

Dispensing Fertilizers Made Easy



Profile of Innovator:	
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Brief description of Innovation Chilli is an important commercial crop in Khammam district. To achieve higher yields from improved varieties, farmers often apply 3–4 times more fertilizer than recommended, increasing production costs. Fertilizers are usually broadcast, leading to inefficient use. Although placing fertilizer in the root zone is more effective, labour shortages during peak seasons make it difficult for farmers to adopt this method. So, Fertilizer dispenser is manufactured with locally available iron sheet and in appearance is like a funnel with a capacity of 15 Kg. This implement can be attached to three tine harrows, the inter cultivation implement.	
Innovation's Highlights	It is made of a funnel-shaped iron structure with a 15 kg capacity. It also has a controller (holes at basal part) to adjust the amount of fertilizer applied. The traditional implement, Jaddigam, (wooden circular base) is commonly used for fertilizer application, and the funnel and controller are attached to it for improved efficiency. The funnel has an upper diameter of 40 cm, a bottom diameter of 8 cm, and a depth of 36 cm. It takes 15 minutes to dispense 15 kg of fertilizer. Using the dispenser, fertilizer can be applied at the root zone of the crop while inter cultivation operation is carried out. It saves the fertilizers but also improves the fertilizer use efficiency.
Benefits/Advantages	Intercultivation and fertilizer application are done simultaneously, reducing labour requirements and overall cost of cultivation. Fertilizer is applied uniformly, resulting in higher efficiency. The implement costs ₹4,500, and it can help reduce fertilizer application costs by ₹6,000 to ₹7,000 per acre.
Scope & Potential of Innovation for Wider Reach/ Out Scaling	It can be used in all types of soils and is flexible enough to be used at different stages of crop growth.
Scientific Validation required	Validation needed for Quality Assessment, Ergonomic Evaluation, Durability & Maintenance
Domain	Development of indigenous tools for fertilizer application suitable for cotton, chilli and maize fields

