



IIT DELHI



CENTRE OF EXCELLENCE FOR RESEARCH ON CLEAN AIR
INDIAN INSTITUTE OF TECHNOLOGY, DELHI
HAUZ KHAS, NEW DELHI-110016

Dated: 28.05.2020

Minutes of CERCA Advisory Committee Meeting

An online meeting was held on 28th May, 2020 with the members of Advisory committee (Attendance List attached) to review the activities undertaken by CERCA during 2019-20/Planned for the year 2020-21 and seek suggestions/inputs from advisory committee members.

At the outset, Mr Arun Duggal, Founder, CERCA welcomed all the members of the Advisory Committee including Principal Investigators (PIs) of clean air research projects sponsored by CERCA.

He categorically emphasized upon the need for raising external funds for sponsored research by CERCA which would be taken up on priority by CERCA from 2021-22 onwards.

He also informed the members about the decision to expand the scope of activities of CERCA that would henceforth also include sponsored research on climate change issues w.e.f June 2020 onwards. Note for information of the advisory committee members to be circulated. A notification to be issued by CERCA inviting research proposals on climate change issues from interested faculty members in June 2020.

Mr Duggal also briefed the members about the plan for establishing a School of Environmental sciences at IITD in the future wherein CERCA could act as a nucleus for such a school. However, an extensive study would be undertaken to study the structure and organization for establishing such schools both in India and abroad.

Subsequently, Hemant Kaushal gave a presentation to the members of the Advisory Committee on initiatives and activities undertaken by CERCA during 2019-2020 including research project updates, collaborations, events organized and financial reporting. Later, Prof. Sagnik Dey gave a presentation on activities planned by CERCA for 2020-2021 including various ongoing activities. (The presentations are attached for kind reference)

Subsequently, Advisory committee members were requested to provide their comments and suggestions.

Remarks and Suggestions from Members

1. **Ms. Vaishali Nigam Sinha** – She applauded CERCA for comprehensiveness of its engagement including variety of activities undertaken by the Centre of Excellence during 2019-20 and recommended a more macro level engagement with stakeholders and the need for creating better visibility for CERCA activities through blogs, articles and publications including social media.
2. **Prof. Sukumar Mishra** – He suggested to focus on deliverables and societal contribution through research publication, product to the market, policy papers to government and implementable outcomes of research projects. He also advocated for a percentage weightage to different categories of work undertaken by CERCA for better evaluation and effective channelization of inputs.
3. **Prof. B R Mehta** – He appreciated CERCA for its performance on a broad range of activities during 2019-20. He aligned with the suggestions of Prof. Mishra and opined to give more attention to research publications and component of implementation in research projects including evaluation of ongoing research projects. He also advised

CERCA to get involved in the Grand Challenge initiative of IIT Delhi for developing a world class air quality monitoring laboratory.

4. **Dr. Sumit Sharma** – While appreciating CERCA for its various activities during 2019-20, he put forth the idea to giving more emphasis on the element of economic development while seeking research funding from external donor organizations in age of Covid-19 as the donors would prefer to invest in such priority sectors that foster economic growth of the nation including health sector and have strong covid-19 linkages. He also suggested for enhancing visibility of CERCA's activities amongst the masses through different social media/journals/newspapers. He also appreciated CERCA for having taken up projects with state pollution control Boards and emphasized that working with other cities/states apart from Delhi/NCR would be important to achieve the overall objectives of CERCA.

Action points

- a. Expansion in the scope of activities of CERCA to include Climate change and issuance of notification by CERCA for inviting research proposals on climate change issues from interested faculty members in June 2020.
- b. Revision of Vision and Mission statements to reflect the proposed changes- **Note for information of advisory committee members attached at Annexure-I**
- c. Undertake a study of other schools of environment in 2020-21 for designing a proper framework and structure for proposed school of Environmental studies to be established at IIT Delhi in the future.

The meeting ended with a vote of thanks by Mr Arun Duggal.

NOTE FOR INFORMATION OF CERCA ADVISORY COMMITTEE

SUBJECT: expansion in the scope of work of CERCA to include Research on Climate change and revision of CERCA Vision and Mission statements

NEED FOR UNDERTAKING RESEARCH ON CLIMATE CHANGE

1. There are close linkages between Air pollution and Climate change. Several air pollutants contribute to climate change by affecting the amount of incoming sunlight that is reflected or absorbed by the atmosphere. **Carbon Dioxide is the largest contributor to climate change (~63% of GHG)** followed by black carbon and methane. Other short-lived climate-forcing pollutants (SLCPs) include Nitrous Oxide (N₂O), methane, black carbon, organic carbon, ground-level ozone, sulphate aerosols, Fluorinated gases (F-gases) such as Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur hexafluoride (SF₆). All of them have significant impacts on the climate. These sources of atmospheric pollution could lead to severe and irreversible changes for people, assets, economies and ecosystems including food security, rising sea levels and stronger storms affecting coastal areas, health issues, migration, and growing economic damages which are only a few of the immediate implications of climate change.
2. India is the world's 3rd largest emitter of GHGs, after China and US and has committed itself to reduce GHG emissions by 2030 under the Paris agreement including promotion of renewable energy sector.
3. Therefore, it is felt necessary to align the objectives of CERCA with the national goals of GHG emission reduction by 2030 under the Paris agreement and expand the scope of activities of CERCA to include scientific research on climate change in order to develop strategies to address root causes of anthropogenic climate change and to build resilience to severe climate change impacts on the society.

In line with the above, the following has been decided:

- Expand the scope of activities of CERCA to include research projects that directly and indirectly have an impact on Climate change including scientific studies in this regard
- Revision of CERCA's Vision and Mission statement accordingly

Accordingly, the following changes have been introduced in the Vision and Mission statements:

PREVIOUS VISION STATEMENT: "To contribute to restoring Blue Skies and improving Air Quality in Delhi/ NCR and other cities in India through scientific research and as a Think Tank".

REVISED VISION STATEMENT: "To contribute to restoring Blue Skies and improving Air Quality including climate risks in Delhi/ NCR and other cities in India through scientific research and as a Think Tank".

PREVIOUS MISSION STATEMENT

- To identify initiatives and policies in India and internationally which have been effective for sustained ambient air quality improvement.
- Provide scientific information and objective feedback on effectiveness of various clean air programmes to Government policy makers.
- Assist in setting Goals and Pathways for achieving satisfactory ambient air quality in Delhi/NCR and other cities in India.
- Develop practical and effective solutions for short, medium and long term for improvement in ambient air quality.
- To support multidisciplinary and multi institution research projects for improving ambient air quality and Indoor air quality.
- Help enhance public understanding and participation promoting Clean Air initiatives.
- Exchange learnings and share knowledge with other countries facing air pollution problems.
- Collaborate with Industry on Clean Air and emission reduction equipment initiatives and Indoor Air quality improvement programs

IN ADDITION TO THE BULLET POINTS MENTIONED IN THE PREVIOUS MISSION STATEMENT, REVISED MISSION STATEMENT WOULD HENCEFORTH ALSO INCLUDE THE FOLLOWING ADDITIONAL POINTS

- To undertake research projects on impacts of climate change including identification of mitigation options that reduce the risk of longer-term climate change including promotion of international research and collaboration.
- Build capacity for climate assessment through training, education and workforce development

List of Participants

1. Mr. Arun Duggal, Founder CERCA and Co-chairman, CERCA Advisory committee
2. Prof. Sukumar Mishra, Associate Dean(R&D)
3. Prof. B. R Mehta, member
4. Ms. Vaishali Nigam Sinha, member
5. Dr. Sumit Sharma, member
6. Prof. Sagnik Dey, member and CERCA coordinator
7. Prof. Nomes Bolia, member and CERCA Co-coordinator
8. Mr. Hemant Kaushal, member secretary and Project coordinator (CERCA)
9. Prof. Harsha Kota, CERCA Chair Professor
10. Prof. Riju Rekha Sen, Faculty and PI
11. Prof. Vimlesh Pant, Faculty and PI
12. Ms. Priyanka Saini, Project scientist (CERCA)
13. Ms. Lovleen Kaur Arora, Project Asst (Technical), CERCA

Note:

1. Dr Prashant Gargava, Ms Bharti Ramola Gupta and Dr Satyendra Kumar regretted to attend the meeting due to prior engagements
2. The faculty members and PIs (Prof Nomes Bolia, Prof Riju Rekha Sen and Prof Vimlesh) could not present their project research work before the advisory committee due to paucity of time. Prof Nezamuddin regretted to attend the meeting due to an urgent departmental meeting.

Enclosed

1. Copy of presentations

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