

Remotely Sensless

Group Meeting #2

10/03/2023

Github repo needs to be made.

Presentation to be made in Xaringain.

1 Setting a Research Direction

Example question:

- To what extent does the implementation of forests in urban areas reduce airborne pollution concentration?

1.1 Existing Policies:

Policy about urban forest, severe air pollution coming from west. trying to mitigate pollution by building urban forests.

- Blockage forest (next to factory to not allow pollutants through the forest, densely planted).
- Wind corridor (sparsely planted, where people spend most of their time e.g. schools, pollutants from cars can pass through quickly to make a wind corridor. allowing them to be dispersed).
- Mitigation forest (normally planted in some parks, main purpose to absorb air pollutants, reduce residual PM).

1.2 Problem Definition

Using remote sensing to optimise placement of forests to mitigate poor air pollution. **

- Placing some to absorb pollution.
- Some forests to blow wind away, needs strong prevailing wind.

Considering:

- Wind direction
- Pollution concentration

Starting with Seoul as a case study, to provide a basis/ example on how to improve your urban air quality.

Using lessons Learnt in Seoul to inform urban planning policy in Leicester, with regards to pollution mitigation measures.

1.3 Possible other city:

- **Leicester, UK**
 - Blames its poor air pollution to neighbouring cities of Manchester, Liverpool, and Leeds. [\[Link\]](#)
 - Would the implementation of PM mitigation urban forests benefit their poor air quality?
-

2 Assessment Criteria

2.1 Problem Definition (40%)

Mike to describe problem with Leicester. + Phil

- Issues in the city of choice
- Policy: implementing urban forests.
- Problems

2.2 Approach (40%)

Zach to start methodology and limitations. + James

- Data
 - Pollution: MODIS? Landsat?
 - Wind direction
- Methods
- Limitations

2.3 Project plan, risks and value for money (20%)