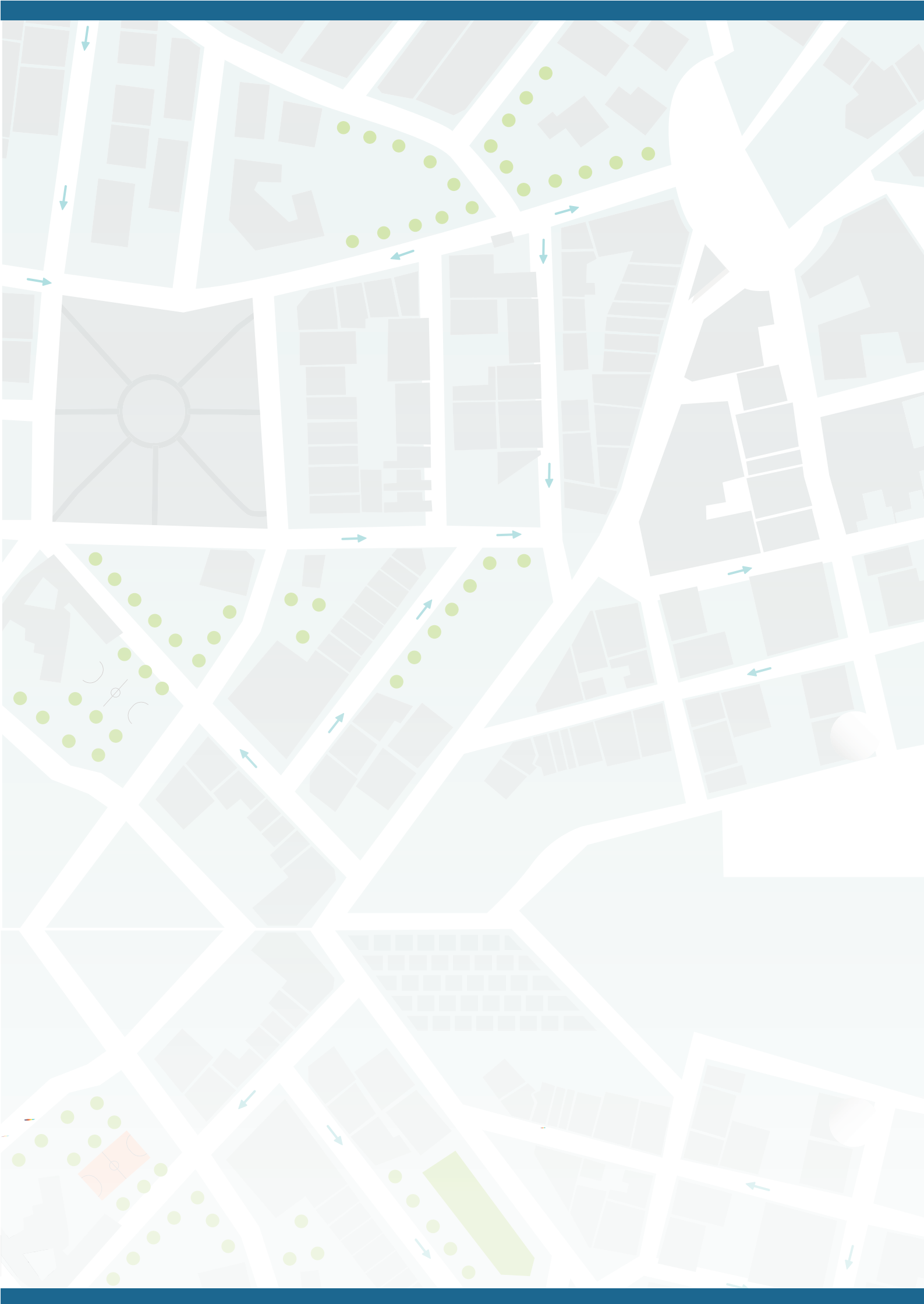


# BENGALURU BLUEPRINT

JANUARY 2017

VOLUME 2







# BENGALURU BLUEPRINT

January 2017

The Bengaluru Blueprint initiative was championed by Mr N. R. Narayana Murthy, Founder-Infosys Limited and coordinated by Janaagraha Centre for Citizenship and Democracy (Janaagraha) and Jana Urban Space Foundation (JUSP). Bain and Company, one of the world's leading consulting firms supported this initiative.

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## Annexure

# 1. Journey so far



We should bring a sense of urgency, excellence, transparency and accountability into governance. We have to raise the level of excellence, enhance focus on speed of decision making, allocation of budgets, completion of tasks on time, understanding targets, the current position, the impact projects are having, the shortfall if any, etc.

**N. R. Narayana Murthy**  
*Founder, Infosys Limited*

The Bengaluru Blueprint exercise was kicked off in September 2015 with a series of one on one interviews. Around 80 participants were interviewed including :

- Political Leaders: Ministers, MLAs, Mayor
- Government: Agency Heads, Principal Secretaries
- Academia
- Domain Experts
- CSOs, Citizen Groups
- Eminent Citizens: Artists, Sportsmen, Writers, Business Leaders
- Corporates
- Senior Editors

Inputs were also gathered from Resident Welfare Groups, Citizen Groups and through an online survey.

On the 15th of October 2015, a synthesis workshop was held where representatives from the government and civil society agreed on the need to create a blueprint for Bengaluru and put the same into action by adoption of quantitative goals to be achieved through sectoral roadmaps.

Following the workshop, meetings were held with Ministers of the Government of Karnataka and Heads of civic agencies to discuss the next steps in formation of a Bengaluru Blueprint Action Group.



## 2. How is the Bengaluru Blueprint different?

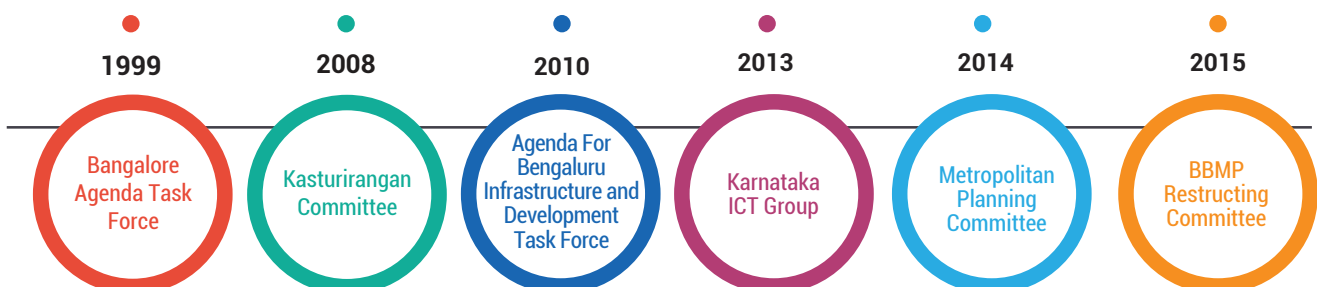
Potholed roads, traffic jams, polluted air and water, garbage mismanagement, slums, unpredictable power supply, etc. are all dimensions of the failure of our cities to provide a good quality of life to their citizens. This is true of not just Bengaluru but almost all Indian cities. These failures are not root-causes but symptoms of a systemic failure in the governance and management of cities. However, governments have continuously focused on band-aid or patch-work solutions, which are only aimed at treating the symptoms, while completely ignoring the root causes. Any number of band-aids cannot prevent the malaise from spreading, unless the underlying structural deficiencies are addressed successfully.

No city has made serious efforts to address systemic issues. This is borne out by the results of Janaagraha's Annual Survey of India's City-Systems (ASICS), a diagnostic study that evaluates India's cities on systemic factors across the four components of City-Systems-Urban Planning and Design, Urban Capacities and Resources, Empowered and Legitimate Political Representation and Transparency, Accountability and Participation. The study evaluates India's cities on laws, policies, institutional design and capacities, accountability mechanisms, etc.

According to the 2015 edition of the ASICS, India's cities scored across a range of 2 to 4.2 on a scale of 0 to 10, across the four components of City-Systems. In comparison, New York and London, which were included as global benchmarks, scored 9.7 and 9.4 respectively, on the same scale. The two questions that now arise are: Have any systemic reforms actually worked in India's cities? If yes, how can these be scaled and institutionalized?

### 2.1 Past initiatives

Bengaluru has seen several initiatives, going back to Bangalore Agenda Task Force in 1999, the Kasturirangan Committee<sup>1</sup> in 2008 and more recently the BBMP Restructuring Committee. Some of them have highlighted issues and provided recommendations but most of them did not dwell on the implementation aspect.



<sup>1</sup><https://archive.org/details/DrKasturiranganCommitteeReportOnBBMP>

## 2.2 Road map for action

The Bengaluru Blueprint goes further and provides a roadmap for implementation. The Blueprint aims to overcome deep underlying issues that impede efficient, sustained implementation of policies that lead to progressively better quality of life. Instances of such deep systemic issues are patchwork projects not accompanied by institutional reforms, challenges in inter agency coordination, shortfall in state capacities, low trust quotient between government and other stakeholders, lack of periodic measurement and robust project governance and management.

The Blueprint provides a robust framework for city leaders to develop a clear strategy for their city by identifying the key outcomes that they wish to deliver, across four themes:

- Economy
- Equity
- Environment and
- Trust and participation

The 3 Es, (Economy, Equity and Environment) which are components of the Quality of Life perspective in the City-Systems Strategy Framework, are derived from the National Urban Spatial Planning and Development guidelines, an initiative of JUSP.

Objectives under these themes are sought to be met through three key perspectives:

- Development (including projects, planning and finances)
- Policies and Processes, and
- Leadership and Capacities

The Blueprint identifies key initiatives across all these themes, and helps to produce a practical, actionable 5-year roadmap for the city.

The Blueprint will enable the city leadership to move from a well-intentioned (but often ambiguous and unrealistic goals without action plans) to a transparent, systematic and detailed approach of setting and achieving quality of life outcomes. Over the five years of the Blueprint, there are different activities and milestones that are required to accomplish a project, which span across the following perspectives: Development, Policies and Processes, and Leadership and Capacities. These result in balancing short-term and long-term priorities, while ensuring sustainability of outcomes.



## 3. Detailed sectoral inputs from interviews

The detailed sectoral inputs from over 80 one on one interviews are shared below. We have tried to faithfully reproduce the suggestions shared. We have not attempted to curate or resolve any conflicts in the suggestions.

### 3.1 MOBILITY

#### Traffic management and behavioural change

##### » Traffic studies and technology

- Undertake origin destination surveys and overlay existing bus routes on these to understand service gaps
- Undertake study to ascertain the number of pedestrians and their share in the usage of roads by each category of transportation
- Establish a Traffic Data centre for data research, dynamic management, command and control centre across civic entities (e.g. changing traffic flows, penalising violations etc.)
- Implement effective IT solutions like GPS tracking of buses/ inter-modal smart cards which can also be used for targeted subsidies etc; possibly a comprehensive digital infrastructure plan including the traffic management centre etc.
- Establish time and cost benchmarks or standards for distances within the city

##### » Reducing congestion

- Levy congestion charges in a phased manner in CBD area
- Pilot car free zones in Commercial Street, Brigade Road etc. and enhance coverage to specific market areas in a phased manner, supported by related commensurate parking
- Explore bidding registration numbers, permitting registration-number based usage of private vehicles
- Charge progressively higher registration charges for households with more than one car

##### » Affecting behavioural change

- Train traffic policemen; fill vacancies in a phased manner
- Show videos on responsible driving at the RTO while procuring licenses, like in Singapore, highlighting self-benefits
- Set higher bar for obtaining licences, redo driving licence rules and plug corruption; end to end IT implementation in RTOs
- Engage driving schools to change the way driving is learnt/imparted
- Enforce lane discipline

#### Public transport

##### » Buses

- Expand coverage, increase investments
- Redesign bus stops to expand capacity, rationalise locations
- First right of access to public transport vehicles including autos
- Implement Bus Rapid Transport System on Outer Ring Road, dedicated bus lanes; articulated buses



Initial capital investment for improving public transportation services may be high but the returns are great and costs can be recovered in a short time.

**Dr. Ekroop Caur IAS**  
*Managing Director (MD),  
BMTC*

- Incentivise usage of public transport
  - Rationalisation of fares in both directions as required
  - Short haul buses to connect to Namma metro
  - Spend surpluses on improving services rather than upgrading offices
  - Incentivise PPPs, be transparent in contracting
  - Investments needed for increasing bus fleet by 1,000 buses every year for doubling the fleet size, annual maintenance, more depots etc.
  - Levy cess on diesel to fund expanded Volvo fleet
  - Land allotment in outer areas for bus depots, to support and increase services to these areas
  - Widen roads e.g. Tannery road, KR Puram
  - Explore feasibility of electrified bus/tram ways
- » **Commuter rail**
- Implement commuter rail network
  - Increase/introduce suburban/commuter rail services especially during peak hours
  - Run shuttle services from railway stations to large IT parks/other places of work during peak hours
  - Make Light Commuter Rail a statutory body
- » **Metro**
- Expand coverage, hasten progress of work
  - Undertake a serious review of cost benefits of the Metro, including timelines, usage, impact on citizens etc.

## Non-motorised transport

- » **Cycle**
- Replace student bus passes with subsidised cycles, encourage corporates to incentivise cycling to work
- » **Walking & pedestrian infrastructure**
- Create a walkable city; use pre-fabricated blocks for quick progress
  - Better pedestrian crossings, both in terms of numbers and quality
  - Explore 70:30 mix in pedestrian oriented design; i.e. design for pedestrians rather than for traffic
  - Explore skywalks with escalator which could be run through solar energy
  - Follow the model of Gangtok where foot paths are railed to ensure that vehicles do not ply or get parked on foot path. This initiative could be piloted from Infantry Road

» **Car pooling**

- End monopoly of BMTC, permit shuttles/minivans/ZipGo type models/car-pooling services
- Subsidise city cab/pooling services, massively multiply their numbers from the existing 60,000 to say 300,000. Recognise autos/cab services as part of public transport
- Co-opt companies to incentivise employees based on usage of car-pooling services, make parking very expensive/difficult, and incentivise corporates to expand bus services and stagger work hours to reduce peak hour congestion
- Incentivise Work From Home (WFH) where feasible, incentivise corporates based on number of employees on WFH

» **Parking**

- Robust policy needed; mandate stilt/underground parking in all new constructions at the building plan approval phase, both commercial and residential
- Link registration of vehicle to evidence of parking space availability, in each case
- Incentivise PPPs for parking through tax breaks, multi-layered parking lots
- Actively explore and maximise parking at bus and metro stations
- Levy significantly higher parking charges especially in centres of high consumption e.g. 100 ft road
- Incentivise hotels to manage their own traffic
- Create a database of road measurements and parking spaces

**Roads**

- Scale Tender S.U.R.E
- Clean up Outer Ring Road and arterial roads with practical surface design interventions. Use target average travel time as a goal, say 80 km/h for Outer Ring Road
- Identify and explore solutions to fix missing road links within the city
- Restrict number of flyovers, use them strategically in ring roads/arterial roads. Accelerate the completion of peripheral ring road
- Set and implement standards for asphaltting and maintenance, supported by 3-5 year maintenance contracts
- Remove toll plazas, use technology/sensors to charge tolls
- Use GPS, map underground utilities like water and sanitation lines for sustainable road improvement
- Develop an Alternate road to airport
- Explore Gujarat's land pooling model for land acquisition (needed for road widening, and fixing the missing links in city roads)
- Transparency in contracting and cost estimation
- Execution of Signal Free Corridor project in Whitefield
- Attention should be paid to design in building of road infrastructure, which is more crucial than construction of the road
- Create a 'Road History' and follow stipulations of Indian Road Congress
- There should be a minimum guarantee of five years for roads. Contractors should be penalised for breach of timelines
- Install traffic timers
- Tar all arterial and layout roads.

<sup>1</sup>The complete list of interviewees is available in Volume II of this report



Metering of sewage generation is followed in Australia, especially for bigger consumers. Right now sewage treatment is subsidised up to 75%.

Rain water harvesting, Water re-cycling and reuse should be promoted. The target should be that at least 40-50% of water should be re-used in the city

**Vijay Bhaskar IAS**  
*Former Chairman, BWSSB*

## 3.2 WATER SUPPLY AND SANITATION

### Institutional

- Convert BWSSB into a company as in the case of BESCOM for better management and efficiency; empower and fix full accountability
- Recognise that there is an availability/quantity problem and a distribution problem. For the availability problem, put in place a medium and long-term plan to both pump more water for Bengaluru, and supplement through other sources
- Restore Thippagondanahalli dam
- Ground water recharge, lakes, storm water drains, rain water harvesting, recycling and sewage treatment are all parts of the solution
- Integrated Water Plan for the city under the aegis of the BWSSB, by integrating related plans and operations of BBMP, LDA, Central Ground Water Board (CGWB), BDA etc.

### Pricing and measurement

- Price water appropriately and do away with water subsidies/raise tariff especially at the higher end of the socio-economic spectrum; raise resources for the large capital investments required to expand water supply network
- Government could give away a certain quantity of water free to the poor and above that charge them nominally
- Sewage disposal to be made a paid service, the price of which should be added to the water bills
- Abolish the sewage cess and increase the price of water
- Measure storage and usage of water to devise sustainable solutions(as in Singapore)

### Treatment, recycling & usage

- Do not process all water to potable level. Instead have the water treated to usable levels and specify it as non-potable. While making alternate arrangements for potable water; explore separate pipelines for potable and non-potable water
- Incentivise reuse and recycling of water by giving incentives for related equipments (VAT concessions, 100% depreciation for IT purposes etc.)
- Mandate and implement separate pipelines in residences for use of recycled water in toilets, gardens etc.
- Promote use of recycled water and help people overcome the psychological barriers of using it

- Employ demonstration effect to help eliminate the mental block in using recycled water. For eg. Singapore leaders drank recycled water in public to generate awareness on usage of recycled water

## **Distribution & leakage**

- Put in place a plan to replace old pipes with stainless steel pipes over a period of ten years
- Use non-intrusive technologies like sleeves to identify water leakage
- Scale E-Kaveri initiative; significantly reduce Unaccounted For Water (UFW)
- Use GIS technology to identify and map the entire water and sewerage network, including storm water drains
- Move away from pumping bulk water from Cauvery; explore Singapore type model
- BWSSB should have independent feeder line for own power supply. It should identify alternate sources of power to pump water so that the dependence on BESCOM is reduced
- Replace 9 inch sewage pipes with 12 inch ones to facilitate better distribution

## **Lakes,tanks & groundwater**

- Conserve and rehabilitate existing water bodies / lakes
- Ground Level reservoirs(GLRs) and tanks have to repaired and restored
- Encourage use of lake water, as when water gets used the lake also gets rejuvenated
- Measure groundwater levels in different neighbourhoods across the city
- Regulate uncontrolled construction activity around aquifer recharge zones and lakes
- Constitute Lake Protection Committees as directed by Karnataka High Court
- Map existing lakes to chart out protective steps to prevent further loss
- Rejuvenate lakes by dividing the lake between companies and community groups to take up the process of rejuvenation. It should not be titular ownership, but enabling communities to take charge of the restoration and maintenance on an ongoing basis
- Lake Conservancy group can be formed with statutory powers. It should be able to collect fees and fines if people litter in or around lakes. It should be independent of Government. Government need not fund it. Private parties can fund and maintain the same.

## **Rain water harvesting & other conservation**

- Rain water harvesting has to be mandated & promoted for groundwater recharging. Common rainwater harvesting challenges such as quality concerns need to be addressed by appropriate research institutions/experts
- Infrastructure for this should be build during the construction phase. There should be strict monitoring through coordination between city agencies to ensure compliance and heavy penalties should be levied for flouting this rule
- Need to measure ground-water level; need for regular monitoring mechanisms
- Create awareness about water conservation and promote use of water saving equipment
- In order to prevent rainwater mixing with sewage, mandate that water and sewage pipes be marked separately in all building plans
- Link rain water harvesting/sewage treatment plants with grant of housing loans by banks and financial institutions



RWAs should be strengthened and given responsibility for waste segregation.

**Dinesh Gundu Rao**  
*Former Minister for Food and Civil Supplies,  
Government of Karnataka*

### Storm water drains

- Improve drainage systems of the city to curb water logging and rain-related traffic problems
- Significant expertise/talent needed to fix sewerage/storm water drains
- Place 'trash racks' in Storm Water Drains to prevent drowning and to recover solid waste

### Sewage

- Large investments are required for laying adequate sewerage network both for the present and future
- Invest in more Sewage Treatment Plants (STPs); improve existing STP's wastewater recycling capacity and usage
- Decentralise sewage treatment at the ward level
- Incentivise/mandate use of tertiary treated water for non-potable purpose
- Mandate STPs in apartment complexes and other large establishments. Prior to giving water connection, have the same inspected by BWSSB. Sanction of building plans and issuance of OC should be linked to functioning STPs
- Explore solutions such as the DEWATS technique formulated by the BORDA network
- Explore and implement use of natural, plant-based techniques of sewerage treatment to the extent possible
- Explore metering of sewerage for bulk generators (like in Australia) to track the presence and extent of treatment, pricing, costing etc.
- Popularise public toilets designed by DRDO
- Consider appropriate pricing for sewerage to ensure availability of funds for proper network
- Review and amend engineering of Storm Water Drains vis-à-vis sewerage lines underlying them, especially in areas with dense slums or slum-like settlements, in order to systemically prevent both bursting of sewerage pipes and lack of sewerage connections

## 3.3 SOLID WASTE MANAGEMENT

### Institutional

- Actively explore methods to raise consciousness on the drawbacks of a culture of consumption

- Involve private sector / individuals to provide technical support on solid waste management; bolster skills and capacities of managerial staff handling solid waste management, including disposal
- Decentralise the system of waste management with total community participation
- Better monitoring of contractors in respect of labour and equipment deployed in wards
- Provide incentives for hotels to take up waste management in their locality
- Large apartments should mandatorily manage their waste internally
- To deal with E-waste a national policy is to be framed to identify locations for deep burial
- Identify city's bulk generators of SWM such as industries/ commercial entities etc. and strictly enforce a zero-waste policy for them that may be incentivised.
- Make wards self-reliant to manage its waste

## Collection and segregation

- Mandate segregation at source, at household level and decentralise recycling of dry waste
- Wet waste should be composted at every ward individually, and dry and hazardous waste should be collected separately by autos/tippers for recycling; move towards zero waste strategies
- Systematic engagement of RWAs, communities and citizens to achieve higher % of segregation
- Introduce public bins segregated for dry and wet waste in all areas of Bengaluru especially at food courts/ darshinis
- Each ward must have its separate waste segregation unit
- Have more garbage segregation drives in the city
- Scientific Infrastructure for segregated waste management should be mandated
- Focus to be changed to mixed waste handling
- Levy charges for collection of garbage
- Use technology and automated methods for street sweeping
- Mandate usage of only tipper autos for door to door garbage collection, eliminate push carts
- Pourakarmikas ( Sweepers) should be empowered to monetise the dry waste collected; thus incentivise segregated collection

## Disposal

- Establish a well-functioning system of supply chain to transform waste to energy; set up decentralised waste to energy plants
- Re-process and re-use construction waste (example of China's National Highway with re-processed construction waste without compromising on quality standards)
- Set up wet waste conversion plants





Clearly zone residential and commercial areas by providing walled boundaries and prevent encroachment of the streets of residential areas for commercial activities. Mixing up of both disrupts drainage and water supply lines. The Outer Green Belt around Bengaluru should be maintained.

**N. A. Haris, MLA**  
*Shantinagar*

### 3.4 CITY PLANNING

#### Institutional process

- Adopt the Bengaluru Master Plan and mandate that all agencies follow the Master Plan
- Common base map of Bengaluru that is in the custody of a single authority and used across agencies
- Create a unified planning authority with representatives from the BBMP, BDA, and UDD. BMRCL, BMTC etc. along with two subject-matter experts from every field to coordinate and plan city's development; include inputs from access planners, demographers, sociologists, financial analysts, health professionals etc.
- Have experienced, certified urban planners rather than bureaucrats lead urban planning institutions/departments
- Create a committee of experts to guide the formation of the master plan for the city after which it should be put up for debate and opinions from stakeholder groups
- Open the process for development of Master Plan, engage citizens; provide full disclosure and updates on status and progress.
- Reframe Ward Committee Rules to include RWAs and facilitate empowerment of Ward Committees

#### Principles

- All projects before implementation must be checked for (i) sustainability and (ii) affordability
- City planning should have a component that looks at the upliftment of underprivileged sections of society to curb inequality and related problems of crime and safety
- Adequate access to water supply and sanitation should be an important consideration while determining city plan
- Urban planning needs to be carried out with sensitivity to environment and resource constraint
- Think of work and living spaces together while planning
- Factor in the multiplier effect of a new employee in Bengaluru bringing his/her family into the city while planning for the future
- Effectively regulate real estate and housing, and the way the city is planned and developed

- The city plan should suit Bengaluru and factor in its mixed growth pattern, and not be necessarily based or derived from western models
- Ward level plans need to be made with citizen participation; ward-level assessment of infrastructure needs to be an input into the ward and city plans
- Create Station Area Plans i.e. Identify special areas/zones such that planning around these areas results in focused density development, safe and conducive environment for pedestrians, promotes heritage and culture etc. ( For example : metro station areas planned by Embarq

### **Role of Bengaluru Development Authority (BDA)**

- BDA should completely move away from constructing layouts and selling plots, building shopping complexes, and should focus on operating as a Planning and Standard-setting body.
- BDA should take on the role of a regulator and lay down/monitor basic quality of life//civic services parameters and standards that have to be met in the development of new plots or projects, e.g. check the legal ownership to the land being constructed, mandate and monitor the certain basic amenities every layout should have etc. .

### **Project execution**

- Quantify impact of all development projects using globally accepted benchmarks and measurement standards so that co-benefits can be measured
- Encourage PPPs/private sector participation in creation of infrastructure, both at city and ward levels; create frameworks/standards for PPPs to operationalise them.
- Carry out robust cost-benefit analyses of costs for large projects and increase their transparency
- Operationalise Transfer of Development Rights
- Use better technology for construction; lease construction equipment instead of buying them
- Eliminate contract risk, especially in property ownership; issue Government Order to the effect that approval by one government department/authority/agency is tantamount to approval by the state government
- Eliminate role and influence of corporates in planning committees as today private interests are overriding public interest

### **Balanced urbanisation**

- Carefully understand history of the city, and how it has influenced the present context as a key basis of planning for Bengaluru
- Consider urbanisation and growth of Bengaluru in the context of Mysore and Tumkur; direct growth, investments and connectivity accordingly
- Significantly enhance connectivity with rural habitations so people can commute to city but stay outside city limits, like in Tamil Nadu. This would reduce travel time from home to work. Supplement this with city services that factor in work locations of migrants.

## **Zoning and building plan**

- Create adequate number of self-sufficient nodes or meta-neighbourhoods in the city, so access to basic services and quality of life does not require frequent/extensive travel within city
- Strengthen zoning regulations, and enforce full implementation of the same
- Clearly zone residential and commercial areas
- Undertake systematic study of terrain before granting building approvals, taking up new developments

## **Others**

- Direct urban infrastructure like malls along NICE road
- Use forest areas outside Bengaluru to build a large park like Lalbagh/Cubbon Park or a forest reserve open to public
- Display model of the city at a central location and keep it updated for changes, so people are able to see a 3D model of the city
- Train staff in futuristic planning of public services
- Increase FSI in core areas around the Metro and Outer Ring Road/ arterial stretches to deter urban sprawl
- Reassess growth plans along ORR in Whitefield area

## **3.5 ENVIRONMENT**

### **Institutional**

- Recognise pollution as a civic, city-level issue rather than central/state subject; create an enabling policy environment
- Set realistic benchmarks or goals to move towards e.g. set 1990 levels pollution as the target level and move towards it
- Take up projects that address climate change objectives; access funds from international organisations like World Bank, ADB etc.
- Actively work with businesses to make them sensitive to environment

### **Air pollution**

- Incentivise electric vehicles to reduce emission
- Mandate better air quality monitoring mechanisms, publish data widely and raise awareness on health implications of data points; consider large electronic displays across the city with related health indicators
- Raise greater awareness about health effects of pollution given lack of visible effects
- Phase out 2 stroke engines
- Enforce standard emission levels of buses/ trucks/ autos etc.
- Manage dust and pollution created from new road construction and resurfacing projects
- Catalyse widespread use of air sensors to generate large quantities of credible hyper local data on air pollution

## Reduce pollutants

- Strict enforcement against unlawful discharge of effluents by industrial units
- Complete ban on plastics
- Promote plastic-free days, beginning with once a week
- Hold anti-honking/ noise pollution awareness campaigns; engage driving schools to change behaviour
- Consider differential tax rates for motor vehicles based on fuel efficiency slabs
- All shops should charge for plastic covers

## Greenery

- Achieve acceptable benchmarks for open spaces and parks in the city
- Instead of one green belt around the city, break it up and mandate green belts or green areas in each locality
- Insist on adequate open spaces and parks in all new developments
- Encourage urban gardening and create incentives/ mechanisms to facilitate the same
- Map all pockets of forest land in Bengaluru, create inventory of different plant/ animal species, publish details and take active steps to preserve biodiversity and greenery. These could also be opened to public with appropriate safeguards
- All roundabouts in the city to be adopted by corporates/institutions and greenery to be enhanced
- Associations and individuals should be allowed to adopt lakes and parks
- Encourage corporates to promote organic farming and urban gardening on campus as an alternate to manicured lawns and the like
- Create a network of urban forests

## 3.6 HEALTH

### Prevention

- Create a database of health profile of Bengalureans through the UID system with a strict privacy policy, so Non Communicable Diseases can be detected and prevented (e.g. by capturing information on blood sugar levels, lipid profiles etc.)
- Create donor database for bone marrow transplant; run a campaign to collect sputum samples to facilitate the same
- Create policy framework for organ donation
- Provide health screening on OPD basis to public transport drivers; provide health allowance.
- Fast-track conversion of public transport vehicles, including autos and cabs to CNG to address rampant respiratory issues among Bengalureans
- Allow NABH accredited labs to carry out dengue tests
- Undertake serious efforts to eradicate disease-bearing mosquitoes; explore the services of Vector Control Research Centre, Puducherry; acknowledge serious health implications of mosquitoes, the widespread incidence of Dengue/ vector borne diseases
- Put out data on rabies in public domain; acknowledge stray dogs as being part of the public health challenge and

explore and implement a middle ground solution between dog welfare and public health (e.g. explore a shelter for stray dogs which can in due course become a fun place for dog lovers)

## **Institutional**

- Develop Bengaluru as an international healthcare destination; should be preceded by creating infrastructure for leisure tourism
- Simplify cumbersome procedures in recruitment of health professionals in public hospitals
- Recognise colleges offering CPS Diploma courses (precedence in Maharashtra)
- Address undersupply of medical professionals, steadily declining numbers of nursing care professionals; actively incentivise private sector medical professionals to devote time in government hospitals
- Move health out of BBMP's purview to State Govt. except for aspects such as fumigation etc.
- Systematically and regularly publish health data and diseases data. Currently there is a possible underestimation of disease incidences. Put in place a Health Information network to obtain and publish credible data.
- Government should also create and publish database of all hospitals and clinics in the city, and various government schemes and facilities that can be availed in Government hospitals
- Catalyse more PPPs in Health sector
- Govt. hospitals need to be referral hospitals
- Govt hospitals need to undertake initiatives such as blood donation camps to build trust with communities

## **Health infrastructure**

- Establish requisite number of Public Health Units (PHUs) and Public Health Centers (PHCs) in Bengaluru commensurate with population, and ensure appropriate demographic/geographic spread
- Allow AYUSH doctors to run PHCs/PHUs. (There is already precedence from Maharashtra and Tamil Nadu)
- PHCs need better monitoring and government requires greater capacities for the same
- Healthcare and health awareness needs to be made more easily available to the poor; including targeted awareness at ward level (e.g. organising health clinics every Wednesday by the BBMP at an AC level)

## **3.7 EDUCATION**

### **Institutional**

- Existing government schools to be strengthened; address manpower and skills shortage through committed volunteerism/citizen participation, CSR, NGO engagement
- BBMP should hand over its schools to the State Government
- Strictly enforce RTE norms in private schools
- Mandate systematic training of teachers in government schools and ensure continuous skill upgradation
- Entrust an institution with the task of developing innovative ways of teaching e.g. to teach binomial theorem, how to use technology in teaching etc. Encourage inclusion of children from all economic strata in the same class room

## Higher education

- Establish more research oriented universities
- Create diversity in educational institutions by de-regulating higher education similar to the steps initiated in the 1980s in the context of engineering colleges in Karnataka
- Create a vibrant connect between education and employment sector along the model of Singapore

## Quality of schools

- Crackdown on authorities that charge exorbitant amounts for rent of school building
- Improve quality of government schools by focussing on infrastructure, teachers' training; motivate teachers through incentives and disincentives
- Engage with corporates and philanthropists to fill certain gaps in infrastructure and facilities in government schools such as vans, uniforms, computer, lab, tables, etc.
- Identify low quality public schools whose image is severely tarnished; introduce reforms through PPP models or mission mode approach
- Provide adequate toilet facilities in government schools, especially for girls
- Anganwadi programme to be encouraged and strengthened
- Include and emphasise on value education (including emphasis on aspects such as respect for humanity and animals, non-materialism etc.) and extracurricular activities
- Institute 'Schools to Job' programmes to link school education with jobs

## 3.8 CRIME AND SAFETY

### Enhancing safety

- Develop an integrated and comprehensive City Safety Charter
- Set ambitious goal of making Bengaluru safest city for women in five years; safety not through confinement but through true freedom
- Lay emphasis on value education and culture
- Focus on women as key target stakeholders in safety; place that at the heart of city planning. Focus on different aspects such as street lighting etc., promote mental and physical wellness for better productivity, and emphasize on making the city a space where women can realise their true potential. Measure safety not just through crime rates, but also through qualitative measures.
- Bengaluru needs a Street Lighting Authority run by private players to ensure operations and maintenance of street lights. This has significant importance to safety. Refer to the model of Ahmedabad and Surat in this context.
- Establish grievance redressal cell in all police stations



Bengaluru should be made the safest space for women in the world, in the next 5 years. When it is the safest for women, it would naturally become safe for kids and senior citizens.

**Subroto Bagchi**  
*Co-Founder, Mindtree Ltd.*

## Crime prevention

- Significantly enhance punishment for crimes and violations
- Fill police vacancies in a time-bound manner, increase the number of police personnel commensurate with population and accepted benchmarks in policing
- Should involve citizens actively - Incentivise/disincentives safe behaviour
- Explore surprise checks mixed with visible policing accompanied with public naming e.g. publishing names of violators and criminals in newspapers
- Enhance coverage of CCTVs; cover both highly crowded and highly secluded areas; enlist support of corporate sponsorships for procurement
- Include Community Policing as a necessary element of city policing; create policy backing through amendment to Karnataka Police Act; run community leadership programs.
- Identify and address specific root causes of crimes in lower income groups.
- Run vocational training in crime prone, lower income neighbourhoods and communities.
- Incorporate RWAs and other civic organizations in the training and professionalization programmes of police force.
- Establish avenues for better communication and feedback process between the police and public.
- Document all police orders.

## Fire prevention

- Increase number of fire stations commensurate with population in the city
- Governments to engage with private players and use PPP models to get adequate funding to put in place equipment and safeguards to increase fire safety in the city
- Map buildings, high rises, road width etc. digitally; so that if an emergency occurs the responding agencies can be better prepared with the specific equipment that would be required in that building



- Systematically engage citizens so as to create an enlightened group of citizens who can understand and engage on fire safety issues
- Strengthen policies on building safety
- Retrofit laws for installing fire safety equipment in older buildings
- Empanel external agency to inspect buildings for various safety measures pertaining to fire and issue a certificate of competency thereafter
- Integrated emergency response between fire, police and other emergency services; and create better synergy between parastatals
- Make fire safety education compulsory part of school and college curriculum, with regular fire drills; make such classes interactive and engaging

### 3.9 EQUITY AND INCLUSION

#### Protection

- Eradicate manual scavenging of sewers
- Mandate social security measure for labourers, particularly women

#### Shelter

- Government needs to provide more shelter homes with better quality and an open system; psychological trauma and delinquency need to be addressed more sensitively
- Bring fresh thinking and perspective to these homes, hire new additional resources for the same
- Partner with NGOs to overcome capacity constraints

### 3.10 CULTURE AND HERITAGE

#### Identity

- Discover and propagate a common identity that binds Bengalureans; promote the same in public consciousness to forge a sense of community
- Encourage Bengalureans to demonstrate good citizenship through volunteerism, responsible citizenship campaigns etc.
- Propagate certain specific identities/culture through diktat by employing a set of rules/laws for citizens to abide by. E.g. Singapore has strict penalties for littering streets, chewing gum etc.
- State should mandate basic introductory sessions in Kannada for all migrant population
- Promote values in such a way that fighting corruption becomes new identity of Bengaluru and a way of life for its citizens. Corruption is not always monetary in nature. Its root cause is not money but destruction of values.

## Culture

- Revive the Urban Arts Commission; empower it
- Consolidate government-run cultural institutions and centres under a common umbrella/department/entity
- Revive Bengaluru Habba or create an alternative; make public spaces come alive
- Engage with Defence authorities and PSUs with large land banks to leverage their land for such shared public events
- Leverage festivals as occasions or opportunities to promote sense of community and shared identity
- Promote use of Kannada; actively consider running Kannada classes for migrants
- Constitute an Aesthetic Detail Commission to lay down design standards for neighbourhoods
- Establish a good public library that citizens can be proud of
- Establish cultural centres like Ranga Shankara in other parts of the city, at least another 5 such centres that are suitably spread geographically
- Evolve a thoughtful, critical public culture in the city

## Heritage

- Rejuvenate iconic structures associated with Bengaluru's identity
- Preserve existing structures (E.g. Lal Bagh etc.) by involving private players in their management, and for improving infrastructure (Ensuring restroom, food & beverages at heritage sites etc.)
- Revisit entry fees as appropriate
- Draft a heritage law for Bengaluru to preserve heritage assets and promote city heritage
- Establish more museums of art and culture
- Actively support, through suitable policies, annual fests, dances, arts, crafts, food fests, etc.; use heritage centres for music concerts, dance shows etc.
- Position Bengaluru as the cultural hub and cultivate strong bonds with other parts of the state through promotion of common culture and values (promotion of arts & crafts in Bengaluru from all over the State such as performing arts, handicrafts crafts, etc.)
- Promote/incentivise local artisans and provide livelihood in their traditional knowledge
- Map buildings of heritage value and raise public consciousness and awareness of the same
- Designate 'Swarna Valaya' , a heritage zone comprising series of heritage buildings (project proposed by Mr. Narasimhan to the GoK) and shift it to a public trust to facilitate preservation and promotion

## Open spaces

- Actively explore developing lake fronts as shared spaces for citizens, through responsible commercial use and robust monitoring against encroachment/commercialisation.
- Negotiate for excess land held with the Cantonment to be converted into public spaces along the Singapore model.
- Explore better utilisation of open land in palace grounds through active intervention of state government

## 3.11 HOUSING AND REAL ESTATE

### Institutional process

- Pilot land titling for urban land in Bengaluru
- Create a unique code for each building, link these codes to Stamps and Registration department, BESCOM etc., thus creating a unique ID for each building which can be used across agencies, and across tax and other purposes
- Fight corruption in processes such as property registration on a war footing
- Govt. regulations on set-backs need to be sensible, and depending on location within city (e.g. London)

### Affordability

- Provide hostel accommodation on rental basis for migrants and workers in industrial units
- Build rest houses for drivers and other service staff at tourist spots for relaxation and rejuvenation
- Slum Clearance Board needs a time-frame to declare areas as slums and issue clearances; Government needs to have enforceable, time-bound policies on this front.
- Make a % provision in each new, large housing project for low cost housing
- Enhance government's role in affordable housing projects
- Seriously study and address housing for the poor and access to livelihoods as joint issues, incorporate the same as a central element of city planning
- Constructively engage real estate developers in affordable housing
- With Govt. support on land, construction industry can collaborate to offer comfortable and decent housing for economically weaker section
- Adoption of Pre-fabricated modular housing can help create more affordable housing

### Availability and planning

- Tap value in defence, railways, HAL, HMT land
- Direct housing development in consonance with proposed metro lines
- BDA should firmly move away from selling plots; BDA should do basic development of land/layouts and then engage private sector to develop the layout
- BDA can however explore building apartments to fill the affordable housing gap
- Ensure that real estate development and housing is factored in the city plan based on other factors such as mobility and water



Plan load shedding properly & share the fixed schedule with citizens so that they can plan their days accordingly and minimise loss of productivity owing to this problem.

**Prakash Padukone**  
*Eminent sports person*

### 3.12 ANIMAL WELFARE

#### Institutional process

- Create more shelters for animals with good sanitary facilities and humane conditions
- Adopt birth control strategies for stray dogs etc. that are compassionate and non-destructive
- Create a monitoring mechanism with powers to keep a strict check on treatment and care of animals within the city and its shelters
- Hold awareness campaigns on the need for animal welfare and environment protection for better quality of life

### 3.13 POWER

#### Power generation

- Explore dedicated power generation for Bengaluru, through both solar and other sources
- Explore if additional power can be purchased for Bengaluru
- Incentivise solar power through tax breaks, reduced power bills etc.; link solar power to grid
- Use open storm water drains for placing solar panels
- Have hybrid solar panels with wind power capacity (for night time use); mandate use by all government buildings, education institutions to leverage large surface areas
- In new gated communities, link solar power generation to building plan sanction
- Promote gas based power plants

#### Power distribution and usage

- Encourage and incentivise power saving and disincentivise excess power usage
- Time Of Day metering and higher tariffs for peak hour consumption
- Provide incentives to households for use of LED bulbs
- Expand coverage of 'Distribution Automation System' (DAS) to overcome power interruptions due to distribution/maintenance issues

- Strict review and regulation of transmission and distribution losses through use of IT mechanisms and automation
- Strict punishment for vandalism

### 3.14 POVERTY

- Recognise demands not just of the elite; make serious efforts to understand challenges of the poor and other underprivileged communities and factor the same into policies
- Establish an intellectual link with the poor, engage them actively in public discourse

### 3.15 TRADE AND INVESTMENT

#### Improving the investment

- Establish an Economic Development Authority as recommended in the BBMP Restructuring Committee
- View growth in trade and investments in light of changes in quality of city's infrastructure and services and aspects like safety, affordable housing, land management etc.
- Engineer balanced growth, especially between North and South Bengaluru
- Focus on growth and development of local trade and business; leave foreign investment to state
- Specifically focus on corruption impacting small businesses and industries
- Set up an efficient employment exchange

### 3.16 GOVERNANCE

#### Mayor

- Create a Mayor In Council system, with the Commissioner reporting to the Mayor In Council
- Increase term of the Mayor to at least 2.5 years, preferably 5 years or Directly elected Mayor with a 5 year term
- Systematically learn from the experience of cities in similar societies/economies with directly elected mayors
- Continue structured, systematic conversations on roadmap to directly elected mayoral system

#### Council

- Co-opt Councillors as part of civil society discourse on development and governance; minimise divisive discourse on socio economic lines
- Create circumstances for active citizens to contest council elections without need for nomination
- Encourage Councillors to constitute advisory groups for themselves/ward
- Incentivise good performance giving awards of Best Ward, Councillor, Best Council Debate etc.

## Governance structure

- **BBMP restructuring committee model**
  - » GBA chaired by CM and with all civic agencies reporting to it
  - » 5 MCs with directly elected Mayors or MCs without disturbing core Bengaluru
  - » Empowered Zonal and Ward Committees
- **Minister for Bengaluru supported by ACS level officer to whom all agency heads report**
- **Strengthen BBMP council and administration**
  - » An ACS/PS level officer heads BBMP
  - » Have all project proposals in the city greater than a certain predefined value placed before the BBMP Council for inputs and comments, irrespective of which agency is executing the same
  - » Agency heads do not report to BBMP Commissioner, even though they are lower in hierarchy
  - » Roadmap for agency heads to report to BBMP Commissioner in due course; but retain corporate identity of parastatals
- **Make zonal committee an immediate priority. It is an easily achievable goal to strengthen BBMP council and administration**
- **Emulating borough system of London**
  - » Make each assembly constituency as a borough.
  - » Make MLA its chairperson.
  - » 50% of the revenue collected should be spent in the same borough.
  - » Each of these boroughs can be further divided into wards.
  - » Fix the number of RWAs on the basis of boundaries fixed by sense of neighbourhood and not mere geographies to avoid conflicts.
  - » Facilitate citizen participation and engagement through these platforms

## 3.17 CITIZEN PARTICIPATION

### Ward committees and similar platforms

- Undertake deeper decentralisation; increase mobilisation, devolve power and finance to local levels
- Internalise collaborative governance
- Ward committees to be formed and be headed by councillors or Jana Spandanas with Ward Councillors and MLAs, coordinated by the ward engineer and supported by radical transparency in work and funds
- Publish quarterly/annual reports at ward level
- Create functional forums to express individual views about future/upcoming projects (like skywalks, etc.)
- Establish formal mechanisms for the government to listen to public complaints/feedback. Institutionalise Grievance redressal for specific areas; CSOs and government itself should ensure subject-specific feedback reaching the right people. Online platforms such as ICMYC should be set up by govt. itself

## Resident Welfare Associations(RWAs)

- RWAs can be an effective supplement to Ward Committees as the latter gains traction
- Actively encourage creation of and mobilisation through RWAs
- RWAs should be given power to approve or disapprove projects in its area and follow through on monitoring of implementation.

## Others

- Participatory Budgeting to be institutionalised in city agencies; citizen engagement in work monitoring and quality feedback to be catalysed; engage experts in Participatory Budgeting processes to gain inputs on high RoI projects and spends
- Need for all stakeholders to develop sense of civic responsibility and be part of interventions at the ward level
- Explore engagement of paid support staff at ward level for Councillors and MLAs to assist in program implementation and monitoring
- Engage with citizens to enhance civic responsibility and collective civic ownership
- Actively solicit ideas from citizens through innovative methods like Swiss Challenge for project ideas
- Link voter ID with Aadhar card and pay Rs.1000/- as a legal incentive to encourage voting.
- Local community should have statutory authority. They should be empowered to tax or levy fine. If funds from BBMP are clearly not working then private funds should be allowed to be leveraged. Privatisation in this sense would be efficient in fund utilisation and maintenance of various utilities
- Corporates can be given responsibility with authority to deal with some civic infrastructure to leverage their inherent culture and expertise. Eg: TCS which manages the passport office. Organisations like Shobha Ltd and OCRA can team up to maintain the ORR. Such an arrangement should include authority to penalize people who are flouting rules.



## 3.18 HUMAN RESOURCES & ORGANISATION

### Skill building

- Urgent infusion of external coaching required on the engineering and technical side to prevent bad infrastructure from continuing to come up
- Institutionalise the above with formal and mandatory skill-based certification program that covers all city staff; link the same to promotions and increments e.g. Master of City Administration, Diploma in City Administration, regular training with credits on project management, smart governance etc.
- Make such certification transferable across city agencies and cities; make a definitive move away from generic capacity building or training sessions that don't have defined learning outcomes, evaluations etc.
- Have specific allocation of each civic agency's budget, say 2% for such skill building certification courses
- PG courses in urban planning, design, architecture and other disciplines relevant to city planning and administration to reflect real problems faced by citizens; a 3-6 month project on solving a real problem at the ward level where students apply their technical skills and gain exposure to real life situations and city engineers get exposed to modern practices
- Establish a City Management Institute as a centre for skill building and excellence in city management, both technical and general; it could be established by the government but run by a highly competent academic or research institution or an independent trust
- Upgrade courses at Administrative Training Institutes, make them contemporary and relevant
- Embed knowledge in government organisations, address "brain drain" that happens when consultants/independent contractors exit
- Draw up training plan for Councillors; consider establishing a "think tank" or a Congressional Research Service type research centre to support the Council

### Performance and accountability

- Revise payscales of city staff to reflect current realities
- Ensure clear lines of reporting, eliminate diffused reporting
- Install CCTV cameras in government offices
- Create system of accountability for performance to Lokayukta
- Create specific performance and accountability measures for each job role; measure performance accordingly and make it matter

### Engagement with private sector

- Engage senior professionals from private sector to autonomously handle technical projects that have clear objectives, defined timelines and freedom to hire own teams; provide incentives so that such professionals can return to their former private sector organisations post the assignment (e.g. UIDAI)
- Actively encourage advisory roles for senior private sector professionals in city agencies; IT is an area where this could be effectively piloted

## Policy and institutional process

- Study BESCOM model for lateral hiring supported by an independent institution to screen and select candidates in select departments/roles such as CFO, CTO, Environmental Engineer etc.
- Amend Cadre and Recruitment Rules, reduce deputation of staff from state government; create Karnataka Municipal Administrative Service
- Introduce policy to recruit young professionals as fellows or interns
- Introduce Short Service Commission like program where talented citizens can serve in civic agencies for predefined tenures, to begin with in limited departments, role types
- Review and eliminate redundant roles
- Ensure there is matching of skills and competencies and job roles, eliminate mismatch and fungibility across roles without commensurate skills e.g. swap between traffic management and law and order
- Put in place detailed job roles and responsibilities, including between elected representatives and administrative staff in the BBMP so there is full clarity on who is responsible for what activity or task
- Fill vacancies; increase staff strength as appropriate, based on detailed studies of organisation chart, workflows and job roles, span of control, time and motion studies etc.
- Enhance strength of IAS cadre in the BBMP, have an IAS officer heading each of the 8 zones
- Freeze Group D recruitment till a detailed study of manpower requirements

## Workflow and process

- Put in place a workflow management system whereby ward level engineers can file online field inspection reports that get reviewed by superiors. This can be supplemented by a robust grievance redressal and monitoring system. This ensures that day to day operations are documented, tracked and reviewed thus ensuring that a minimum number of tasks are regularly performed by ward level engineers, and more time is created for strategic management at senior levels
- Seriously consider comprehensive business process re-engineering of workflows and processes especially focussed on delivery of civic services to citizens and grievance redressal; consider deploying specialised teams for the same including from private sector

## 3.19 FINANCIAL MANAGEMENT

### Tax collection

- Assess all properties in the city and bring them into the tax net; involve councillors in the drive
- Ensure rates are appropriately applied for commercial and residential buildings; increase collection levels
- Have a phased payment scheme for property tax e.g. 25 % every quarter
- Increase penalties for property tax default
- Apply rules similar to Income Tax Act for delays, interest, fines and penalties, escalation etc.
- Advertisement tax potential should be harnessed; Illegal hoardings should be curbed

- Review tax policies of the BBMP in light of the economic growth of Bengaluru, the resultant prosperity has exerted on infrastructure and public service delivery
- Engage councillors in tax collection and give back a portion of tax collected to the ward

### **State government funds**

- State grants should be increased by revisiting the SFC formula
- Part of state grants could be conditional subject to achievement of performance measures such as improvement in financial management, achievement of service levels, transparency, successful completion of audits etc.; the same could be formalised through an MoU with state

## **3.20 TRANSPARENCY**

- Hold monthly press conferences to publish data on progress achieved, and status of various projects
- Fully disclose all govt. files on Bengaluru's development, status of the same, rationale for the decision, debates and discussions underlying the decision, funding and budgets etc.
- Publish details of water and power consumption in units in public domain; make it an agenda of civic responsibility and pride
- Create a website which contains in an easily searchable format, names and contact details of all key government officials relevant to Bengaluru
- Make phone numbers of councillors and contractors of each project/road easily accessible to the public

## **3.21 INFORMATION TECHNOLOGY**

- Undertake phased but comprehensive digitisation of manual records pertaining to citizens or city operations
- Introduce newer technologies, IT solutions to monitor implementation by government. Create an institutional mechanism to oversee this process
- Deepen e-governance, pilot e-wards model
- Do not permit the digital connectivity agenda distract from provision of basic infrastructure and services

## **3.22 ACCOUNTABILITY**

- Job security needs to be task and performance centred.
- Use TV to hold public debates and programs like Aap ki Adaalat to hold public officers accountable
- Appoint two citizen representatives to whom MLA or Corporator will be answerable to
- Plug pilferages & corruption/ misuse of funds and bring more transparency & accountability to the governing system
- Adopt principles of corporate governance in city governance
- Push the agenda towards more market mechanisms - Including metrics and disclosures

## 4. Sectoral inputs from online survey

An online survey was conducted to collect responses from citizens in Bengaluru. A total of 1290 respondents participated in the survey. The sectoral inputs from the online survey is shared below. We have tried to faithfully reproduce the suggestions shared. We have not attempted to curate or resolve any conflicts in the suggestions.

### Mobility

- Reduced travel time for individual motor vehicle users (Signal free corridors, congestion fee during peak time, improved road quality, better parking facilities etc.)
- Better infrastructure for pedestrians, cyclists (Wider footpaths, Foot-over-bridges, more pedestrian crossings, dedicated lanes etc.)
- Improved availability and quality of public transport (BRTS, privatization, metro, car-pooling options etc.)
- Scientific and data based schedule of bus services (other public transport), planning of roads based on data collected/projected increase in vehicular traffic
- Promote car free days and have tougher implementation of traffic laws.
- Mass transit infrastructure to reduce traffic issues.
- Encourage mass transportation in colleges and restrict private transport in educational institutions.
- Feeder services to main transit points within the city
- Should have a bus day every week where no private vehicles be entertained in the streets.

### Water supply and sanitation

- Increased use of recycled or treated water (Rain water harvesting, sewage treatment, separation of sewer and storm water drains, repair of storm water drains, promotion of treated water for non-potable use etc.)
- Increased Water availability at source (Rejuvenation of lakes, repair of ground water reservoirs etc.)
- Reduced water leakage during distribution (Rehabilitation of leaking pipes, prevention of water theft etc.)
- Increasing extent of water pipeline network, prevention of sewage leakage into storm water drains and reducing monopoly of private water tankers
- Need more Dustbins and compact urinals in public area.
- Appoint more people to check the cleanliness of roads and streets in all the areas.

### Solid waste management

- Improved waste collection and segregation (Improved performance of garbage contractors, decentralised waste management through greater involvement of RWAs and citizens in waste segregation and promotion of segregation at source etc.)
- Improved disposal of waste (Promotion of waste to energy initiatives, decentralised disposal at ward level, responsible disposal of e-waste, wet waste composting, involvement of private sector, identification of new landfill sites etc.)

## Environment

- Increased greenery (More parks and open spaces, promotion of urban gardening etc.)
- Within Environment, please rank the following goals in your order of priority for the government to focus on, in the next 5 years
- Reduced levels of water pollution (Tackling sewage, rehabilitation of lakes etc.)

## Health

- Increased affordability/ access to health facilities (Role of govt. and public private partnerships in establishment of affordable hospitals, primary health care centers etc., better delivery of health insurance schemes for the poor)
- Greater number of qualified medical professionals (More doctors and nurses, more medical PG seats, focus on training etc.)

## Education

- Increased access to education and improved schooling infrastructure (Easy access to school facilities in each ward, especially to vulnerable groups – girls, migrants etc.; Provision of basic classroom infrastructure, books, labs etc.)
- Increased availability of skilled teachers (Reduced teacher vacancies, teacher training and performance management programs, student exposure to practitioners, experts from outside etc.)

## Crime and safety

- Strengthened legal and institutional framework (Crime and safety charters for each ward, stricter laws and enforcement, use of exemplary punishment etc.)
- Within Crime and Safety, please rank the following goals in order of priority for the government to focus on, in the next 5 years
- More human resources to manage crime (Reduced vacancies in police, more women in police force, judges, community policing etc.)
- Ensure women safety and enhanced police patrolling at night

## Equity and inclusion

- Promotion of equality and inclusion (Dedicated efforts to integrate vulnerable groups, formal/informal engagement programs, use of IT as a means of outreach, festivals to bring city together, role of RWAs, community, workplace in promotion of diversity etc.)
- Punishment for human rights violations (Establishment of adequate human rights courts, appointment of special officers in police stations to address such grievances, demonstration of strict punishment against discrimination and rights violations etc.)

## Culture and heritage

- Promotion of art and culture in the city (Annual Festivals and campaigns like Bengaluru Habba, cultural centers, promotion of local artists etc.)
- Open shared spaces for cultural activities, general recreation and leisure
- Creation and promotion of a Bengaluru identity (Identification of Bengaluru's USP, promotion through channels like media, campaigns, festivals, eminent stakeholders etc.)

## Housing and real estate

- Provision of affordable housing (Public-Private-Partnerships in increasing affordable housing options, availability of attractive financing and other support)
- Stricter enforcement of laws, regulations (Enforce zoning/building regulations, crackdown on encroachments)
- Validated land/ property records accessible to public (Information disclosure on property ownership, project approvals, unique code for each building and other key data)
- Revoking approvals for property/construction activities on lake bed
- Implementing rental agreement regulation effectively. Cost of living is more in Bengaluru because of high home rents and 10 months advance unwritten policy.
- Digitisation of land/property records.

## Power

- Increased power supply through capacity addition (Investment in renewable sources of energy, mandatory solar rooftop in new buildings, provision of incentives for renewable energy adoption etc.)
- Improved power distribution (Reduction in transmission losses by using IT, infrastructure upgrades, prevention of theft through underground cables etc.)
- Reduced power consumption through conservation (Promotion of LED lighting, Time of Day metering etc.)
- Each neighbourhood/ward to have bio-gas plant that can convert waste to power.

## Poverty

- Better delivery of schemes to the poor (Plug leakages, control mismanagement of funds etc.)
- Empowerment of poor through education and economic security (Skill development, jobs, finances & other support, education opportunities etc.)

## Trade and investment

- Promotion of local business and trade (Infrastructure and financial support, regulatory/ administration waivers, incentives and promotion events to boost local business and trade)

## Citizen participation

- Run campaigns to seek the assistance of public/volunteering for betterment of the city
- Need a way to provide every person the opportunity to vote on every issue facing their society and make the decisions directly
- Create MP- MLA-Corporator-Citizen groups to tackle improvement in infrastructure.

## Others

- Education for all: regulatory fee structure for all schools is required.
- Need a single window body for road cutting and maintenance.
- Voluntary Disclosure of financial information with all details of projects including location of that project with Google Map location.
- Citizens/RWA assessment of Ward performance on Civic matter must be translated to a public award of incentives, handsome bonus and public acknowledgement of supervisory & functional BBMP/BDA officials of Zones.
- Ambulances need to be fit with cameras so we get objective evidence of those who don't give way, and necessary action can be taken.
- Collect parking fee for parking vehicles near residential areas, this will also lead to enhanced resources for BBMP.
- Improve working conditions for Govt. employees to ensure better governance



# Annexure

## Stakeholders interviewed

### Political leaders

- Dr. C. N. Ashwath Narayan, MLA, Malleshwaram
- Dinesh Gundu Rao, Minister for Food and Civil Supplies, Government of Karnataka
- N. A. Haris, MLA, Shantinagar
- Krishna Byre Gowda, Minister for Agriculture, Government of Karnataka
- B. N. Manjunath Reddy, Mayor, BBMP
- L. A. Ravi Subramanya, MLA, Basavanagudi
- S. Suresh Kumar, MLA, Rajajinagar
- B. N. Vijayakumar, MLA, Jayanagar

### Government

- Dr. Ekroop Caur, MD, BMTC
- Pankaj Kumar Pandey, MD, BESCOM
- S. K. Das, Former Secretary, Government of India
- I. S. N. Prasad, Principal Secretary, Finance, Government of Karnataka
- Dr M. A. Saleem, Additional Commissioner of Police, Bengaluru City Traffic Police
- P. K. H. Tharakan, Former Director, Research and Analysis Wing
- Vandita Sharma, Principal Secretary, Infrastructure Development Department
- T. M. Vijay Bhaskar, Chairman, BWSSB

### Academia

- Aromar Revi, Director, Indian Institute for Human Settlements
- Prof. Anurag Kumar, Director, Indian Institute of Science (IISc)
- Prof. C. N. R. Rao, National Research Professor, Jawaharlal Nehru Centre for Advanced Scientific Research
- Dr. G. K. Jayaram, Founder and MD, Institute of Leadership and Institutional Development
- Narendar Pani, Professor, National Institute of Advanced Studies, IISc
- Prof J. Ramachandran, Professor, Indian Institute of Management, Bangalore
- Prof T. G. Sitharam, Professor, The Center for infrastructure, Sustainable Transportation and Urban Planning
- Dr. Sudhir Krishnaswamy, Professor, Azim Premji University & Foundation

### Domain experts

- Alok Gupta, Chief Operating Officer, Embarq
- Dr. Devi Prasad Shetty, Founder & Chairman, Narayana Health
- Manish Michael, Executive Director, United Way
- Nitin Pai, Director, Takshashila Institution
- V. Ravichandar, Member, BBMP Restructuring Committee
- Sanjay Sridhar, Regional Director for South and West Asia, C40
- Srikanth Nadhamuni, Managing Trustee, E Governments Foundation
- Uday Vijayan, Founder, Beyond Carlton
- Vivek Menon, Managing Director (MD), Invicus

## Civil society

- Arundhati Nag, Founder and Managing Trustee, Sanket trust
- Ananth Padmanabhan, Azim Premji Philanthropic Initiatives
- Kalpana Kar, Member, Bangalore Political Action Committee (B.PAC)
- P. Lakshapati, Founder, Association for Promoting Social Action
- Madhu Kishwar, Professor, Centre for the Study of Developing Societies
- C. V. Madhukar, Investment Partner, Omidyar Network
- K. K. Nayar, Trustee, Janaagraha
- Narayan Ramachandran, Advisor, Takshashila Institution
- Naresh Narasimhan, Managing Partner, Venkataramanan Associates
- Nitya Ramakrishnan, Member, Whitefield Rising
- Padmini Ravi, Eminent Bharata Natyam Artist
- Prakash Belawadi, Member, B.PAC and Co-Founder, Centre for Film and Drama
- Prakash Padukone, Eminent Sports person.
- Pronab Dasgupta, Director, BIC
- Ramchandra Guha, Historian and writer
- R. K. Mishra, Founder Director, Center for SMART Cities
- N. Santosh Hegde, Former Justice, Supreme Court of India
- Xerxes Desai, Former MD, Titan

## Business leaders

- Alok Ohrie, President & MD, Dell India
- Ashok Soota, Executive Chairman, Happiest Minds Technologies
- V. Balakrishnan, Founder & Chairman, Exfinity Venture Partners
- Kiron D Shah, Managing Director and Chief Executive Officer, Velankani Information System
- M. Lakshminarayan, Managing Director, Harman International (India) Pvt Ltd
- Manish Sabharwal, Chairman & Co-founder, Teamlease Services
- Mohandas Pai, Chairman, Manipal Global Education & VP, B.PAC
- N.R. Narayana Murthy, Founder, Infosys Ltd.
- Ravi P. N. C. Menon, Chairman, Sobha Ltd.
- Sachin Bansal, Co-Founder, Flipkart
- Shekhar Viswanathan, Vice-Chairman, Toyota Kirloskar Motor Pvt Ltd.
- Sridar Iyengar, Independent Director
- Subroto Bagchi, Co-founder, Mindtree Ltd.
- Vikram Kirloskar, Chairman & MD, Kirloskar Systems Ltd.
- Vinita Bali, Former MD, Britannia Industries Ltd.

## Senior editors

- Darlington Hector, Executive Editor, Financial Express
- Maya Sharma, Resident Editor, NDTV
- Meera K., Co-founder, Citizen Matters
- T. M. Veera Raghav, Resident Editor, The Hindu

\* Designations are as on October 2015

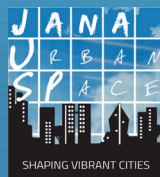
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