

## DIGITAL TOOLS FOR SSNM

CCARI/Success Story/2022-2

### FERTILIZER CALCULATOR GOA APP: AN INNOVATIVE METHOD FOR SITE-SPECIFIC NUTRIENT MANAGEMENT IN CROPS OF GOA

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#### PROBLEMS/CONSTRAINTS

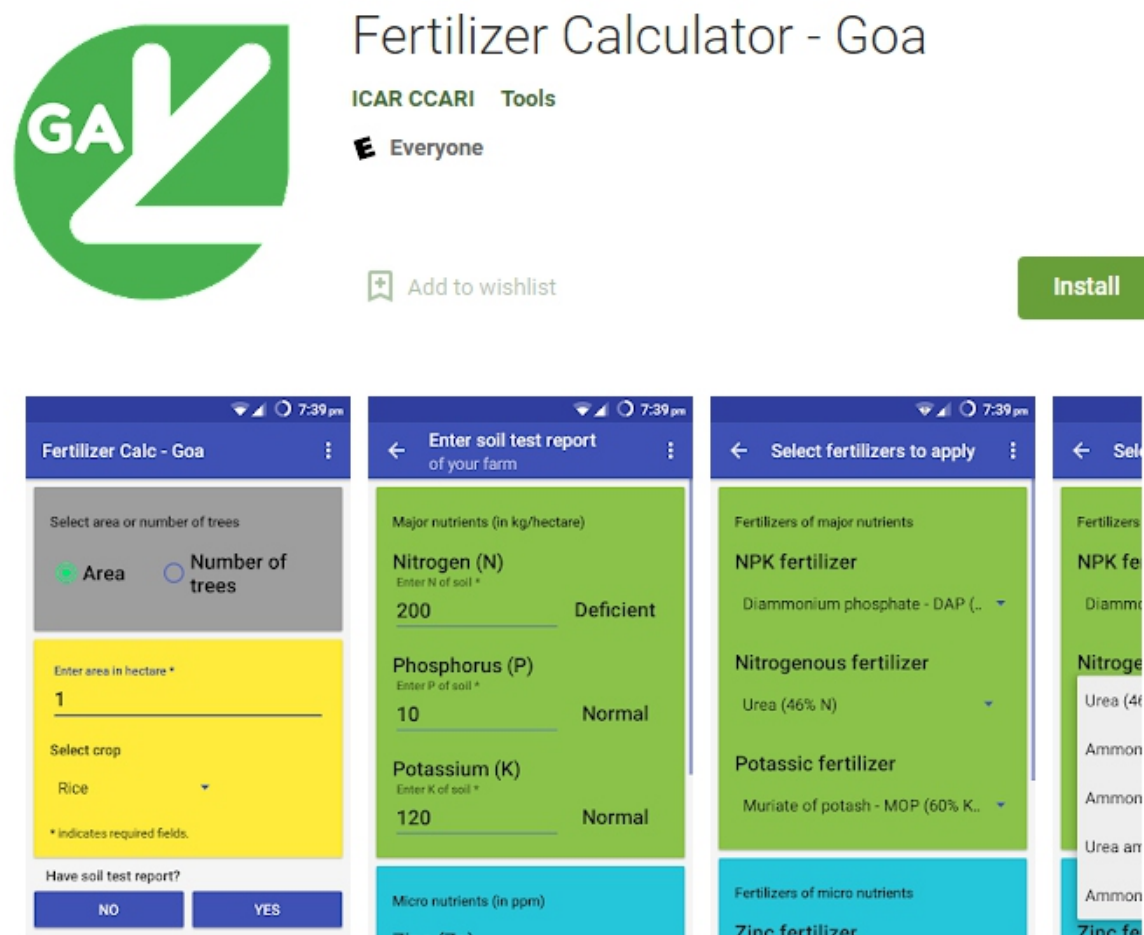
The soils of the State of Goa are mostly laterite with acidic soil reaction and low soil available nitrogen, potassium, calcium, magnesium, zinc, boron, etc. Farmers are accustomed to using suboptimal fertilizer nutrient application, and thus, the crops experience a multi-nutrient deficiency, resulting in poor crop yield. Therefore technological interventions were needed to enable farmers to get the fertilizer prescriptions based on soil test.

#### INTERVENTIONS

The Fertilizer Calculator Goa app is an android platform app that is useful to obtain fertilizer recommendations based on the crop, area or number of trees/plants, soil testing report values and desired fertilizer grades, etc. It is developed for obtaining the fertilizer recommendations for important crops of Goa. The app was released by ICAR-CCAR Goa in 2015 and is available on Google Play Store. The app also provides options for sharing the results as in a message using different sharing options, making the app more useful.

Link to download -

[https://play.google.com/store/apps/details?id=in.res.ccari.fertilizerrec.goa&hl=en\\_IN&gl=US](https://play.google.com/store/apps/details?id=in.res.ccari.fertilizerrec.goa&hl=en_IN&gl=US)



The user interface of the fertilizer calculator Goa

#### IMPACT

The app or technology has been downloaded and installed by more than 10,000 users. The technology is available freely on Google Play Store, ICAR CCARI website, ICAR-KRISHI Portal and several other platforms. In the case of coconut, adopting the technology reduced fertilizer cost by 8% and increase in the nut yield by 33% due to balanced fertilizer application. The paddy growers obtained a 24-30% increase in the grain yield with same investment on the fertilizers.