Modernizing Cities Via Smart Garden Alleys With Application In Makassar City

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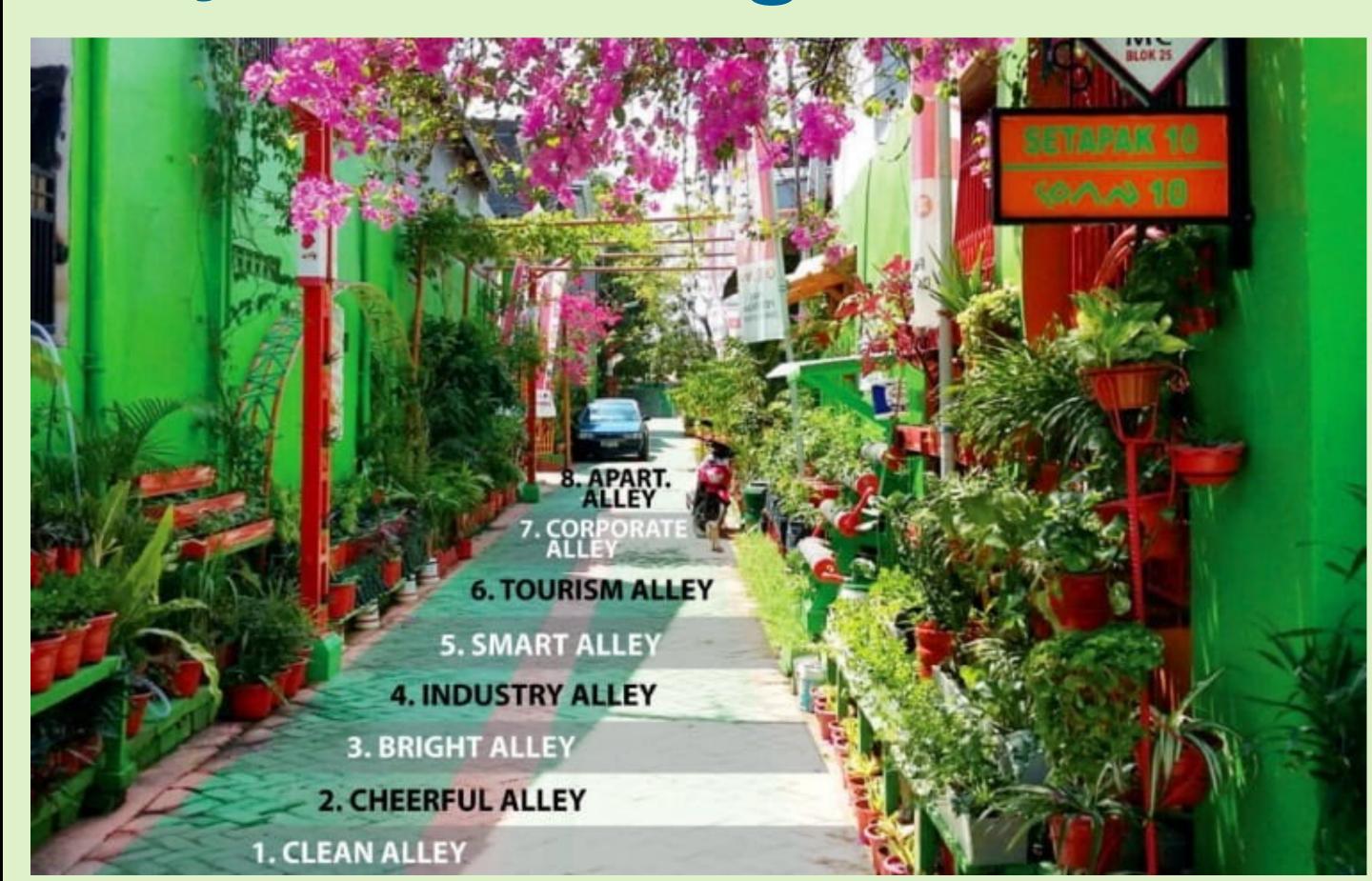








Project Challenge



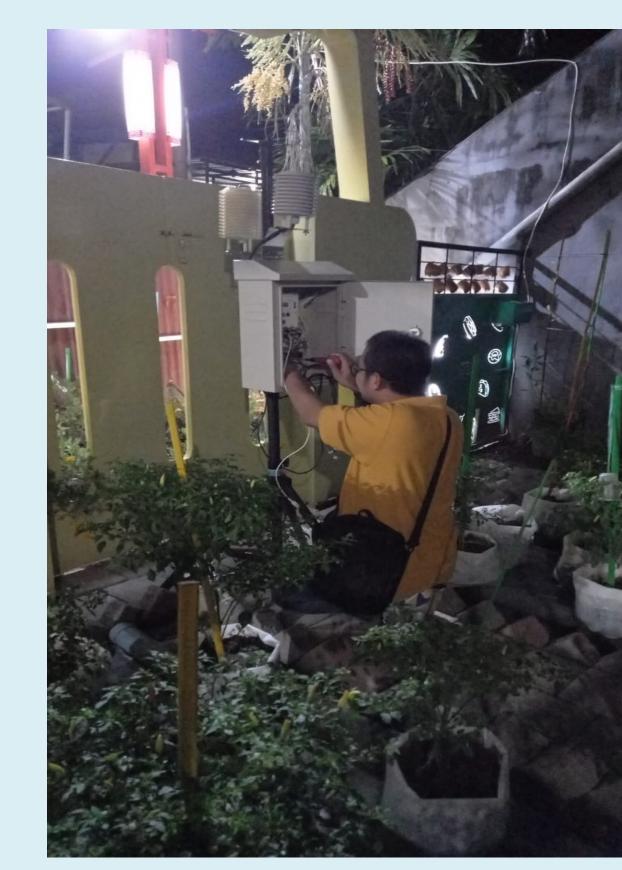
How to transform Makassar City's garden alleys into smart environments?

Intellectual Merit

- Assessment of real-world smart urban gardens in Makassar City, Indonesia
- Deployment of smart sensor networks to monitor urban gardens
- Novel machine learning frameworks for the operation of smart garden alleys

Major Outcomes/Progress

- Assessed six garden alleys and found discrepancy in the performance/success
- Designed, assembled, and deployed sensor networks to monitor outdoor microenvironment
- Conducted interviews and surveys







Broader Impact



- Enhance the economic revenues through increased visitor
- Improve alley environment
- Decision making framework for city

Future Goals

- Evaluate the environmental performance of garden alley with collected data.
- Promote further collaboration with local government and academic institutes to achieve the net zero carbon community by energy-food-water nexus systems.