







A vision plan for a 'Future ready Haryana'

# NAVIGATING AND ADDRESSING FUTURE TRENDS:

A compendium of resources for insights and action

**WG5: Regional Development and Local Self-Governance** 

- 1. RETHINKING A CITY | Vicente Guallart | TEDxUPF (youtube.com) High air contamination is being claimed in some of the main world cities. Barcelona is one of these. For these reasons, several changes are being or must be made in the city to increase quality of life. What is Barcelona already doing or planning to do? How are transportation systems redesigned? Guallart has been the founder of Guallart Architects and of the Institute of Advanced Architecture in Catalunya. Pioneer of interaction between nature, technology, and architecture proposes new paradigms based on urban, social and cultural conditions emerging from information society; he crosses boundaries through collaborations in geology, sociology, engineering, fabrication, economics, and software design, merging architecture, nature and new technology. His projects follow a "natural" logic, referring to components originating in nature as well as to environmental systems. A logic that connects nature with the transformations of urban spaces, social organisations, and the digital world.
- 2. Sponge City and Sponge Planet | Kongjian Yu | TEDxBoston (youtube.com) Sponge cities that fight flooding. Sponge cities use natural features to slow down, soak up and reuse flood water. Change, Cities, Climate Change, Earth, Public Spaces, Water A recipient of a Doctor of Design at Harvard GSD, Yu is a Professor and founding dean of Peking University College of Architecture and Landscape, founder and design principle of Turenscape that practices globally. He is a strong advocate of "ecological security patterns" and "sponge cities" that have been adopted by the Chinese government for the nationwide ecological campaign. His projects have won numerous international design awards including 14 ASLA Excellence and Honor Awards (American Society of Landscape Architects), 5 WAF Best Landscape of the Year Award (World Archi. Festival).
- 3. <u>Transforming Cities: Al for a Human-Centered Future | leticiai Izquiero | TEDxBoston (youtube.com)</u>

Designing cities solely for efficiency can lead to isolated and homogeneous spaces known as "eco-chambers." This approach brings several problems, including social isolation, mental health issues, and a lack of community engagement. With rapid urbanisation, it is crucial to use AI as a co-designer to develop sustainable and livable cities that prioritise both social and environmental factors.

Leticia's research focuses on understanding people's emotional responses to urban spaces using Natural Language Processing (NLP) and qualitative insights. By studying Informal Settlements in Mexico and exploring the High Streets of Madrid, she uncovers the overlooked factors that influence urban experiences, such as building trust among neighbours and creating vibrant environments. Leticia aims to develop AI tools for urban design that involve stakeholders and communities, allowing them to optimise multiple aspects simultaneously.

By fostering an ongoing dialogue between humans and AI, we can enhance the design and operation of cities. AI tools bring unique capabilities like lateral creativity, pattern recognition, and analogical reasoning, complementing our real-life experiences and aiding informed decision-making throughout the design process.

# 4. How to Future Proof Small Towns with Innovation | Wei Li | TEDxTAMU - YouTube

Dr. Wei Li presents fascinating statistics regarding small towns. He discusses bringing innovation to small towns through a repeating cycle. Dr. Wei Li is an Associate Professor of Urban Planning at Texas A&M University. He is committed to research, education, and service activities that lead to smart solutions for challenges faced by underserved communities underprivileged populations. In 2019, he received the Distinguished Achievement Award from Texas A&M University and the Association of Former Students. Since 1955, the Distinguished Achievement Awards have been awarded to those who exhibit the highest standards of excellence at Texas A&M. Since 2019, funded by the W.M. Keck Foundation, Dr. Li's pedagogical model called ENDEAVR has trained over 200 Texas A&M students from 10 different majors.

# 5. Achieving sustainability beautifully, future of roads | Shelly Zhang | TEDxBoston (youtube.com)

"Is using plastics bad? What do we do with the waste? And can we turn a pollution crisis into an opportunity? This talk steps back from the established assumptions and aims to present a fresh perspective by examining similarities to how trees generated a vast amount of "waste" throughout the prehistorical aeons and how the biosphere's innovators turned such waste into valuable resources.

The talk goes on to discuss how breaking down waste plastics is not only feasible but actually thermodynamically favourable from a scientific perspective. It follows with a concrete example of how our team is developing technology to turn today's "non-recyclable" plastics into an asphalt additive. When scaled such "Plastic to Asphalt" technology delivers a "green discount"

to alternatives and eliminates emissions from incineration naturally by market forces.

6. Towns are disappearing in Japan. What can we do? | Masayuki Kobayashi | TEDxWasedaU (youtube.com)

Have you ever considered the mutualistic relationship between culture and its people? Masayuki Kobayashi, a recent graduate in Mechanical and Aerospace Engineering at Tohoku University, dives into this complex concept and raises concerns towards Japan's decreasing population in rural areas, causing traditions and cultures to degrade along with it. Or, is it alternatively the lack of culture that is causing these beautiful towns to diminish? Have you ever considered the mutualistic relationship between culture and its people? Masayuki Kobayashi, a recent graduate in Mechanical and Aerospace Engineering at Tohoku University, dives into this complex concept and raises concerns towards Japan's decreasing population in rural areas, causing traditions and cultures to degrade along with it.

7. The role of science and technology in address water shortages | Professor Adel Sharif | TEDxBaghdad (youtube.com)

In today's world, the scarcity of water has become an increasingly pressing issue, affecting communities globally. Amidst this challenge, the fusion of science and technology emerges as a beacon of hope, offering promising solutions to address and mitigate water shortages. In this TEDx talk, we will delve into the pivotal role played by advancements in science and technology in combating the crisis of dwindling water resources. A water and renewable energy engineering expert at the University of Surrey, UK, boasts a remarkable list of international awards, including the Queen's Award for Water in 2011, the European Academy of Sciences Award in 2008 and the Global Council for Renewable Energy's Leading Pioneer in Renewable Energy in 2018.

8. Water in Pixels: Optimizing Water Productivity on the Planetary Scale | Max Gulde | TEDxFreiburg (youtube.com)

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European Academy of Sciences Award in 2008 and the Global Council for Renewable Energy's Leading Pioneer in Renewable Energy in 2018.

## 9. <u>Can Indian Seaweed Replace Plastic? | World Wide Waste | Insider Business</u> (youtube.com)

Thin-plastic food wrappers make up half the garbage floating in our oceans, but they're difficult to recycle. One company has invented a way to replace these plastics with seaweed. Now, it stands as a finalist for Tom Ford's Plastic Innovation Prize worth more than \$1 million.

# 10. Recycling e-waste - Good for business and the environment | DW Documentary (youtube.com)

One way to tackle e-waste is to repair devices rather than throw them out. More companies are doing just that, from recycling solar modules to renting out second-hand smartphones. Their goal is to reduce e-waste and protect the environment. Experts predict that by 2030, more than one million tons of solar modules will end up as waste in Germany alone. With his company, 2ndlifesolar in Hamburg, engineer Martin Wilke wants to ensure that as many of these discarded modules as possible are recycled, for example, as a small-scale solar panel system on a balcony. The company also recycles the raw materials in the discarded modules, such as silver and silicon.

### 11. Future of Local Government: <a href="https://www.youtube.com/watch?v=xtLt3KapjU8">https://www.youtube.com/watch?v=xtLt3KapjU8</a>

There are big changes afoot in our system of local government. Two major pieces of reform work on water management and resource management have led to calls from within the sector for a re-imagining of the role and function of local government in order to build a sustainable system that enhances wellbeing in the community. Government is looking at how systems of local democracy and governance might evolve over the next 30 years with a particular focus on community wellbeing, the environment and the Treaty partnership. In particular, the review is expected to recommend how to achieve a resilient and sustainable local government system with strong leadership, effective partnerships which enhance community wellbeing, and a local body system that actively embodies Treaty partnership.

12. Creating Economic Development Opportunities with Local Government Legislation: <a href="https://www.youtube.com/watch?v=tSnUUqWUIJQ">https://www.youtube.com/watch?v=tSnUUqWUIJQ</a>

The Community Charter and the Local Government Act are key pieces of legislation that provide local governments with broad powers and tools that enable them to take action to support small businesses and community economic development. This webinar will provide an overview of the legislative framework and principles of the local government system in British Columbia related to economic development.

First, we will hear from officials from the B.C. Ministry of Municipal Affairs and Housing who will provide an overview of local government legislation and some of the economic development tools that are available through the local government system. Then Emanuel Machado, the Chief Administrative Officer from the Open for Business award winning Town of Gibsons, will share some of the successful community economic development work that has been supported by local government legislation.

This webinar was held during Small Business week when the Open for Business Awards were accepting nominations. At the end of the webinar we were joined by a member of the Small Business Roundtable who provided a walk through of the application process!

13. Good Governance at Local Self-Government: towards Efficiency and Welfare Society: <a href="https://www.youtube.com/watch?v=RJFoHom2k4M">https://www.youtube.com/watch?v=RJFoHom2k4M</a>

#### Articles/Reports

- 1. Collaboration for Reducing Plastic Waste National Circular Economy Roadmap for Reducing Plastic Waste in India
- 2. UrbanPlanningCapacity-in-India-16092021.pdf (niti.gov.in)
- 3. https://sprf.in/wp-content/uploads/2023/07/Inter-state-Migration.pdf
- 4. Make Agriculture Aspirational Again CPRG India
- 5. <u>Climate-induced displacement: A new normal for India's vulnerable communities |</u>
  Climate

  Connection
- 6. <u>India collected 527,131 tonne e-waste in FY22, half of it from Haryana (business-standard.com)</u>
- 7. https://niti.gov.in/sites/default/files/2023-06/Best-Practices.pdf

- 8. <a href="https://www.janaagraha.org/wp-content/uploads/2023/10/ASICS-2023.pdf">https://www.janaagraha.org/wp-content/uploads/2023/10/ASICS-2023.pdf</a>
- 9. With generative AI tools on the rise, what will the future of work look like? IIT-Bombay professor writes | Education News The Indian Express
- 10. Despite tall claims, unemployment among youth remains a challenge | India NewsTimes of India (indiatimes.com)
- 11. file:///C:/Users/Pinaca/Downloads/IndiaNeedsSmartVillagesmorethanSmartCities.pdf
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