

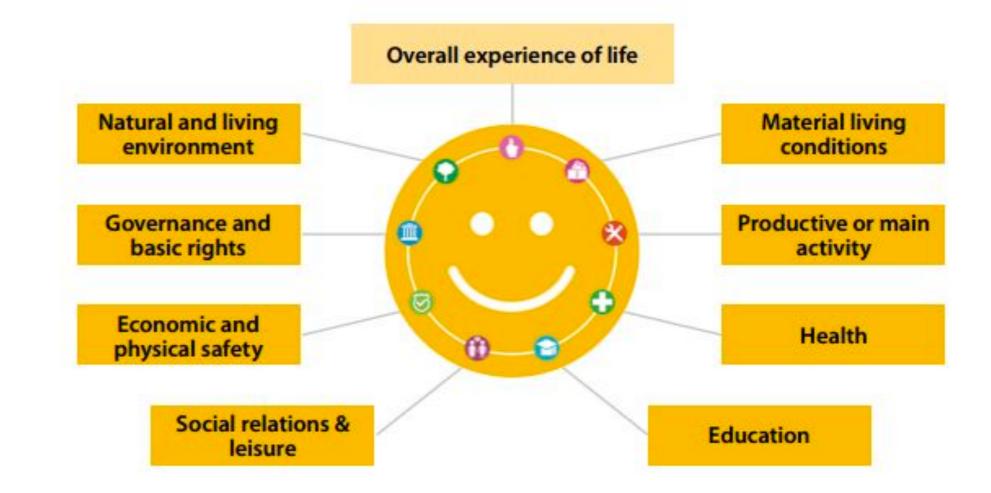
Sensing Quality of Life



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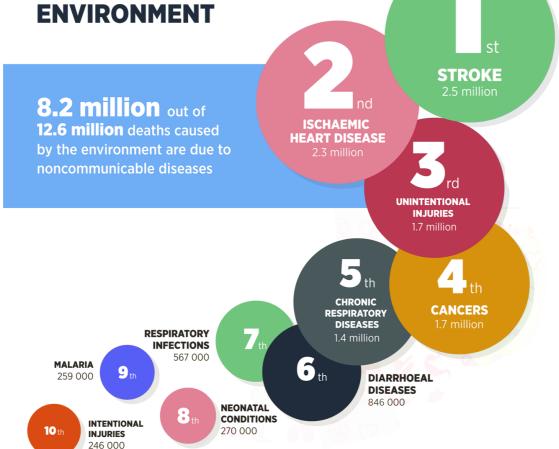
- The Quality of life is tied to the perception of 'meaning'.
- Maslow (1943) stated that people are motivated to achieve certain needs.
- Air is one of the basic need for survival
- Economic impact regarding health costs and missed days at work and school.







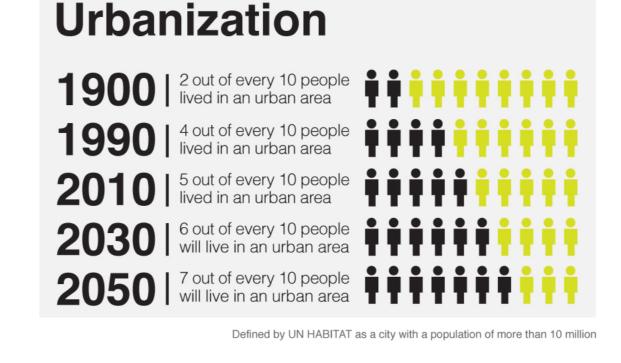
CONTEXT



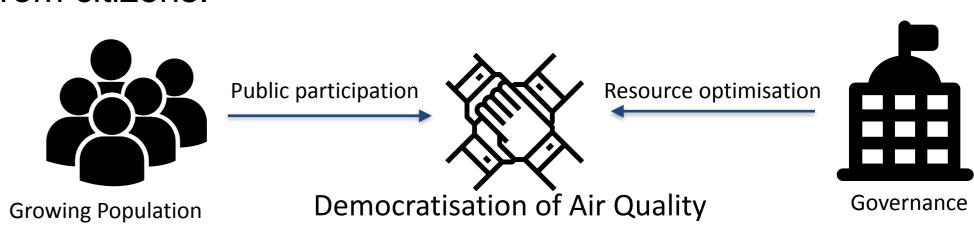
TOP 10 CAUSES OF

DEATH FROM THE

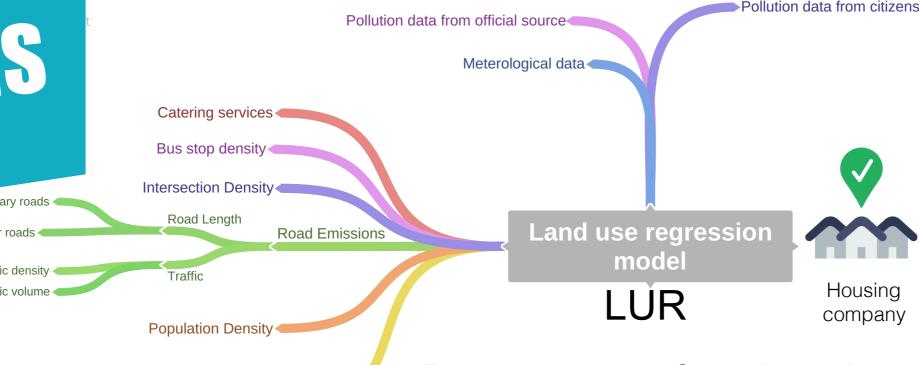
1.Increase in urban population affects environmental conditions. Hence, monitoring exposure at higher resolution is important.



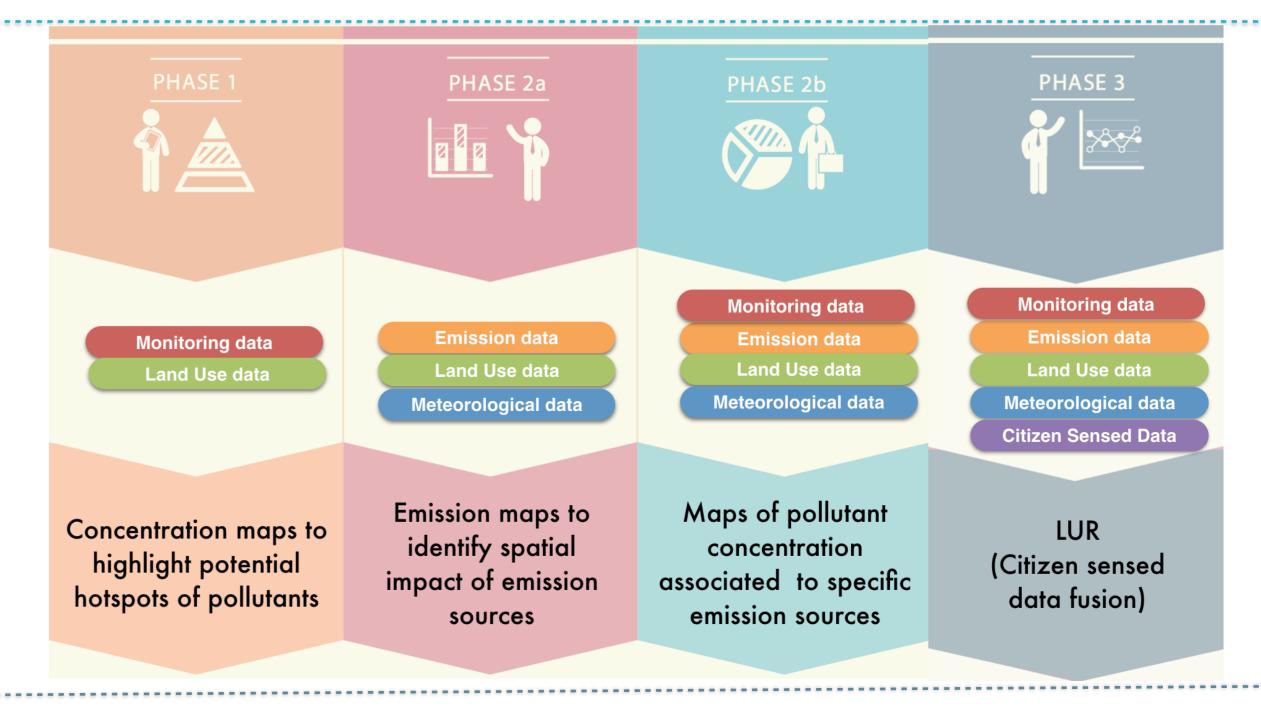
2.Increasing population increases burden over governance of the city; a smart city needs participation (equal contribution) from citizens.







- Development of model using open source tools
- The benefit is the flexibility to include various existing Geographic Information Systems (GIS) data.



RESULTS

Planned scientific contributions:

- Optimal location of monitoring stations for LUR modelling.
- Integration of citizen sensed data for air quality monitoring.
- LUR model to predict air quality at higher resolution in the city.
- Air quality(AQ) exposure analysis for GeoHealth services in Smart City.
- Housing companies as producers of air quality data.



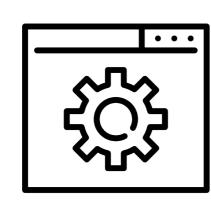




AQ Model for OCT

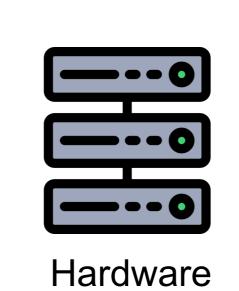
AQ Prediction at higher resolution





Crop land

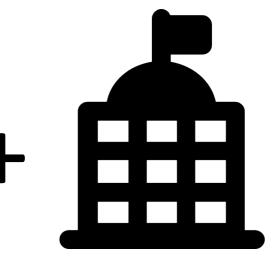
Software Open source

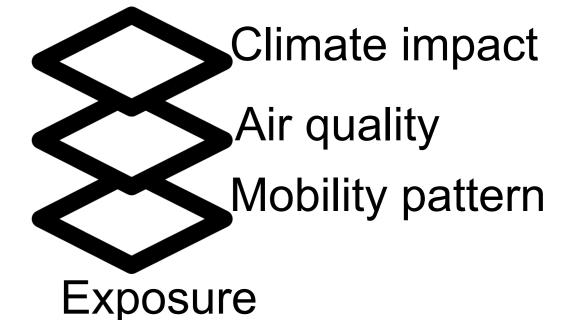






Housing companies, citizen and government collaboration

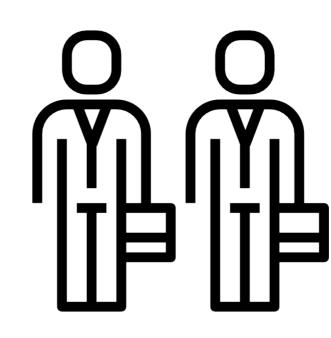








GeoHealth Services

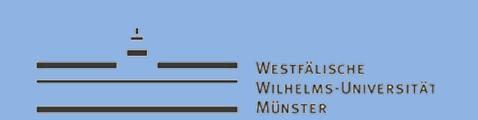


Policymakers



Notifying citizens

Consortium







Acknowledgements

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References

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- 2. Sadalla E, Guhathakurta S, Ledlow S (2005) Environment and quality of life: a conceptual analysis and review of empirical literature. In: Sadalla E (ed) TheU.S.-Mexican border environment: Dynamics of human environment interactions. San Diego State University Press, San Diego
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