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Pune Metropolitan Region Development Authority (PMRDA) was established in 2015 with the prime purpose of building a region with sustainable growth potential and economic opportunities. To realize this aim, the following objectives have been defined for every function of PMRDA:

- Create a premium international investment destination that surpasses any & every global opportunity;
- Identify emerging sectors of the economy for sustainable economic growth;
- Encourage spatial planning to secure highest liveability index for the citizens of PMR;
- Create a market-based economy with a new governance model;
- Establish PMR as a growth engine for the country;
- Reinforce culture and heritage in the ecological and social strata of PMR.

An important effort towards efficient master planning was initiated at PMRDA through the 'Concept Plan for PMR and Detailed Land use plan for key growth Centres (stage 1,2 & 3.) Visioning and programming', which was prepared in July 2021 by Surbana Jurong Private Limited. The report included various best practices towards sustainable urban planning and quality living, which formed the basis for the preparation of the Development Plan of the region. The proposed vision for the Development Plan is to:

- Promote consolidated development;
- Create self-sufficient towns that are independent yet complement with Pune Municipal Corporation and Pimpri Chinchwad Municipal Corporation by providing unique economic role for each town;
- Provide for a better lifestyle and increase liveability index by offering sufficient amenities and robust utility infrastructure;
- Create strong linkages through public and private modes of transport connecting these towns;
- Encourage sustainable development as envisaged in the Sustainable Development Goals;
- Promote environmental resilience.

Within this framework, PMRDA has expressed a strong interest in developing a "Center of Excellence in Urban Planning-COE" in close cooperation with the city of Karlsruhe (Germany) and the European Union funded International Urban and Regional Cooperation programme (IURC). The focus will be to review case studies in India and Europe<sup>2</sup>, and formulate a set of ideas/proposals regarding the objectives, structure, knowledge sharing activities, and other key elements for such an institution.

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<sup>&</sup>lt;sup>1</sup>PMRDA incorporates the cities of Pune and Pimpri-Chinchwad as well as several tehsils and talukas.

<sup>&</sup>lt;sup>2</sup> See Appendix I for a set of European case studies.









# 1.2 Center for Excellence in Urban Planning

The proposed COE aims to establish a Think Tank on 2 key pillars (i) Research and (ii) Participatory processes. With 'Research' as its overarching philosophy, the regional authority would be able to make informed decisions regarding planning necessity, feasibility, applicability, sustainability, and affordability questions/issues. Participatory approach would help to make inclusive decisions by seeking majority opinions towards city planning projects. The benefit would be primarily for PMRDA to build credibility on taking researched decisions and to establish a one of its kind urban centre of research and participatory planning in the State.

On this premise, the three parties (i.e., PMRDA, Karlsruhe, IURC) signed respective MoUs through a hybrid event on 1<sup>st</sup> June 2022, marking the official launch of the cooperation as follows:

- i. PMRDA and IURC on formulation of a concept for a COE.
- ii. IURC and Karlsruhe in cooperation with PMRDA for the above topic.
- iii. Karlsruhe and PMRDA on development of the eco-industrial township.

PMRDA being a regional development authority, COE could focus on bringing in research based innovative ideas and solutions, contextualize it for the region. The main aim is to create a platform through COE, where various topics related to urban planning, growth, development, planning, and implementation are discussed, and taken forward. It will enable a dialogue on topics ranging from sustainability, resilience, disaster mitigation, policy, politics, urban form, technologies in planning and concepts of implementation.

The COE would add an innovative & technological layer to the regional planning and implementation of proposed reservations/development of urban projects. The outcome of the research-based work and interactions with expert-based work would be multi-fold. Publications, project development, approval facilitation, guidelines preparation, best practice implementation, introducing new concepts, etc. By interacting with the stakeholders (within the Authority and in Pune region), PMRDA would be setting a new way of participatory planning process in taking stakeholder inputs for important urban projects. Even with the current achievements of the projects done by PMRDA, the COE could guide and take on development projects across the state and nation. The COE is also envisioned to address micro level urban problems faced by citizens, provide workable solutions, as well as provide incentives for Urban Local Bodies (ULBs) to implement them in a specified manner.

With advancement in concepts of urban systems, enablers within the system need to be equipped for a better development of the future. Thus, the knowledge sharing and capability development training sessions, for government officials for all the ULBs under the region, civil bodies, NGOs, and internal departments would enable deeper understanding of the technologies and strategies required for robust planning.

In doing so, the COE would be an enabler for the research and participatory planning processbased Think Tank. The Centre is proposed to be dynamic and can add areas as per demand and requirements, falling under the broad principles laid out as concept. Following are the









areas of intervention under the Centre as an initial setup. Every service provided could have an underlying layer of revenue/finance and schedule making it pragmatic in approach.

- 1. Capacity building: Provide support to ULBs, government officials, NGOs, civil society, etc. related to various contemporary as well as futuristic planning and implementation processes (e.g., project management, sustainability criteria, PPP, project reporting, assessment of financing opportunities) and creating a platform for sharing and exchange of global & local knowledge.
- **2. Advisory:** Advisory board of interdisciplinary expert group for urban planning, design, transport, construction, heritage conservation projects of city importance
- **3. Think Tank:** Research various urban topics for present and future development as well as develop each idea through research and consultations.
- **4. Consultancy:** prepare detailed project briefs within PMRDA by a team of experts (varying based on project), as well as provide consultancy to other authorities/ departments.



The Capacity building, Advisory, Think Tank and Consultancy wings would have dedicated teams to ensure its implementation as envisaged. The wings would be working on multiple sectors and would be dynamic in nature and new additions would be added in the course of time, including publications, standards/guidelines, global best practices sharing/ dissemination platform, etc.

The Advisory group of the CoE could play an important role in paving the identity and culture of the region's built-form as well as ensure sustainable benefits. Expert members from interdisciplinary fields can be appointed to advise about projects of importance in terms of location, scale, design, heritage conservation, best practice, construction standards, etc. in a participatory, transparent, and professional manner. Appendix II provides details on the role of Advisory Boards in the German context.

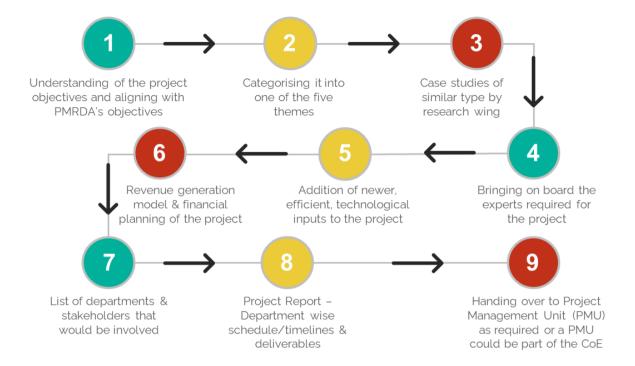








Following is the proposed process to be carried out for project development within the CoE of PMRDA:



Following topics have been selected by PMRDA which also closely relate to the IURC topics of cooperation.<sup>3</sup>



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 $<sup>^3\</sup>mbox{Colours}$  represent the three key thematic networks of IURC.









# 1.3 Key COE Provisions

Based on number of iterations from September 2022-January 2023 (including during the exchange visit to Brussels and Karlsruhe in November 2022), following aspects of the CoE were finalised:

- 1. COE would focus on (i) urban planning (ii) green infrastructure (iii) mobility and the activities to be carried out would be capacity building, exchange, preparing standards/guidelines, publication, consultancy. The activities could be dynamic and subject to change or additions over the course of time.
- 2. Research would be the overarching aspect of the proposed Centre, enabling it to take research based and well-informed decisions.
- 3. Centre should be involving maximum stakeholders to arrive at a specific output in terms of project briefs to take informed and researched decisions and use the findings as a convincing tool in front of the politicians.
- **4.** CoE is envisioned to inform the decision makers about best practices and contextual urban projects, introducing new urban concepts, well researched concepts, etc.
- **5.** The name of the Center would be finalised through a brainstorming session among the three stakeholders upon finalisation of the concept note.
- 6. The Centre would be located in the PMRDA office, Akurdi, Pune.
- 7. The organizational structure would be as follows:
  - PMRDA to host the centre with Commissioner to lead as a part of the governing council consisting of Board of Directors
  - Formation of a SPV as a registered body, headed by a CEO including a team of experts.
  - Independence under the aegis of PMRDA. The responsibility of establishing the Centre would be with the PMRDA through its own funding sources. Other sources to be identified by PMRDA, if necessary.



**8.** PMRDA to develop the Terms of Reference, based on the latest version of the Concept Note.









# 1.4 Eco-Industrial Township

India has one of the fastest growing industrial economies and it is one of the mainstays for economic development and employment creation. Industrial infrastructure planning and implementation needs to move towards adapting practices following sustainability development paradigms. It is important to mainstream eco-sensitive design aspects such as green labelling and ESG principles.

The new Leipzig Charter and the principles of the new European Bauhaus lay down the circular economy principles of (i) mixed land use (ii) 15-minute cities (iii) aspects of integrated green energy, (iv) modern mobility planning and (v) water management. Current Indian industrial infrastructure is not conducive towards integrated sustainable development.

A new greenfield project in PMRDA is proposed to implement the above principles. An Eco Industrial Township (EIT), which is being designed with planning and technical support by the City of Karlsruhe, PMRDA, and IURC, aims to become a lighthouse project to set standards for all other development in the region, state, and country. The COE can take up the EIT project as the first comprehensive and integrated sustainable pilot project. Following are the key details about the pilot EIT project:

Location: Khed, Pune - PMRDA, India

Area: 112 acres/45 ha
Owner: Deepak Fertilisers

Partners: Deepak Fertiliser, PMRDA, IURC, Karlsruhe city

#### **Principles**

- Multi-user, multi-purpose integrated industrial and warehousing system increasing efficiency of factory space.
- Data centre for manufacturing data warehousing and analytics.
- Affordable residential facilities and social infrastructure for employees and city/village population.
- Commercial/office infrastructure.

**Expected Outcome:** Provision of social values by meeting the Sustainable Development Goals (SDGs) with an objective to create a balance between nature and human development.









## 1.5 Timeline

Following are the procedural steps taken up to finalise the concept of the Centre:

Activity	2022								2023							
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
MoU on developing the Centre of Excellence in Urban Planning																
Formulating the concept note through meetings, discussions, sharing of best practices.																
Sharing of international best practices and discussion																
Detailing of the institutional framework options & case studies																
Workshop with expert stakeholders and interactions																
Preparation of the draft concept report.																
Submission of the final report to PMRDA by IURC and finalisation																

# 1.6 Way Forward

The concept of the CoE which emerged through the cooperation was developed through internal discussions, expert interactions, research, and exchange visits. The engagements have been productive, and the case studies shared in this report can form the basis of its implementation. In the forthcoming years, PMRDA could take up the finalisation of the organisational set up of the CoE in Urban Planning, inclusive of the institutional framework and the financial sources for the same.









# Appendix I Centre of Excellence in Urban Planning Case Studies

1. NATIONAL INSTITUTE OF URBAN AFFAIRS, NEW DELHI



**About the institution:** The organisation was established in 1976 as an Apex body to support and guide the Government of India in its urban development plans under the Ministry of Housing and Urban Affairs, other government, and civil sectors.

Areas of work: Research, Urban Policy, Planning & Training

- Develop project/ program-based toolkits for Indian cities in urban sectors of economy, infrastructure, finance, governance, climate change, resilience, environment, social development, build environment, etc.
- Expand urban knowledge.
- Formulate technology-based solutions.
- Organise training and capacity building programmes.

Key human resources: Planners, engineers, researchers, architects, analysts

Area of operation: National

### **Objectives/Vision/Mission:**

- Identify key areas of research and address the gaps in urban policy and planning.
- Promote integrated solutions for urban India.
- Develop new research and expertise for supporting effective innovations in the urban sector and their dissemination through knowledge exchange, training, and capacity developments.

Funding: MoHUA and other agencies

Annual budget: N/A

Link: https://niua.in/









# MUNICIPAL CORPORATION OF GREATER MUMBAI - CENTRE FOR MUNICIPAL CAPACITY BUILDING & RESEARCH, MUMBAI



**About the institution:** The institution was established in pursuant to the provision of 63 (b) of MMC Act-1888 which provided discretion in the matters related to furtherance of educational objects other than primary education to undertake research, urban policy work, capacity building & consultancy. It is registered under the Societies Registration Act 1860 on 3rd June 2019 and under Mumbai Public Trust Act 1950 on 22nd July 2019.

#### Areas of work:

- Water supply & sewerage, solid waste management, storm water drainage
- Construction and maintenance of roads and bridges
- Installation and maintenance of streetlights, traffic lights, signage, etc.
- Public transportation system along with the distribution of power
- Primary and secondary education,
- Primary health care, medical colleges, and hospitals
- Slum improvement
- Fire services
- Promotion of art, music and culture and heritage conservation
- Development Plans (DP)

**Area of operation:** Maharashtra State; 27 Mahanagarpalika; 361 Municipal Councils, 140 Nagar Panchayats; Special planning areas; State parastatal agencies.

Key human resources: Planners, engineers, urban sectoral experts

#### Objectives/Vision/Mission:

- Engage in capacity building related activities for Urban Local Bodies (ULBs).
- Formulate ULB capacity building programmes.
- Offer consultancy services.
- Serve as a Centre of excellence in ULB capacity building and in the general service of the ULBs.
- Undertake practical research and provide solutions to operational problems.
- Create databank of ULBs and its update

**Funding:** BMC and respective organisations (Organisations who request consultancy or training/internal departments of the BMC)

**Annual budget:** 2019-2020: 160 Lakh (~180,000 Euros)



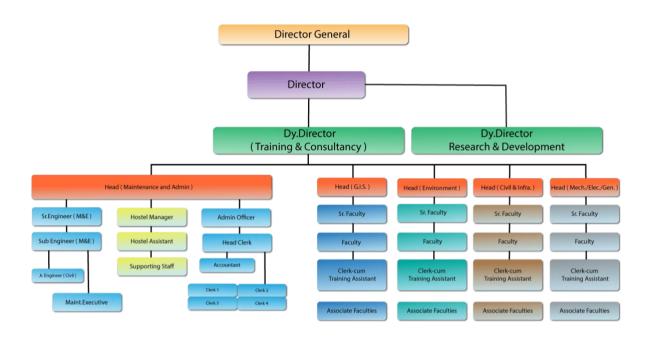






Link: <a href="https://mcmcr.mcgm.gov.in/">https://mcmcr.mcgm.gov.in/</a>

## **Organisational structure**











## 3. CEPT RESEARCH AND DEVELOPMENT FOUNDATION (CRDF), AHMEDABAD



**About the institution:** The CEPT Research and Development Foundation (CRDF) was established in 2013 to better manage the University's research and consulting activities as a research and advisory arm and a multidisciplinary think-do-tank. Through these research and consulting pursuits, the faculty members make available their academic knowledge and professional expertise to external stakeholders including the government, public sector organisations, NGOs, communities, and businesses. CRDF, through its Centres, strives to enhance and deepen knowledge, encourage innovation, and provide professional services.

**Areas of work**: Research, technical advisory, training and capacity building, knowledge exchange

- Development plans, development control regulations & guidelines
- Policy advice and formulation
- Peer reviews
- Strategic program management services
- Feasibility studies and assessments
- Handholding support through pilot projects
- Capacity building Training of trainers, content development and dissemination
- External communication, knowledge management and outreach

**Area of operation:** National & international

**Key human resources:** Urban planners, urban designers, architects, civil engineers, infrastructure specialists, environmental engineers, climate scientists, energy management specialists, advanced geomatics experts, heritage conservationists, housing experts, transport planners, urban managers.

#### Work themes:

(i) Urban Planning & Policy (ii) Research on Architecture & Urbanism (iii) Applied Geomatics (iv) Water and Sanitation (v) Advanced Research in Building Science & Energy (vi) Excellence in Infrastructure (vii) Excellence in Urban Transport (viii) Heritage Conservation.

#### **Objectives/Vision/Mission:**

Enhance and deepen knowledge, encourage innovation, and provide professional services.

Funding: Technical advisory services, consultancies, training, and capacity building, etc.

Annual budget: NA

Link: <a href="https://crdf.org.in/">https://crdf.org.in/</a>









## 4. THE GERMAN INSTITUTE OF URBAN AFFAIRS (DIFU)



**About the institution:** Difu was founded in 1973 on the initiative of the member towns and cities of the Association of German Cities (Deutscher Städtetag, DST). Difu is a non-profit limited company under German law and has offices in Berlin and Cologne.

**Areas of work**: Research, training, and exchange of experiences.

- Urban development and planning
- Mobility
- Finance
- Infrastructure
- Economy
- Environment and climate

Area of operation: National & international

**Key human resources:** Experts in urban planning, urban design, architecture, civil engineering, infrastructure, environment, geography, housing, transportation, etc.

#### Objectives/Vision/Mission:

To give the towns and cities new impulses to solve upcoming challenges and to contribute to sustainable urban development with innovative ideas.

### Funding:

- The German Federal Government and the State of Berlin
- Municipalities
- Commissioned research
- Seminars and publications
- Foundations, commercial companies, associations, and organisations

Annual budget: 13 mil. Euros (2020)

Link: https://difu.de/en

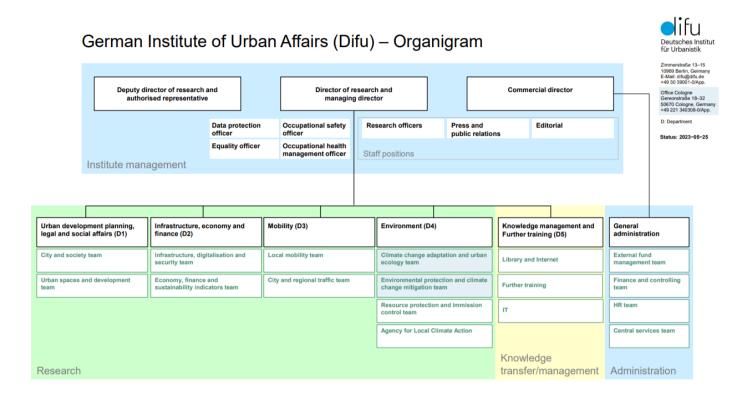








## **Organisational structure**











#### 5. MANCHESTER URBAN INSTITUTE (MUI)



**About the institution:** Formed in 2016 under the University of Manchester with an aim to unite the strengths of the various centres and groups. It is an urban focused research institute and emphasises the University's commitment to address global inequalities.

Areas of work: Research, consultancy, and knowledge exchange

- Digital urban futures
- Future proof cities
- Green and resilient urban futures
- Health and wellbeing
- People and energy
- Project delivery
- Smart and sustainable cities
- Transport and mobilities
- Urban infrastructure
- Urban justice, gender, and social difference

Area of operation: National & international

**Key human resources:** Faculty members and experts in urban planning, urban design, architecture, civil engineering, infrastructure, environment, geography, housing, transportation, etc.

#### Objectives/Vision/Mission:

The mission of MUI is to serve as a leading academic urban institute that generates worldclass research, achieves high levels of engagement and impact with non-academic stakeholders and to train the next generation of urban activists, decision-makers, researchers, and scholars.

Funding: NA

**Annual budget: NA** 

Link: https://www.mui.manchester.ac.uk/









#### 6. L'INSTITUT PARIS REGION



**About the institution:** L'Institut Paris Region was created in 1960 as a major regional urban planning and environment agency offering unique multidisciplinary expertise of territorial development.

Areas of work: Training, publication, library, research

- Urban Planning
- Environment
- Economy
- Society
- Mobility and transport

Area of operation: National & international

**Key human resources:** Experts in urban planning and geography, architects, environmentalists, economists, statisticians, engineers, demographist, sociologists, etc.

#### **Objectives/Vision/Mission:**

Being a leading scientific and technical support centre for the development and evaluation of public policies in the capital region, while also underlining the independence of its expertise and its vocation to expand internationally.

Funding: N/A

Annual budget: N/A

Link: https://en.institutparisregion.fr/

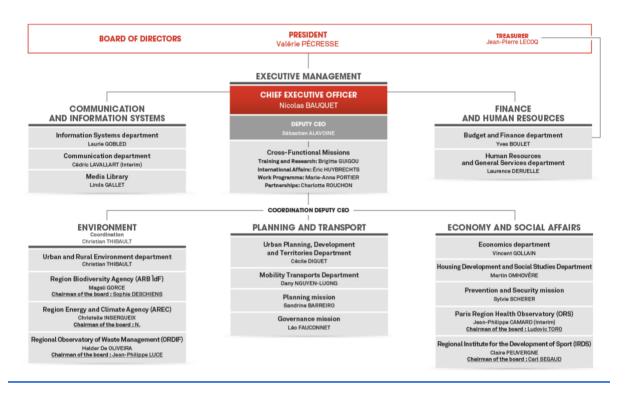








## **Organisational structure**











# Appendix II German Advisory Boards

Excerpts from Advisory Boards of Cologne, Munich, Trier, Karlsruhe, Regensburg, Lubeck.

The German design Advisory boards are interdisciplinary supporting organisations to the political decision-making authorities of the city administration, municipalities / building authorities / committees and the council on urban and architectural projects that have a significant impact on the preservation and design of the cityscape. Any project which is distinctive, representative, or monumental in character for the city could be taken up. It can be presented by the public sector or private builders. The board ensures to retain or grow the culture of the city for economic benefits.

**Members**: Depending on the size of the city, the Advisory Board consists of up to five members. They elect a chairman and a deputy chairman from among themselves. The members of the advisory board are appointed by the municipal representative body (city council, senate, citizenship, or district council). The members should not plan and build in the consulting area two years before and two years after their advisory. The members are professionals in the fields of architecture, landscape planning and urban planning and meet every 2-3 months (public and non-public meetings). Their tenure is for 2 to 3 years on a renewable basis.

#### Role of the Board:

- Conduct non-public site visits, preliminary consultation, public project presentation and discussion.
- Formulate tenders/bases for competitions, expert opinions in projects.
- Ensure decision making, on an "equal footing" between all stakeholders.
- Give security of having made the right urban planning and architectural decisions.

#### Outcome:

- Plans of urban planning projects of high relevance for urban design, such as public spaces/ squares, green areas, important road connections, traffic calming measures, traffic structures of great importance, construction projects, transport stops, etc.
- Preparation of building land-use plans/Building permission.
- Structural changes to historically or architecturally valuable buildings or ensembles as well as new buildings in their vicinity.
- Construction projects outside the (historical) core city in order to achieve the development of an overall urban structure.
- Type of projects implemented in Regensburg, Trier, and Karlsruhe respectively; (i) conversion of a residential/ commercial building/ Hotel-restaurant/ (ii) construction of a new commercial building in a prime location (iii) revitalization of the administration building.