Regenerative Cities – Myth or Reality

By

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I am not a statistician. Please forgive me if there is an error in the data. My views are based on my association with 4 major integrated cities developments in India where I have been directly involved & got an opportunity to be with the end users, policy makers, builders, developers to understand & appreciate their limitations.
Does it look familiar???

Growing Population

Traffic, Traffic & More Traffic

Lack of infrastructure
  Power, roads, water, sanitation

Increasing pollution levels

Health impacts

Resource management
  Land, water, waste

Longer commuting time

Huge problems - No Time, No Energy, Poor Health
As per 2001 census 30% of our current population is urban which will grow to 54% by 2025.
Around the world

- Copenhagen joins hydrogen economy
- London takes up carbon reduction schemes
- Freiburg builds low carbon future
- Rise of Super Greenies
- Green is the colour of success

etc. etc. etc..................

- Why do we need Green?
- Is Green Healthy?
- Green probably is attracting more Venture capital than IT.

etc. etc.etc..................

- Re-envisioning customer value Opening the floodgates of new potential
- Wanted - Canadians to go on an Energy Diet
- The Better Life Index - Beyond traditional GDP numbers

etc. etc. etc.
Is there a holistic solution????

Are the regenerative cities the right answer...are they a reality or myth?
The Cosmic Principal

Embracing environment where other elements finds synergy

- **SPACE**
- **WATER**
- **EARTH**
- **FIRE**
- **AIR**

- Stability & Solidity
- Innovation & Leadership
- Profits & Returns
- Rapid Growth & Acceleration
The basic core of any city

- Economic Generators
- Social Infrastructure
- Support Infrastructure
- Recreation + Entertainment
Citizen Perspective

- Planned Community
  - Residential Area In Proximity To Work Place
  - Short Distance
  - Less Travel Time
  - Greater Productivity At work
  - More time with family

- Social Infrastructure
  - Multiple Housing Formats
  - Serviced Apartments/ Rental options
  - Lower Rentals
  - Low cost of Living
  - Improved Lifestyle
  - High cost of Living

- Lifestyle Amenities
  - Hospitals / Schools
  - Education/ Better Medical Facilities
  - Significantly High Quality Talent Pool
  - Shopper’s Delight
  - Convenience Shopping
  - Recreation/ Entertainment
  - High Retail Activity
  - Multiplexes/Malls/ Departmental Stores

All of above with sustainability as the core in India where illiteracy still rules?????
New Destination – Satellite Integrated Townships – Possibly Regenerative

• A Satellite Township is inherently, an answer to the geographic, economic and infrastructure needs of an expanding megacity.

• Satellite Townships are conceptualized, created and developed *in answer to* certain requirements of, *under the connection of* and most often, *under the shadow of* their big city neighbours.

• *Delhi – Noida; Mumbai – Navi Mumbai; Kolkata – Salt Lake City.* And now, Hyderabad – Discovery City.
Regeneration ????

With the genesis of a new destination so far, what are the focus areas for the regeneration & what are the realities...

Any strategy for a resilient urbanising world should primarily be based on the following elements:

• Renewable energy
• Energy efficiency
• Transport
• Circular waste management
• Water management
• Urban food and agriculture
• Biosequestration
Renewable Energy

Renewable energy can be used to meet all energy demand in cities for electricity, heating and transport. Renewable energy sources can be found within the city, but in particular larger cities need to take advantage of resources from the metropolitan region or even further afield

- wind (wind turbines),
- solar energy (rooftop photovoltaic cells and solar thermal water heating),
- geo-thermal (ground source heat pumps),
- and biomass (burning organic waste, energy crops, wood or burning methane gas from sewage, landfill decomposition or manure from livestock farming).

Reality in India

Initiatives have been made but none of the above methods can meet the energy requirement of a country like India & the existing technology is not really commercially viable. Planning a new city based on above mentioned technologies is almost impossible.
Energy Efficiency

Worldwide, hundreds of energy efficiency policies have been implemented and proven more or less successful. Despite these efforts over the last 15 years, energy consumption has still increased considerably. In order to reverse this trend, policy makers around the world must do more. They must adopt comprehensive policies which tackle market imperfections and consumer ignorance, and promote efficient technologies. There is no one-size-fits-all solution, instead cities, regions and countries have to compile a strong and equitable package of measures with regard to their economic, political and social situation to overcome barriers and imperfections.

Reality in India

An area where extreme confusion prevails & most of the design parameters fail on implementation. IGBC and many other agencies including Central & State Governments are doing a lot but somewhere we need to look at the reality on ground. The fact is the country where Facilities Management is not at all a chosen career, despite of best installation, it fails to meet expected results on account of suboptimal operations.
Transport

- More than 95 per cent of all global motorized movements depend on oil: whether it is cheap and extremely polluting bunker crude oil being burnt by the global shipping armada, or subsidized aviation kerosene keeping millions of travellers aloft.
- Today's call is for a 100 per cent renewable electricity based urban transport system. It is becoming clear that regionally supplied wind or solar energy can power urban public transit systems - note the success of Calgary's C-Train which is powered by Albertan wind farms.
- The other approach is to find ways to supply vehicles with the renewable energy sourced locally – and the batteries of these vehicles can even be used as floating storage systems - for electricity peak shaving, for example. Electric and hybrid vehicle technology can greatly reduce urban air and noise pollution.

Reality in India

India being a growing economy has different challenge ...something that the developed countries have already gone through. Presently in India, the average aspiration is to own a vehicle first... pollution etc. is a nice thought but who cares. The new technology once again is not commercially viable.
Circular Waste Management

The vision of a regenerative city incorporates a full circle of waste avoidance and re-use. If waste is produced, it must be treated as a resource which can be used to create new products or generate energy. Products must be designed with a life cycle approach, taking their handling after the end of their initial uses into consideration. Recovering value and creating markets for the secondary products and energy become the basis for policy solutions.

Reality in India

This is one area which does not require any elaboration. Are we — even as the educated citizens are conscious of the damage that we are inflicting to the environment when we take that plastic bottle or a plastic bag? The best of the medical facilities in India have minimal respect for waste management. This is not about a statute or a policy. This is about a cultural change at society level. At this stage in India with the growing economy & availability of new products, such consciousness is difficult to come by.
Water Usage

Cities, directly and indirectly, use vast quantities of water which end up as waste water. Efficient water use has to be closely linked with the recycling and reuse of plant nutrients and carbon contained in waste water. A regenerative city will assure that these materials are returned to farmland growing food for cities in a closed nutrient cycle.

Reality in India

This is probably an area where there is hope & a lot of work is going on. There is general awareness & people are getting more n more conscious. Concepts like Rain water harvesting, recycling is in vogue.
Urban Food & Agriculture

The issue of local food is one of the most commonly and enthusiastically embraced of all the issues around localisation. From British allotment gardening, to community supported agriculture, to Cuban urban agriculture, to Japanese rooftop gardens - there are more and more examples of intra-urban and peri-urban areas being transformed into productive food-growing land. Local agriculture projects create solidarity, cohesion and purpose among the communities, sustaining morale and building community pride.

Reality in India

While the average food consumption per capita is increasing, the urban food growing in non existent. On the contrary, the agriculture lands surrounding the cities are being converted into Real Estate. India being a country of extremes, suffers from both sides – excess food at higher end of income bracket & practically, nil food at the lower end. Somehow till date, despite efforts by government.
Bioequstration

Some industries or cities pride themselves on fostering carbon sink projects in far-away places such as Amazonia as attempts at 'offsetting' their fossil fuel sins – and many emissions trading schemes are based on this idea. But if a city offsets its greenhouse gas emissions in its own bioregion it has an extra reason to ensure that they are well managed. If a city establishes its own carbon sink it will ensure that its own regional ecosystems benefit. Whilst open space and waterway management, forestry and agriculture practices may all help to absorb carbon, only deliberate planning for biological carbon sequestration can really make a significant contribution.

Reality in India

First of all, there is very limited knowledge on the Carbon Footprint & credits & on the top of it, there is hardly an attempt to educate the developers. Moreover, even if educated, the growth rates being so high, the priority of the developers is to meet the fundamental demand first. Even the clients are not really ready to pay extra.
Who are we & what are we doing

Forewarned with all such issues & realtime problems, we at Ramky Group, are developing an integrated satellite township in Hyderabad, Andhra Pradesh called ‘DISCOVERY CITY’. The City is registered with IGBC for green development & we have dedicated team members working almost on all aspects of regeneration.

The RAMKY Group, founded in Year 1994-95, is a specialist multidisciplinary organization with a turnover in excess of Rs. 4500 Crores focused in the areas of Civil, Environmental & Waste Management infrastructure with specific emphasis on 'Public Private Partnership' projects. The Group has a reckonable presence in more than 55 locations in the Country in addition to branch offices in UAE and Singapore.

The basic principle we work under is that whatever we do should be a major contribution to the society, and the Country should be proud of it. We’ve done fairly well on that front, with a string of firsts like India’s first integrated hazardous waste facility, India’s first biomedical waste facility and also India’s first integrated municipal solid waste facility. These are in addition to our massive road-building and other infrastructure works… nothing short of building the Country’s backbone.

The Group goes by the belief – Towards Sustainable Growth
RAMKY GROUP

RAMKY INFRASTRUCTURE LTD. (RIL)
- Construction and Development of Civil Infrastructure

RAMKY ENVIRO ENGINEERS LTD. (REEL)
- Waste Management, Recycling and Integrated Environmental Services

RAMKY ESTATES AND FARMS LTD. (REFL)
- Residential, Commercial Institutional and Integrated Townships including Asset Ownership

RAMKY FINANCE & INVESTMENTS LTD (RFIL)
- Nurturing and Supporting Entrepreneurs
  - Life Sciences
  - Education, Construction
  - Consultancy & CSR
OUR PRESENCE IN INDIA
OUR GLOBAL PRESENCE AND INTEREST

- International Projects Executed – UAE, Oman, Singapore, Gabon
- Geographies of Interest - Africa, Middle East, SE Asia, South America
VISION & MISSION

VISION
Ramky shall be a leading global enterprise in world class infrastructure development and environment management through sustainable growth.

MISSION
To be a one stop solution for all real estate needs offering a wide range of products and services across all markets and be recognized for high quality standards, complete customer satisfaction, fair business practices and excellent returns to stakeholders.

VALUES
Ramky in achieving its vision shall promote high standards of:

- Integrity
- Customer Satisfaction
- Work Culture
- Employee Sense of Belonging
- Innovation
- Safety, Health & Environment
- Social Commitment
Vision
Establish Discovery City as the place that truly epitomizes the philosophy

LIVE, ACHIEVE, THRIVE, UNWIND
RAMKY DISCOVERY CITY

- Integrated Township in 750 acres at Srinagar village, Ranga Reddy District, Hyderabad
- Hyderabad’s first and largest integrated green satellite city which is registered with Indian Green Building Council
- Excellent connectivity – on Srisailam Highway & 5 min. from Outer Ring Road (ORR)
- Encompasses an array of Residential, Retail, Office Space, Leisure, Hospitality, Health Care, Educational, Sports and R&D
- A smart destination which is sustainable – **THE CITY OF HAPPINESS**
WHAT IS DISCOVER CITY?

Every city offers a life. Here's one with everything around you.

Presenting Discovery City. A unique lifestyle build around your every need, be it work, shopping, entertainment, education or healthcare. A self-sustained integrated township spread across 830 acres, Discovery City offers the most comfortable and convenient lifestyle anyone. For more, give us a call or even better visit us.
**Recreational:**
Easy access to balance work with play

**Infrastructural Benefit:**
leave rough city conditions behind

**Educational:**
More time to study; arrive in school fresh

**Community Benefit:**
feel part of belonging

**Health Benefit:**
No worry about immediate medical care

**Occupational:**
Find work near where you live

**Cultural Benefit:**
easy access to enrichment
Thank You