

Kudos, IFFCO! Nano Revolution, Mega Yield

2021-06-11

Farmers' cooperative Iffco has put India on the nano fertiliser map, the new chapter in farm technology, with its nano (liquid) urea. The new invention can radically transform agriculture, raise farm productivity, reduce water usage and contamination, and slash the Centre's fertiliser subsidy bill.

Nanotechnology enables designing ultra-small particles that offer higher surface-mass ratios, and help in the controlled delivery of plant nutrients. The benefits include the reduction in the excessive use of urea, improvement in soil health, more efficient water use, lesser wastage and lower input costs for farmers.

The annual consumption of urea is 30 million tonnes. Typically, a farmer uses two bags per acre. Field trials show that a 500 ml bottle of nano urea can replace one bag of conventional urea, and reduce the urea requirement by 50%. The product is priced at ₹240 per 500 ml bottle without subsidy, 10% lower than a bag of conventional urea. Today, urea prices are not decontrolled and the government pays a subsidy of around ₹15,000 per tonne. If 15 million tonnes of nano urea is used instead of conventional urea, the savings in fertiliser subsidy will be around ₹22,500 crore. This means a 28% reduction in the budgeted fertiliser subsidy of ₹79,530 crore in 2021-22.

A large portion of conventional urea is lost to the atmosphere or surface water bodies, polluting the ecosystem. Nano urea is ecologically better. Iffco claims that the nitrogen present in nano urea could raise yields by 8%, and reduce storage costs. This is welcome. Iffco should scale up its ambition and target the export market as well, and not restrict itself to a planned 15-million-tonne capacity. [India](#) now has a lead role in a new global green revolution.

Read the [original article](#) on The Economic Times.

