

# 26<sup>th</sup> AIM International Workshop

Theme: New Research Collaboration

## Research Proposal

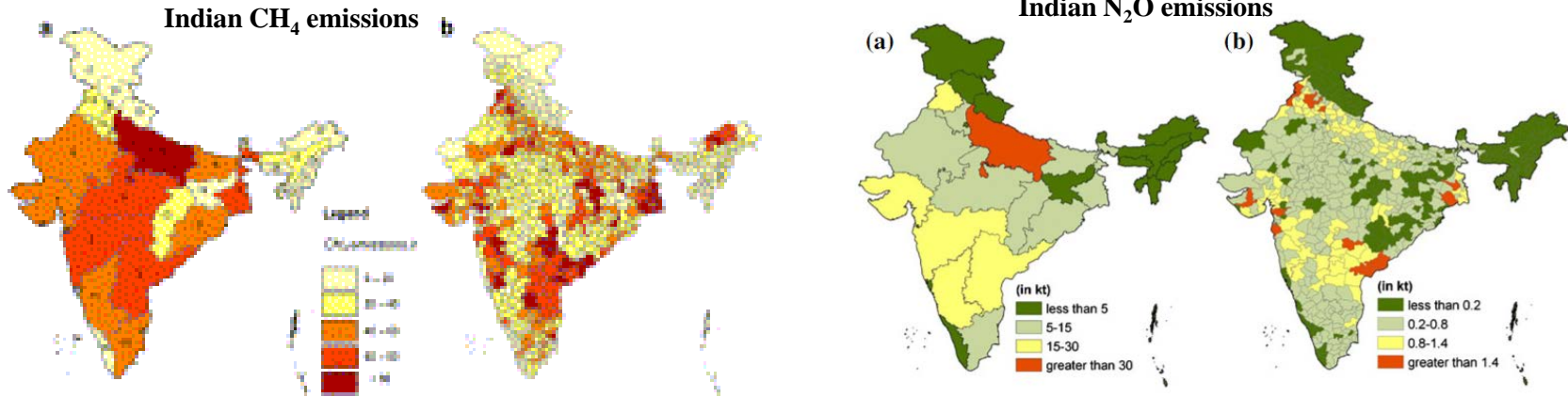


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# Modelling Non-CO<sub>2</sub> gases in all sectors (in participating Asian countries)

- In most of the past and current literature, the focus has been on CO<sub>2</sub> emissions.
- Non-CO<sub>2</sub> emission also contribute a significant amount to the warming.



- For example: Currently, agriculture and livestock related emissions contribute above 65% of Indian CH<sub>4</sub> emissions and above 90% of N<sub>2</sub>O emissions.
- We can work on proposal to model and analyze non-CO<sub>2</sub> gases in Asia to contribute towards Global Stocktake 2023.

## Selected references on the work published in past:

- Garg, A., Shukla, P.R. and Upadhyay, J. (2012). [N<sub>2</sub>O Emissions of India: An Assessment of Temporal, Regional and Sector Trends](#). *Climatic Change*, 110 (3), 755-782. doi: 10.1007/s10584-011-0094-9.
- Garg, A., Kankal, B., and Shukla, P.R. (2011). [Methane emissions in India: Sub-regional and sectoral trends](#). *Atmospheric Environment*, 45, 4922-4929. doi: <https://doi.org/10.1016/j.atmosenv.2011.06.004>.

# Climate Change Mitigation: Mega-cities in Asia

- Cities produce 70 percent of anthropogenic global carbon dioxide emissions.
- The 50 largest cities together emit greenhouse gases equivalent to 2,600 megatons of carbon dioxide per year. That is more than some countries. For instance, Russia emits about 2,200 megatons and Japan about 1,400 megatons per year.

## Objectives

- Policy analysis*** to identify key sectoral policies in order to accomplish the objectives of achieving the development goals of the cities while transiting into low carbon climate resilient mega-cities, and
- Study the linkages between ***city-specific mitigation policies and SDGs*** for selected mega-cities from AIM family participating countries across Asia.

## Policy Assessment (Example)

Sectors I. Power II. Industry III. Building	International commitments/ collaborations	NDC mitigation policies	Sustainable Development Goals	Co-benefits	Tradeoffs
India (Mumbai)					
China (Shanghai)					
S. Korea (Seoul)					
Thailand (Bangkok)					
Indonesia (Jakarta)					
Vietnam (Ho Chin Min)					



# Thank you

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