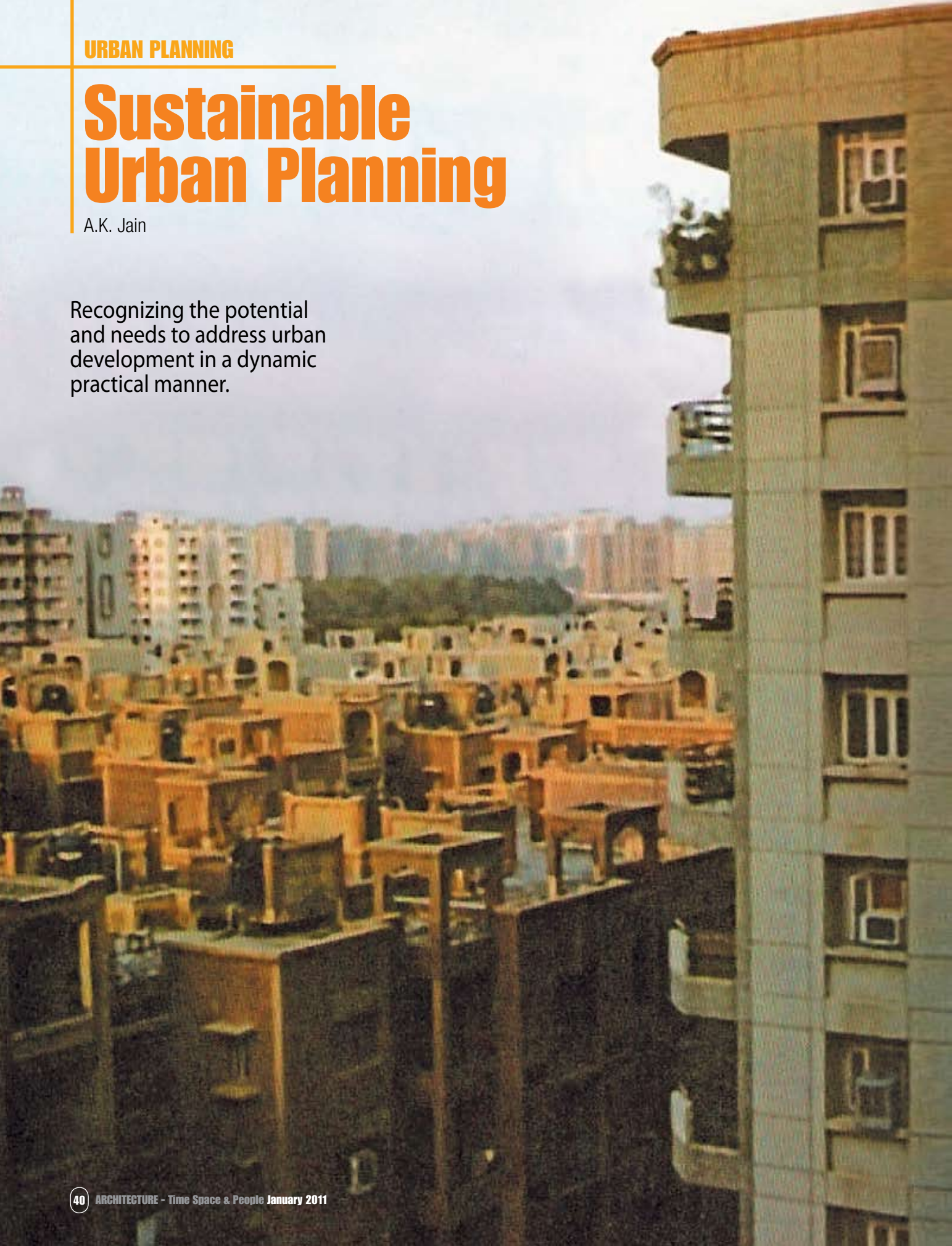


# Sustainable Urban Planning

A.K. Jain

Recognizing the potential and needs to address urban development in a dynamic practical manner.



**U**rban India in terms of population has increased more than ten times during the last 100 years – from 26 million in 1901 to 285 million in 2001, which is 28 per cent of the total population. By 2020, urban population will be 40 per cent of the total population and by 2050 the figure will be 50 per cent. The share of urban population has risen from 17.2% in 1951 to 27.8% in 2001.

The number of cities with a population of more than one million has gone up from 5 in 1951 to 35 in 2001. Of these, 8 cities have population between 3 million and 5 million and 6 cities: Delhi, Mumbai, Kolkata, Chennai, Bangalore & Hyderabad, have a population of more than 5 million. These megacities are the nodes of economic growth of India. By and large, the nature and extent of growth of Indian Cities is unplanned and unanticipated and the provision of services is not proactive, but reactive. The demand for services such as transport, water, and sewerage continually outstrips supply, resulting in a situation of perpetual scarcity and shortage.

Pressure is evident on the basic services. About 54 per cent of urban households do not have access to toilets and 64 per cent are not connected to the public sewerage system. Almost 50 per cent of solid waste remains uncollected. Although 89 per cent of urban population is covered by treated water supply, water is supplied only for a few hours per day. City roads are clogged. Though vehicle population in India increased 80-folds in the last 40 years, road area has increased by only 5 per cent. Only 17 of the largest cities have organized bus services, and only three cities – Mumbai, Kolkata and Chennai – have a suburban rail system.

## URBAN CONTEXT

The Indian city is an amorphous manifestation of its cultural, socio-economic, political and demographic diversity. The built form is largely a derivation of resource view of urban land. The fundamental contradiction in urban planning has been between the requirements of livelihood and lifestyles, between political and professional processes and between cultural values and market forces. The more complex the process, the more critical this contradiction becomes. Compounded with dynamics of change, population growth and land speculation, the resultant built-form has become complex, chaotic and amorphous. It no more reflects a coherent vision and ambience to its environmental context. As a consequence, the approach is often to adopt remedial solutions.

Despite significant progress in economic growth and poverty reduction, according to Tendulkar Committee (2009), India's 38% population, i.e. 400 million, are living in poverty. One of the main reasons behind this is the lack of adequate job creation. Labour markets have hardly progressed relative to the country's economic gains. In many regions, the rate of unemployment has increased, although a few have witnessed some improvement. Under-employment and child labour continue to be issues of concerns. The country is confronting three specific issues – jobless growth, the working poor and youth unemployment. The overall progress marks wide disparities and stark contrasts.

## PLANNING, PARTICIPATION AND POLITICS

Various policy changes have been initiated so that the Indian cities keep pace with the spirit of the democratic

decentralisation and globalisation. An important opportunity to face the challenge of rapid urbanisation is presented by the surge towards decentralisation adopted by the government. The government took a very significant step in 1992, by passing the 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendment Acts thereby transferring many administrative and financial powers to Local Bodies. This makes Urban the Local Bodies the most important functionary in the provision of the urban services.

### **As per the 12<sup>th</sup> Schedule of the 74<sup>th</sup> Constitutional Amendment Act, 18 new tasks have been defined as in the functional domain of the ULBs, which are:**

1. Urban Planning including town planning.
2. Regulation of land-use and construction of buildings.
3. Planning for economic and social development.
4. Roads and bridges.
5. Water supply for domestic, industrial and commercial purposes
6. Public Health, sanitation, conservancy and solid waste management.
7. Fire services.
8. Urban forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interests of weaker sections of society, including the handicapped etc.
10. Slum improvement and upgradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as parks, gardens, playgrounds.
13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds;

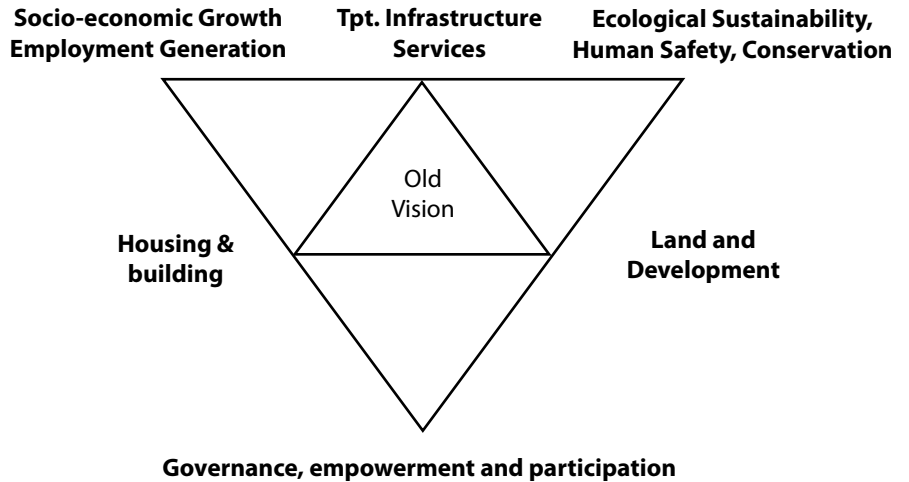
cremations, cremation grounds and electric crematoriums.

15. Cattle pounds: prevention of cruelty to animals.
16. Vital statistics including registration of births and deaths.
17. Public amenities including street lighting, parking lots, bus stops and public conveniences.
18. Regulation of slaughter houses and tanneries.

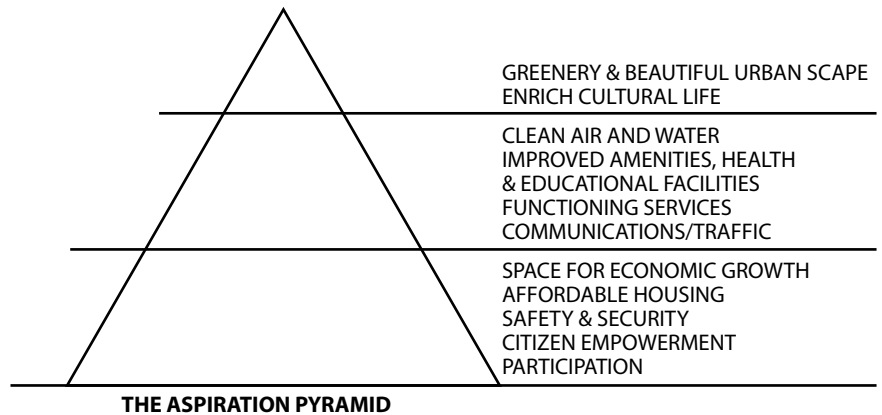
These amendments encourage the preparation of district and metropolitan development plans, which integrate investments and their spatial implications, and need a suitable plan making mechanism and techniques. This requires serious consideration so that the planning framework responds to the climate of new economic policies and democratic decentralisation. In order to enable the implementation of a new strategy, it would be necessary to restructure the local bodies and service departments and to equip them to the changing political set up. The challenge is to find ecologically sustainable, socially just, economically viable and culturally transferable technological and managerial innovations. Besides various changes in the planning process, as given below, the traditional role of ULBs from 'Provider' has to change to 'Facilitator':

A leveraging strategy should be adopted so as to encourage private sector to participate in infrastructure/city development for which there is an urgent need of inter-sectoral cooperation. It is necessary to

explore the areas where the government can cooperate in partnership, with the private sector encouraging cooperation and competition in the critical areas of concern, such as given below:



### The New Paradigm



## CHANGES IN PLANNING PROCESS

From	To
Focus on statutory planning	Performance orientated planning; focus on implementation
Government does all	Public-Community-Private Partnership, Corporatisation of Urban Local bodies, contracting out
Comprehensive planning	strategic and action planning
Focus on spatial and physical aspects	approaches incorporating institutional and financial aspects, planning for economic development
Meeting basic functional needs planning as a social function	emphasis on quality and innovative demand driven planning
rigid legislation	legal reforms facilitating participatory planning & flexibility
Monopoly over urban information	new urban information systems, computerisation, telecommunication Make cities Computable and Networked.

- Land assembly and development.
- Transport services, clean technology and laws for environmental safeguards.
- Water, sanitation, drainage and waste management.
- Housing, alongwith community utilities, services, open space and facilities.
- Slum upgradation, rehabilitation and their city renewal.

## TOWARDS A NEW PARADIGM OF URBAN PLANNING

Urban planning, as an attempt to synthesise the diverse activities, perspectives, aspirations and resources into a composite whole is a complex and dynamic process. The process of planning depends upon the political, socio-economic, physical, infrastructural and administrative realities. During the last decades the peoples' aspirations and focus of planning have become enlarged - from the local spatial, infrastructure, housing, architectonic and functional aspects, to global environmental, organizational, governance, conservation of heritage, urban, aesthetics, employment and poverty alleviation, human dignity, empowerment and participation.

Urban planning should essentially synthesise various components of sustainable development, such as :-

- The potential carrying capacity, water conservation/supply and reducing ecological footprint of urban system for low carbon city development.
- Economic development and poverty related challenges.
- Energy, transportation and water resources constraints and opportunities.
- Environment, pollution control and climate change related challenges.

- Heritage and conservation potential.
- Governance and institutional capacity.

With people and resources in place, the city plan needs to set a strategic direction for growth in a manner acceptable and supported by the people. There must be a good match between the planner's perspective and the people's aspirations. This can be expressed from different perspectives which nevertheless converge to become an all-round set of shared values.

## PARTICIPATORY PLANNING

Effective participatory planning among all the stakeholders, mediation between competing or conflicting interests would help in bringing about change and lasting improvements to the living environment. To translate the sustainability principles by city design, the following six critical areas can be identified:

- **Jobs** : Job sites located within communities reduce time spent travelling to work.
- **Corridors** : High density commercial and residential corridors focus growth along transit routes.
- **Walkability** : Interconnected street systems link residents with the services they need.
- **Green Space** : Green Spaces provide recreation opportunities and connect people with natural systems.
- **Infrastructure** : Integrating natural systems based on the principles of conservation of natural resources and recycling that reduce infrastructure costs and environment impact.
- **Housing** : a range of housing types allows residents of differing

economic situations to live in the same neighborhoods and have access to the same services.

- **Management and maintenance** aspects need to be given serious attention at the planning stage.

This means using land optimally and to create a smart and compact city together with a new paradigm of land use and flexibility, which promotes creation of jobs and reduces the need to commute.

## CONCLUSION

India is at a juncture to decentralise urban planning process, financial resource generation and technical capability. This has positive implications and potentials for the introduction of new urban planning tools. There is a need to evolve a new set of urban policies and planning approach recognising the potential and needs, and to address urban development in more dynamic and practical manner. This will strive for more effective linkages between social, economic and spatial planning, improvement of the efficiency of cities and their infrastructure, strengthened local governance and better institutional and inter-sectoral cooperation, as well as cost-effective forms of public-private partnerships. We have achieved the urban planning capacity, yet we seek to be moving further from the realisation of this potential. The majority of population suffer a growing sense of loss and frustration as their lives, families and their hopes for the future disintegrate. Millions of people lack secure and adequate shelter and basic sustenance. The professionals in the field of habitat have the responsibility to set a new direction and redirect the resources and power at their command to take the step to a new era. It must involve transformation and innovation in the relationships

among people, governments, and other players in urban planning and development. The success of this depends upon the planning process, which should be participatory and localised. The planning process should provide a holistic perspective and engage discussions on cross-cutting issues within the context of local communities and eco-systems. It should envision and embrace a new era of urban planning.

## REFERENCES

1. Anil Agarwal & Sunita Narain, Dying Wisdom (India's Traditional Water Harvesting System), Centre for Sce. & Env., New Delhi.
2. Chelliah, R.J. and Mathur O.P., (1995), Operationalising Article 242 Y of the Constitution 74th Amendment, National Institute of Public Finance & Policy, New Delhi.
3. Delhi Development Authority, (2007), Delhi Master Plan, 2021, New Delhi. Delhi.
4. Government of India (2007), The Eleventh Five Year Plan, New Delhi.
5. Government of India (2007), National Urban Housing and Habitat Policy, Ministry of Urban Housing & Poverty Alleviation, New Delhi.
6. Govt. of India (2006), National Urban Transport Policy, Ministry of Urban Development, New Delhi.
7. Human Settlement Management Institute (HSMI) (1995) : Public Private Partnerships for the Provision of Urban Services, New Delhi.
8. Jain, A.K., (1990), The Making of a Metropolis, NBO, New Delhi.
9. Jain, A.K., (1996), The Indian Megacity & Economic Reforms, Management Publishing Company, New Delhi.
10. Jain, A.K., (2003). 'Making Planning Responsive to and compatible with, Reforms', Cities Journal (UK) Vol. 20, NO-2,
11. Jain, A.K., (2003) 'Actioning new partnerships for Indian Cities', Cities Journal (UK) Vol. 20, No.5, 2003.
12. Jain, A.K.,(2001), Ecology and Natural Resource Management for Sustainable Development , Management Publishing Co., New Delhi.
13. Jain A.K, Low Carbon City – Policies, Planning and Practice (2009), Discovery Publishers, New Delhi
14. Jain A.K.,Urban Housing and Slums, 2008, Readworthy Publishers, New Delhi.
15. Jain A.K,A Sustainable Vision for Urban India (2008), Kalpaz Publishers, New Delhi.
16. Jain A.K, Inclusive Planning and Social Infrastructure, (2009), Bookwell, New Delhi.
17. Jain A.K, Water – A Manual for Engineers, Architects, Planners and Managers, 2007, Daya Publishers New Delhi.
18. Jain A.K, Handbook on Disaster Management, Pragun, (2008) New Delhi.
19. Jain A.K, River Pollution: Regeneration and Cleaning 2009, APH Publishing, New Delhi.
20. Jain A.K, Urban Transport Planning & Management, APH Publishing (2009), New Delhi
21. Jain A.K, Building Systems for Low Income Housing (2008), J.M. Jaina, New Delhi.
22. Jain A.K., Urban Land Policy and Public Private Partnership for Real Estate and Infrastructure Projects, (2009), Readworthy Publications, New Delhi.
23. Jain A.K., Planning and Design for Trade, Commerce and Shopping Malls (2009), Readworthy Publications, New Delhi
24. Jain A.K., Lutyens' Delhi, (2009), Bookwell Publishers, New Delhi
25. Jain A.K., Urban Planning and Governance A New Paradigm, (2009), Bookwell, New Delhi
26. Jain A.K., Delhi Under Hammer (2009), Rupa Publications, New Delhi.
27. Jain A.K., The Cities of Delhi, (1994) Man. Pub. Co. New Delhi.
28. Jain, A.K., (2007), The Indian Habitat – Between Livelihoods and Lifestyles, Shelter, Vol. 10 No.2 (August 2007).
29. Soto, Hernando D., The Other Path, Cited in the Mint 2 November, 2007.
30. Tannerfeldt G. & Per Ljung (2006), More Urban, Less Poor, Sida & Earthscan, London (U.K.)
31. Urban Redevelopment Authority (1991), Living the Next Lap – Towards of Tropical City of Excellence, Singapore.
32. William E. Rees, (1997), Ecological Footprints and Urban Transportation, Velocity, Barcelona. ■

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