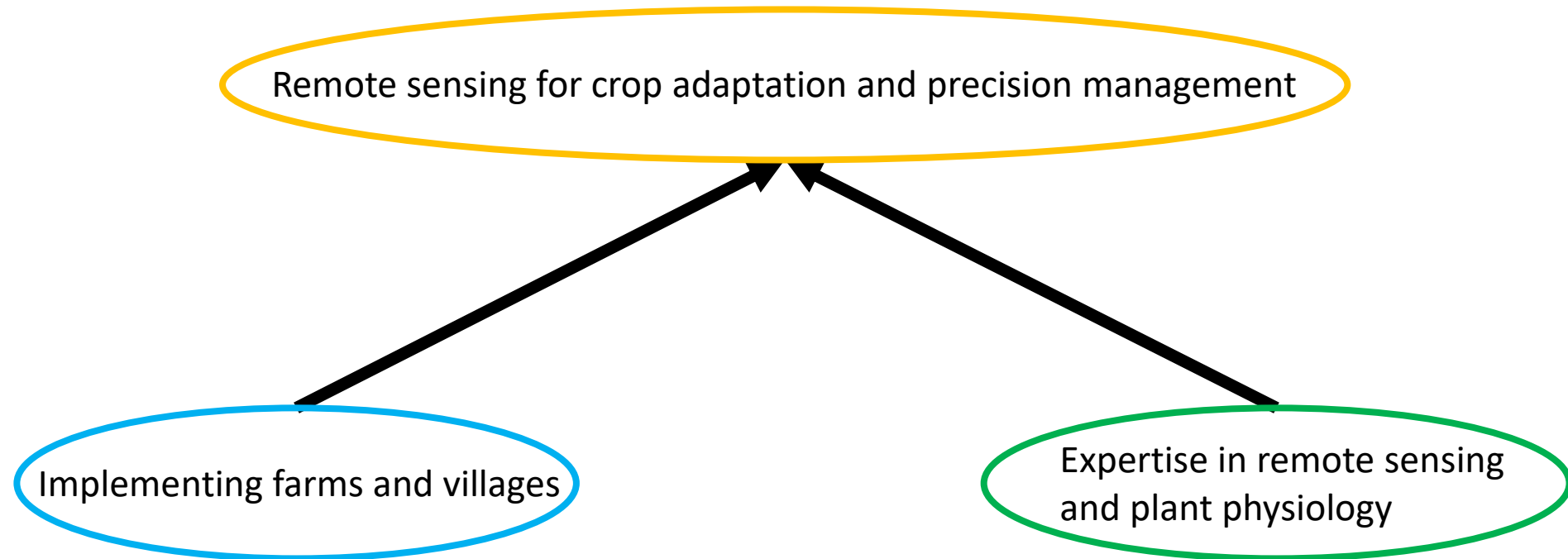


Integrating multi-scale **remote sensing**, **AI** and **crop physiology** for enhanced **rice** production and nutrient use in diverse rice cropping systems

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Currently organizing with partners in Thailand and Philippines



### *Technology transfer*

- Deploy and customize remote sensing (UAV) methods and algorithms for precision water and nutrient management

### *Collaborative research activities*

- Associating UAV based crop growth curve parameters with plant phenotype and performance
- Satellite-based synthetic aperture radar (SAR) growth tracking
- Phenotype by management interactions on greenhouse gas emissions
- Characterization and impact of weed growth dynamics
- Remote sensing-based evaluation of cover crops and crop rotation for enhanced performance, sustainability and resilience

### *Big Data*

- Data collection for AI based crop modeling
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