

Road map for Large Language model implementation for hyper localization of site-specific fertilizer

1. Set objective in terms of selection of crops (e.g Wheat), sites, data needs (e.g crop rotation, ISFM...etc) and what output expected (e.g Urea rate)
2. Collect relevant data like farm management practices, farm typology, and farm characteristics which are quite important for fine tuning fertilizer recommendation. The data could be collected from literature and field survey.
3. Data preparation: cleaning, organization, standardisation
4. Developing algorithm/customize/ use existing models.
5. Integrate with the site-specific fertilizer model (NextGen ????) which is already existed.
6. Evaluate model outputs and refine using experts' knowledge in the area.
7. Development of mobile application for real/near real time data collection from farms/farmers
8. Test and validate the model and application.
9. Configuration and deployment in viable environment and infrastructure
10. Monitoring and further improvement