National Institute of Urban Affairs

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WORKSHOP REPORT

Stakeholder Consultation Workshop

Capacity Building for Smart Data and Inclusive Cities

13th December 2019

Thiruvananthapuram

Contents

1 Background

The Smart Cities Mission Directorate has launched Data Smart Cities Strategy documents in 2019 to provide guidance to the 100 smart cities in developing their respective data systems. (The documents can be accessed through - https://smartnet.niua.org/dsc/). While the idea that data would support better governance has been central to the Mission from the beginning, the Data Smart Cities Strategy begins to address the point that all the data collected through the Mission also needs to be governed and managed in a thoughtful and effective way. This includes a focus on how people experience and use data and technologies, as well as the needs for refinement and innovation of institutional processes of local authorities. The involvement of local government, Civil Society Organisations, parastatal agencies, citizens etc. has the potential to ensure more inclusive and representative decision-making during the planning process. Therefore, stakeholder consultation provides a valuable input towards evidence-based decision making at city level.

The **Capacity Building for Smart Data & Inclusive Cities (SDIC)** project is collaborating with four smart cities (Bhopal, Jabalpur, Faridabad and Kochi) to strengthen technical and institutional capacities of the Urban Local Body (ULB)/Special Purpose vehicle (SPV) officials in relation to the implementation of smart city projects. In the first phase, SDIC has established a baseline understanding of the challenges, opportunities, and contextual factors for each of the cities, identifying projects for tracing these learning journeys along with the (ULB)/(SPV) in a participatory planning approach. The SDIC team also intends to provide handholding support for implementation of data smart city guidelines through aligning project activities on data-led governance. In order to generate new ideas and solutions to address the data challenges, the project will promote the convergence of efforts by different development actors.

In this context, the stakeholder engagement for Cochin Smart City Limited (CSML) at Thiruvananthapuram aims to provide an opportunity to share experiences, learn from best practices, benefit from peer-to-peer support, and begin working together to find innovative solutions to their local data challenges. The workshop will provide a detailed and critical discussion of the Data Smart City Strategy, with a focus on what is required for SDIC smart cities and opportunities to use this new policy guidance to further inclusivity.

The workshop is designed to be a crucial platform for setting our agenda/framework and understand the expectations of stakeholders for project's effective implementation.

The event will be interactive, consisting of lively session discussions. Participants include representatives from national governments, SPV and local authorities, donors, NGOs, international organisations, academics and independent experts.

2 Objectives

1. **To foster an alliance** of diverse city-stakeholders including civil society organisations, slum dweller organisations, researchers, activists and relevant city-institutions, to provide a shared platform to develop an inclusive vision for the use of data within the smart city.
2. **To map key stakeholders** with a special focus on those associated with data generation, storage, sharing and analytics for inclusive urban policymaking.
3. **Identify and catalogue all types of data** and data collection protocols – especially pertaining to underprivileged sections of society, differentially abled people, and slum dwellers etc. – that are being collected and may be collected in the future within the scope of the Smart City.

4. **To identify issues and develop collaborative future priorities** for an effective data policy to support data driven urban governance.
5. **To develop a long-run strategy** for ensuring continuous stakeholder engagement for evolution of the data smart city strategy.

3 Expected Outcome of the Workshop

The expected outcome of the workshop is to engage in dialogue with the city governments and other relevant stakeholders both at state level and city level (includes institutions, civil society organisations, and researchers) concerning inclusive and people centred city data design. The one-day workshop is divided in to three session and following are the expected outcomes from each session.

Sl. No.	Session Brief	Expected Outcome
1	**Setting the context:** The session introduces the Capacity Building for Smart Data and Inclusive Cities (SDIC) and project objectives specifically focused on Kochi.	This session will create awareness about the institutionalisation of data and various initiatives of the SDIC project.
2	**Data Driven Governance and Governance of Data at city level:** This session highlights several examples of innovative efforts to govern urban data and make use of it to strengthen city governance. Participants will share 'what worked', 'what's not' and 'what challenges' they faced in their respective initiatives; followed by discussion.	Participants shall have the good understanding of different innovative efforts to govern urban data and make use of it to strengthen city governance. Initiate dialogue around the inclusion of people centric data in the larger data systems of city.
3	**Data Policy Framework: Kochi Context:** Scenarios will be discussed where there is clear potential for positive and negative consequences of using data; this discussion should illuminate key opportunities and challenges for building effective Data Alliances going forward.	Discussions around given scenarios in the context of data policy and recommendations will feed into the proposed data framework.

4 Participants

A total of 24 key stakeholders representing city Governments, other key actors in policymaking, various Government department and agencies, representatives of leading academic and research institutions in the city, community organizations, entrepreneurs and advocacy groups attended the workshop.

Sl. No.	Name of the Agency	Area of Expectancy	How Important is their contribution to the Data Alliance and City Data Policy	Future Engagement Strategy
1	Kerala State Information Technology Mission (KSITM)	Nodal agency of IT Department for E-Governance, IT infrastructure development and IT enabled services	Kerala State IT mission is a pioneer agency closely work under IT Department, association with them is crucial for the achieving the formation of city data alliance and development of city data policy.	As a key stakeholder in the city data alliance
2	Information Kerala Mission (IKM)	State level nodal agency for E-Governance initiatives of the local bodies	State level agency working with local bodies and engaged in the development of open data portal; hence it is crucial to have IKM to be part of data alliance in the context of the Kerala. IKM's experience and learnings can contribute during the development of City Data policy.	As a key stakeholder in the city data alliance
3	Indian Institute of Information Technology and Management, Kerala (IIITMK)	A premier institute conforming to the needs of building capacity at advanced levels of Computing for higher knowledge with an emphasis in Technology	Contributions of Academic institutions are vital for the city data alliance and data policy.	As a key stakeholder in the city data alliance representing the academia
4	Kerala State Planning Board (KSPB)	The Board was formed with a view to enable the State Government to formulate development plans based on a scientific assessment of the resources of the State in the one hand and the growth priorities on the other.	Association with State Planning Board will help in improving visibility of the project and scalability of the city data policy. During the first session, member of Kerala Planning Board expressed his willingness to include the takeaways of the workshop in the State's Statistical Commission Report.	As a state level stakeholder for the city data alliance
5	Town and Country Planning Department	The Department is mainly to ensure the planned development of urban settlements in the State	The department's involvement is important for the implementation of the city data policy.	As a key stakeholder in the city data alliance representing city government.

Sl. No.	Name of the Agency	Area of Expectancy	How Important is their contribution to the Data Alliance and City Data Policy	Future Engagement Strategy
6	Cochin Smart Mission Limited (CSML)	SPV formed for the implementation of projects under Smart Cities Mission for Kochi City	As a major stakeholder and beneficiary of City Data Alliance & City Data Policy.	As a key stakeholder in the city data alliance representing city government.
7	Kochi Municipal Corporation (KMC)	Urban Local Body of Kochi city.	As a major stakeholder and beneficiary of City Data Alliance & City Data Policy.	As a key stakeholder in the city data alliance representing city government.
8	Directorate Urban Affairs	State level agency coordinate the administration of Municipalities and Municipal Corporations	As a state level agency to assist in adoption of policy at city level.	As a key stakeholder in the city data alliance representing government.
9	Shelter Associates	Pioneer NGO experienced in creating city wide spatial data on slums in Maharashtra.	The Association will ensure the inclusion of people centric voices and help us to understand issues and challenges for inclusive datasets.	As a key stakeholder in the city data alliance representing citizen group (NGO)
10	CURE India	The NGO working with urban informal and low-income communities to un-think, reimagine, innovate and de-engineer solutions to include and integrate people in the processes of city development.	Working with agencies like CURE will guide us to make the city data policy more inclusive and CURE's learnings will strengthen our city data alliance	As a key stakeholder in the city data alliance representing citizen group (NGO)
11	Kerala State Disaster Management Authority (KSDMA)	State level nodal agency for disaster management	KSDMA predictions are based on a larger quantum of data of different parameters. The organisations experience and learnings can contribute during the development of City Data policy	As a key stakeholder in the city data alliance representing city government.
12	Shri K J Sohan	Former Mayor of Kochi Municipal Corporation.	Representation from the citizen group is vital to ensure the people centric city data alliance and city data policy.	As a key stakeholder in the city data alliance representing citizen group.
13	Kerala Institute of Local Administration (KILA)	State level agency for the capacity building of local bodies.	Contributions of Academic institutions are vital for the city data alliance and data policy.	As a key stakeholder in the city data alliance representing Academia

5 Overview of the Workshop Sessions and Main Discussion points.

5.1 Session 1

The session introduced SDIC project and discussed about the expectations from the workshop. In this introductory session, each stakeholders introduced themselves with how they involved with the data. Member of Kerala Planning Board expressed his willingness to include the takeaways of the workshop in the State's Statistical Commission Report.

5.2 Session 2

In this session, stakeholders discussed about innovative efforts to govern urban data and make use of it to strengthen city governance. Different groups of stakeholders had different pictures in their minds about data, what kinds of data they meant when they were talking about data. The officials, especially the ex-mayor of Kochi, tended to be talking about geographical data, or maps, via GIS. Along this line, the CEO of Trivandrum Smart City, Shri. P Balakiran, spoke mostly about his experiences with open data, which again is typically either map data or metrics on the functioning of the city. Shelter Associates also spoke about this kind of data. For this kind of data, there is little reflection about ethical issues or the potential downsides of making things public. Some people were there from the state-level official statistics office. They seemed to be mostly thinking about data as survey data. Meanwhile, we were talking about is "big data", or more along the lines of data incidentally created when people do what they do, or from sensors getting real-time information about things. There are overlaps, for sure, but the different things we have in mind when we talk about data have real and important implications for what we see as risks and operational issues.

5.3 Session 3

In the breakout session, stakeholders was divided into three focused groups to discuss around given scenarios in the context of data policy and recommendations will feed into the proposed data framework.

Scenario 1 (China's social credit score discussion): Group discussed the potential for a Chinese-style social credit score in India. Disbelief amongst the largely local participants, who were incredulous that the government would not be trustworthy or that the government would use authoritarianism for oppression; potentially that they could use authoritarianism for public benefit. Difficult for the group to think beyond the service provision issues.

The group highlighted for common platform with trusted stakeholders, need to define data types, interdepartmental data flow. The group concerned about the platform in which allows their data about themselves. People should own the data in principle, even if that is a challenge to realise in actuality. There needs to be a way for people to validate and update their data on a platform, this should be a public process. Group suggested for a management system, and all physical data to be digitised. Group pointed out that Data is collected by different actors at different times, sometimes duplicating efforts. Somewhat idealistically, they suggest data should be easily shared and validated so people are happy to use common data rather than duplicating efforts.

Scenario 2 (Personal data usage. Universal ID and a universal platform): Personal Identifiable Information (PII) is being piled up. Data protection policy is important to make sure people's PII is protected. Profiling - things like health warnings can be determined for people pre-emptively. A Data Alliance at the state level is necessary to function as a governing body or authority, and be responsible for data extraction and for coordinating disputes over data. The group pointed out that it is herculean task to standardise the process.

AI was mentioned by the group as a potential way to mitigate human bias, but AI is also biased because it "learns" from biased human artefacts. The group suggested for a committee to prepare the guidelines (i.e. prepare the data governance policy). Want a way to do analytics without needing PII. Blockchain or some kind of ethical use of automated technology can help to secure the data.

Scenario 3 (Transit Data): This group suggests for timely updation of data. There should also be provisions for data to be disposed of at some point. To ensure that the data collected from the department is high quality and useful, the group suggests for identification of data champions. For smooth flow of data, the group suggests for involvement of head of department and a nodal officer should be selected such that that head of the department should approve every piece of data that is shared.

The group was mostly planners and government people, Seemed to focus on the administrative hurdles. It was also clear that, from their perspective, the main data types were geographic and spatial data. The group did not seem very concerned about the risks of opening up data, perhaps because they were viewing the issues from the perspective of spatial data, which they had already debated and felt confident in processes for determining what should be open and what should be private.

On this issue, it would be good to detail the similarities and differences between the issues around this kind of data compared to other types of data. As a suggestion, group recommended for API based sharing of data to ensure the real time data.

One example given was that because Kochi is one of the premier tourism destinations in the world, the team pointed out that there is information about different forms of transport to get to tourist locations, including bus and water taxi, etc. The group wanted to create some kind of open data platform (spatial data) where citizens could upload or contribute data and which would be free to everyone. There is something here about the potential (and need) for ground-testing and nuancing the kinds of insights that come from big data, to not take big data as "the truth" when we know it largely consists of data that is easy to collect rather than data that tells you comprehensively what's going on. This is a deep and fundamental issue related to the ontology and epistemology of the sector. Just hinted at here, not even fully discussed in a way that is helpful, but if we could refine this, it would be an important talking point at WUF

6 Key Observations

Following are the key observations and takeaways from the workshop:

1. **Data security**: The stakeholders present in the workshop had limited awareness of the need for a responsible and ethical approach to data and why it matters. During the workshop there was no data security concern expressed by any of the sectors – government officials, NGO's and the private sector. It was not that the stakeholders present in the meeting were not aware of the risks of handling the data. It was just not their priority. As one government official said that if there is a trade-off, the official will focus on doing her job rather than thinking about the breaches. The exercise involving the scenarios, the undesired effect of the data was not discussed to in as much thought. It was hard for the stakeholders to imagine the data security concerns. The stakeholders when given the scenario are aware of the risks of handling the data responsibly. However, the stakeholders themselves during the discussion did not raise the issue.

2. **Data Partnership:** The stakeholders are beginning to question how to approach data in partnership and what due diligence aspect need to be raised. They emphasise on the aspect of creating a data alliance but do not know how to go about it. No data sharing agreements in place. Complain about the lack of data and want to share it but lack of motivated effort to see it in practice.

3. **Policies:** There is a desire for the creating alliance and a little aware of the risks but no responsible data alliance policies or data management policies in place. There is no effort from the side of the any stakeholders to do something on their own and neither is there any institutionalisation of the data.

4. **Data inventory, identification and classification:** The government official does not seem to have an understanding of what the data the organisation holds, where it is held or who has access to it. The NGO sector – mainly Shelter Associates keep track of the data sets and have made it public and it also linked to the government websites. The practice that they do is not institutionalised. A standardized data inventory process is in place across the organization in support of organization learning and knowledge management. Shelter Associates seem to have a process in place of accessing the data by the donors. There is **little clarity** on who is doing what. A lot of people are included which makes it really chaotic and hard to understand. Consequently, there is a lack of **accountability** in terms of managing the data.

5. **Data Privacy rights:** The stakeholders are familiar with informed consent and data privacy rights/data subject rights, but unsure of how to manage them.

6. **Data retention and destruction:** During the exercise on the scenarios - the staff beginning to think about and establish time period of data retention and destruction. No policy has been drafted regarding the same though.

Other reflections

- Another thing that was noticed was that although, the citizens were included in proposal of the smart city. It seems to have frizzled out now. Missing aspect of community/citizen involvement.
- Training of personnel's also becomes an important part. It was mention briefly.
- No institutionalisation of data in governance. Absence of processes of institutionalisation of data.
- The NGO sector – specifically Shelter Associates had a clear purpose for using the data. They had a plan in place for it as well.
- The NGO's mention the problem of data accessibility and some government departments as well. The sharing of data between the departments and asking for access request is problematic.
- The data is being collected with little thought as to whether it is needed (or should be collected), what it will be used for, who will use it, and whether there is capacity to use and manage it
- More workshops to be conducted with stakeholders who collects and use data. They should be convinced about the value of their motivation.
- Public needs to be "sensitised" to the issues. There should be the right incentives and disincentives for departments to collaborate. There should also be established protocols for exchanging information to establish trust - about the data and about the actors sharing the data.

7 Way forward

The cities selected under smart cities mission are still in the process of creating, deploying and contracting of new smart technologies in there city. Other than core roles, a further important function for city governments / implementing agency as smart cities evolve is around data integration & decision based on data to improve the transparency and ensure the accountability. Kochi smart city is in an ideal position to pull together and integrate government, entrepreneurs (industrial, utility, corporate, community), academia and citizen to the greatest possible mutual benefits. The success of the role is strengthened by the trust that citizens commonly feel in their local city government, as representatives and protectors of their interests. At the same time, governments have duty of care around privacy and data security, which must be maintained and strengthened.

Following are the way forwards evolved during the workshop:

- To take forward the momentum and strengthen the engagement of citizens, city need to form city data alliance.
- To streamline the internal workflow and data flow for the larger goal of data driven governance, city should empower the city data alliance with data champions identified from different state level and city level departments.
- Capacity Building of identified personnel (Data Champions) to bring the understanding about big data, related technologies, data management and data framework.
- As an initial effort for co-creation of city data policy, city should initiate dialogue on data sharing process, open data portal, data management, data security and privacy, standard operating procedures on various criteria.
- The outcomes of the dialogue as challenges, solutions, suggestion and recommendations will feed into the data framework / city data policy.
- To ensure the applicability of the city data policy, state and city should pass resolution to provide legitimacy.

8 Annexure:

8.1 Stakeholders list

Sl No	Name	Designation	Department	Contact Number	Email ID
1	Shri. P Balakiran IAS	CEO	Smart City Trivandrum	9496922022	ceo@smartcitytvm.in smartcitytvm@gmail.com
2	Dr. K Raviraman	Member	Kerala State Planning Board	9958209920	raviraman2013@gmail.com
3	Smt. Anu R S	Secretary	Kochi Municipal corporation	9446483404	kochicorpsecretary@gmail.com
4	Shri. K J Sohan	Former Mayor	Kochi Municipal corporation	9847317898	kjsohan@rediffmail.com
5	Dr. Sabarish K I	Head, Head e-Governance	Kerala State IT Mission	9447811556	sabarishtvm@gmail.com
6	Shri. Krishna Pillai	Project Manager	Kerala State IT Mission	9633015180	pkrishna.ksitm@kerala.gov.in
7	Dr. Tony R Mathew	Senior Project Advisor	Kerala Infrastructure Investment Fund Board (KIIFB)	7558815599	gis1@trc.kiifb.org
8	Shri. T. Radhakrishnan	Asso. Professor	Indian Institute of Information Technology and Management – Kerala (IIITM-K)	9446574757	rkrishna@iiitmk.ac.in
9	Shri. Jayakumar	Senior Town Planner	Town and Country Planning Department	9447022244	jktrivandrum@gmail.com
10	Smt. Roopa Mathew	Assistant Town Planner	Town and Country Planning Department	7025031039	roopa.pun@gmail.com
11	Smt. Vyshnavi	Project Fellow	Kerala State Disaster Managemen	7907425026	vyshnavi.vellanchi@gmail.com

Sl No	Name	Designation	Department	Contact Number	Email ID
			t Authority (KSDMA)		
12	Shri. Sandeep	Research Associate	Kerala Institute of Local Administration (KILA)	9495626908	sandeepg@kila.ac.in
13	Shri. Jaifeen Kareem	Project Officer	Sunrise Kochi	8281995940	mail@sunrisekochi.com
14	Mr Anish Kumar Menon	Research Scholar	CUSAT	9895514805	anishmenon1@outlook.com
15	Smt. Pratima Joshi	Executive Director	Shelter Associates	9823102949	pratima@shelter-associates.org shelter3associates@gmail.com
16	Shri. Pranav Singh	Senior Program Manager	CURE- India	9990847966	psingh@cureindia.org
17	Shri. Ish Goel	CEO	Somish Blockchain Labs	9810004549	ish.goel@somish.com
18	Shri. Jitendra Singh Rathore	Assistant Engineer(IT) and City Data Officer	Bhopal Smart City Development Corporation Ltd (BSCDCL)	9109190390	jitendra.bplsmartcity@gmail.com
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21	Smt. Lakshmy S	Project Team Member	Climate Action, Thanal	8129401295	lakshmysundaresan@gmail.com
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23	Shri. Jesil	Founder	Karboncraft	9495806325	jesilmohammednausher@gmail.com
24	Shri. Gopalakrishnan Potti	Finance Officer	Urban Affairs Directorate	9447025357	dapotti@gmail.com
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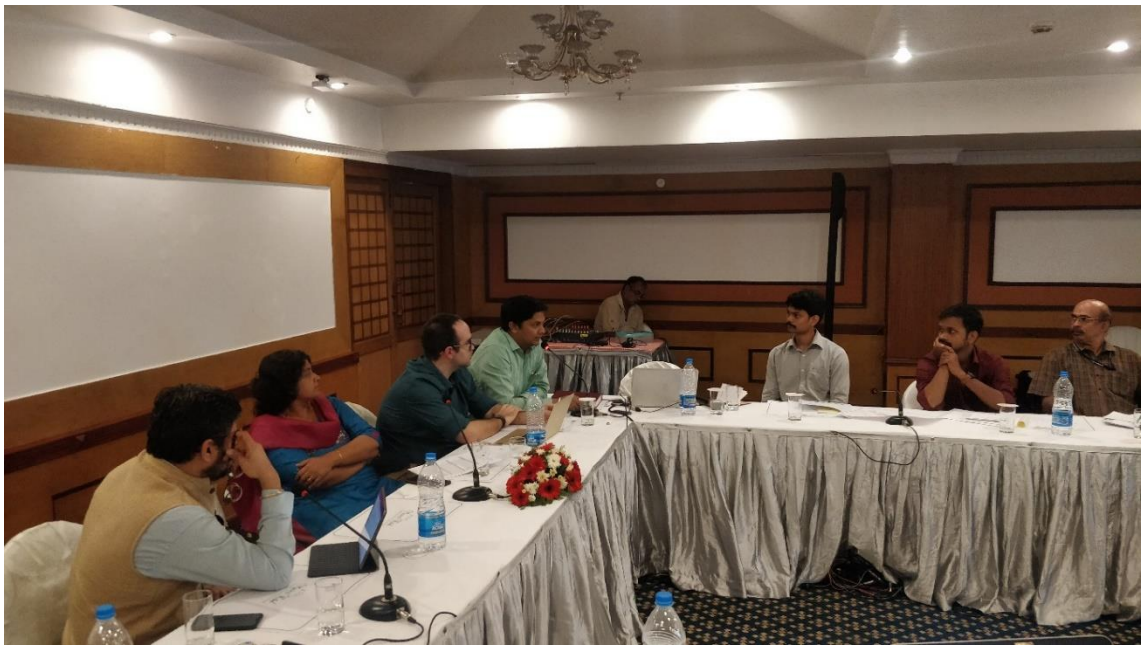
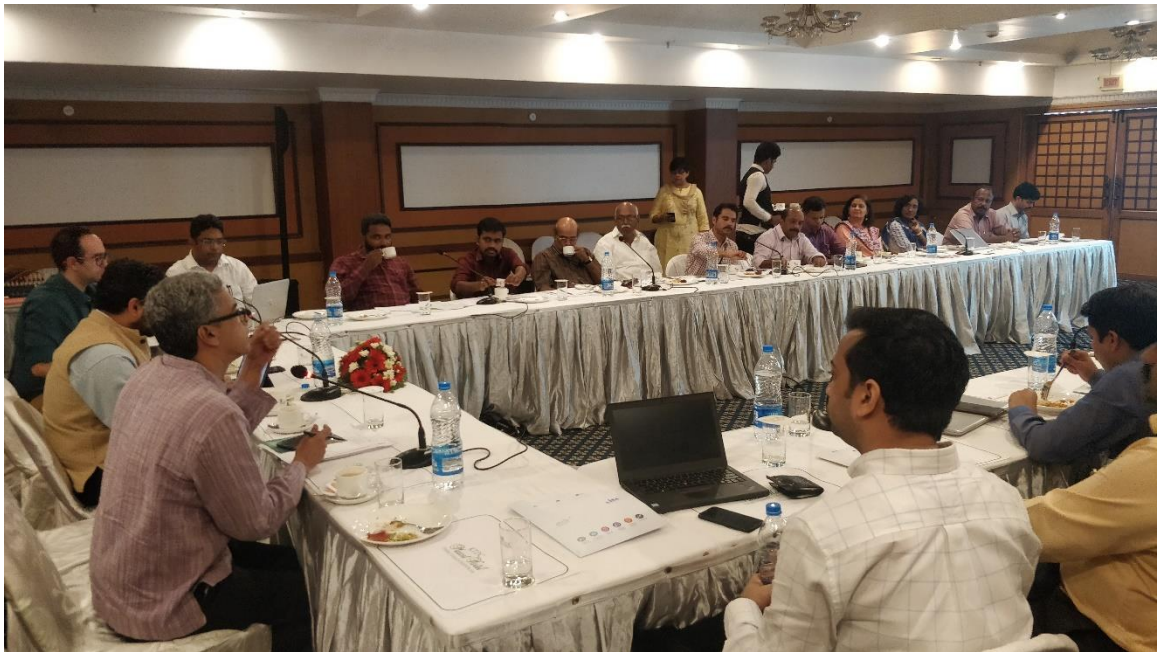
26	Smt. Anjali	Research Associate	IDS	9560110282	anjalisinghania@gmail.com

8.2 Photographs



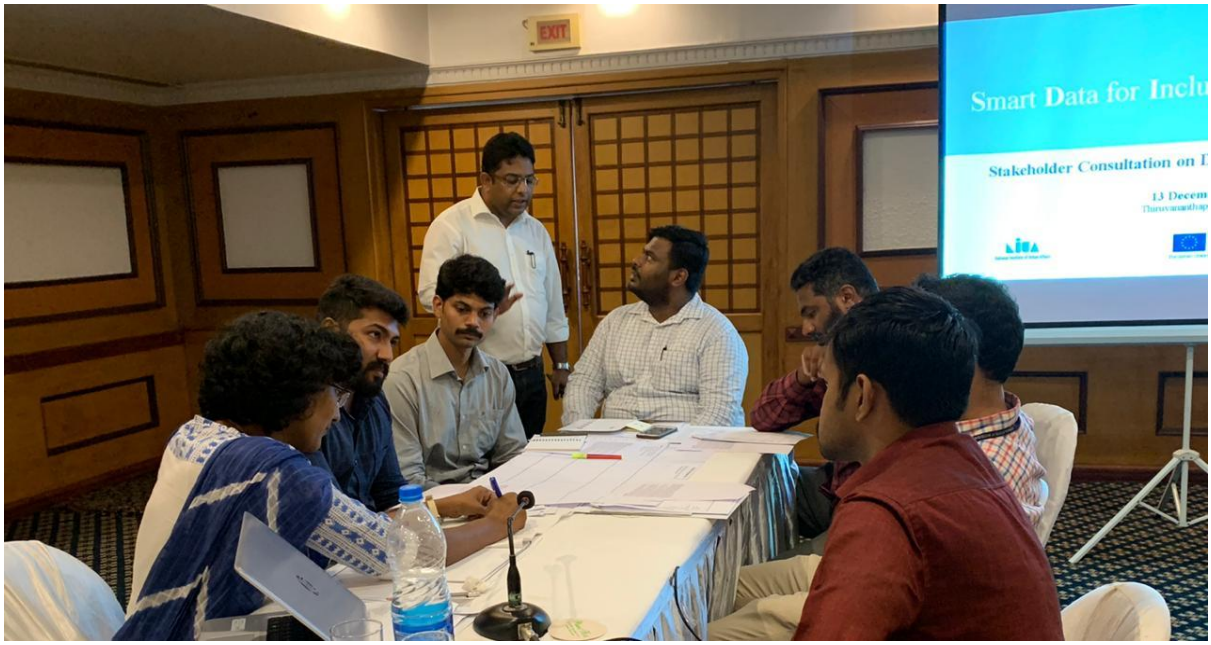
Photograph 1: Shri P Balakiran IAS, CEO of Thiruvananthapuram sharing his views about data governance



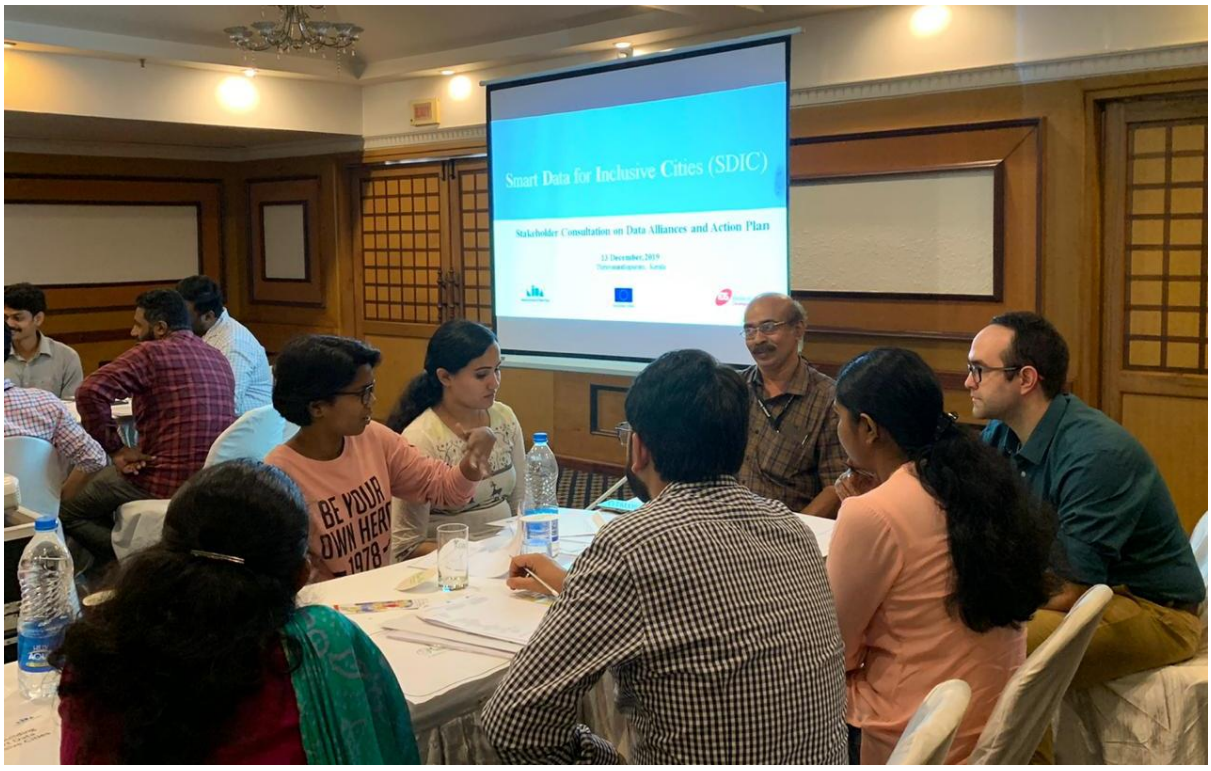
Photograph 2: Dr. K. Raviraman, Memeber of State Planning Board addressing the Dias

Photograph 3: Dr. Debjani Ghosh, SDIC Co-lead, presenting the SDIC project objectives

Photograph 4: Ms. Anu R.S, Secretary- Kochi Municipal Corporation sharing the challenges for implementation of data driven governance



Photograph 5: Focus group discussions during breakout session.



Photograph 6: Focus group discussions during breakout session