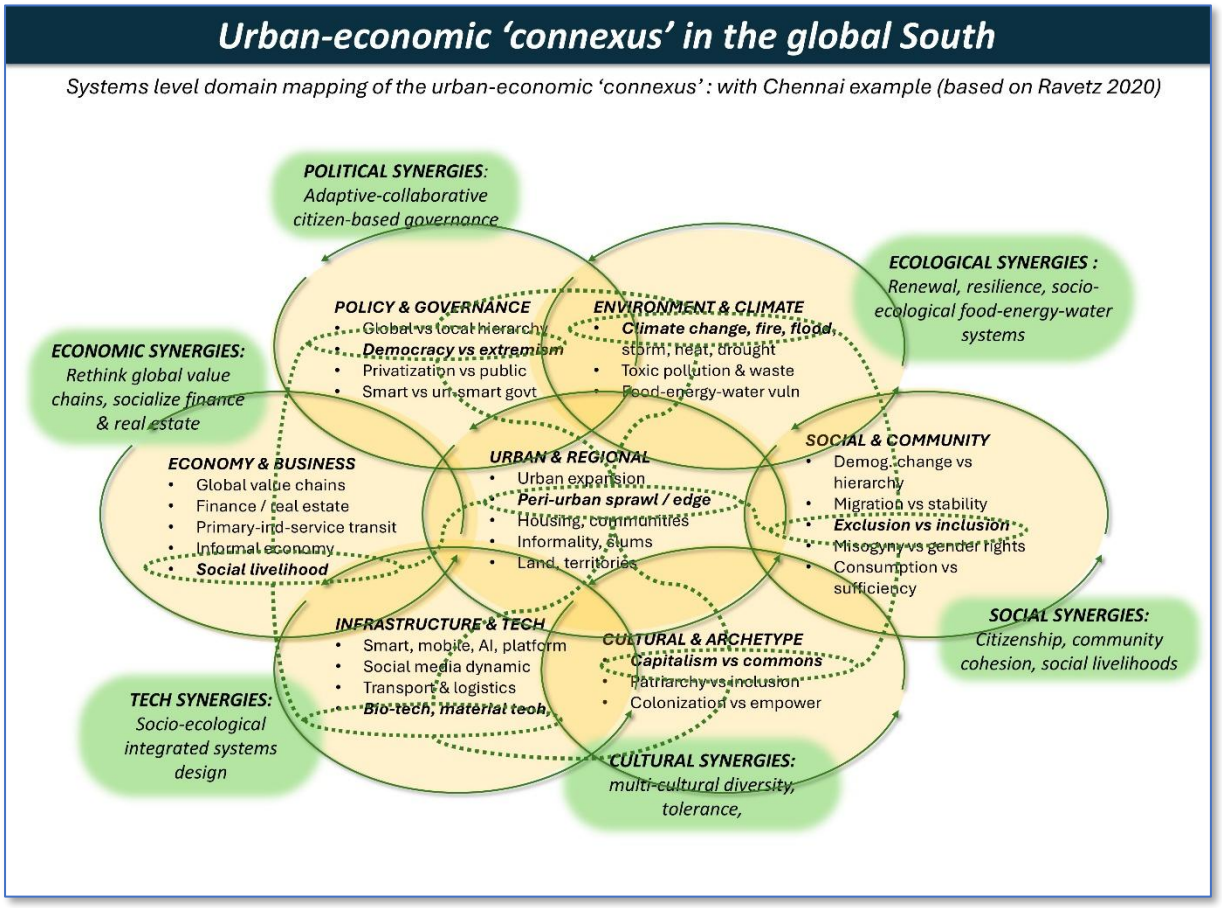
Here the synergistic approach takes a perspective on the fundamentals of urban economic systems. For the transformation potential it looks beyond crude material growth and evolutionary 'winner takes all': it looks towards a more collaborative co-evolution, as in *'winners are all'* (Corning 2018). It maps out three parallel modes of urban-economic systems, and looks for the value-added opportunities between:

- ***functional*** or ***'clever'*** economy (*Mode-I*): a technical system of production and distribution, to deliver material goods, such as housing or food, with a logic of market equilibrium;
- ***evolutionary*** or ***'smart'*** economy (*Mode-II*): entrepreneurs and speculators flourish, in a jungle of 'winner-takes-all'. This economy is based on the *'invisible hand of the market'*, and here the housing or food might be traded or securitized, with a logic of innovation;

- ***co-evolutionary*** or ***'wiser'*** economy (*Mode-III*): the myriad value chains are now guided by a *'visible mind of society'*, a *collective urban-economic intelligence*, where *'winners-are-all'*. Housing or food are produced from sustainable resources, in the best conditions, with distribution according to the needs of society.

To explore such potential, the nexus mapping is now overlaid with a synergistic *connexus* mapping, as in Figure 4. This shows multiple opportunities for potential value-added, mutual learning, co-creation and co-production for positive transformation.

Insert Figure 4)



CONCLUSIONS

These Indian examples, and countless others from the global urban south, can show potential ways forward – the transformation from an impossible nexus, to the visionary potential of the *connexus*. The prospects range from catastrophic 'brown' cities to utopian 'green' (Ravetz 2020b): from a future of neo-colonized sub-altern economies, environmental collapse, digital disruption and social fragmentation – to a vision of high-skill value chains, local self-reliance, strong urban-rural linkages, and technology at the service of sustainability and livelihood.

Such a nexus is a combination of many factors at many levels of 'deeper complexity': likewise the connexus of opportunity can self-organize and emerge in the right conditions. The unique dimension

of collective intelligence then enables policy-governance and all stakeholders to anticipate, envision and co-design for desirable futures.

This short piece cannot provide all details for such challenges – it does aim to sketch the possibilities, with methods and examples, for the ongoing journey of urban-economic transformation.

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