PM PRANAM — a game changer for India's fertiliser ecosystem

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Manifest Pedagogy:

In a bid to discourage the use of chemical fertilisers, the government is likely to launch a scheme called — Pradhan Mantri — Promotion of Alternative Nutritious And Agriculture Management (PM-PRANAM). The scheme will incentivise those states that use lesser amounts of chemical fertilisers in a particular year as compared with the average quantity used over a period of the last three years. The step is very progressive given the number of problems associated with over use of Chemical fertilizers.Natural farming, chemical-free farming can give strength to the country's goal of becoming self-reliant.

<u>In News</u>: The Centre plans to introduce a new scheme — PM PRANAM, which stands for PM Promotion of Alternate Nutrients for Agriculture Management Yojana.

Placing it in the Syllabus: Agriculture

Static Dimensions

- Background
- Other Government Initiatives to reduce fertiliser usage

Current Dimensions

- About PM PRANAM
- How much fertiliser does India require?
- Why is the scheme being introduced?
- When will it be introduced?
- Potential benefits of the PM PRANAM

Challenges associated

Content

Background

- In order to reduce the use of chemical fertilisers by incentivising states, the Union government plans to introduce a new scheme PM PRANAM.
- The proposed scheme intends to reduce the subsidy burden on chemical fertilisers, which is expected to increase to Rs 2.25 lakh crore in 2022-2023, which is 39% higher than the previous year's figure of Rs 1.62 lakh crore.

About PM PRANAM

- The scheme will not have a separate budget and will be financed by the "savings of existing fertiliser subsidy" under schemes run by the Department of fertilisers.
- Further, 50% subsidy savings will be passed on as a grant to the state that saves the money and that 70% of the grant provided under the scheme can be used for asset creation related to technological adoption of alternate fertilisers and alternate fertiliser production units at village, block and district levels.
- The remaining 30% grant money can be used for incentivising farmers, panchayats, farmer producer organisations and self-help groups that are involved in the reduction of fertiliser use and awareness generation.
- The government will compare a state's increase or reduction in urea in a year, to its average consumption of urea during the last three years.
 - Data available on a fertiliser Ministry dashboard, iFMS (Integrated fertilisers Management System), will be used for this purpose.

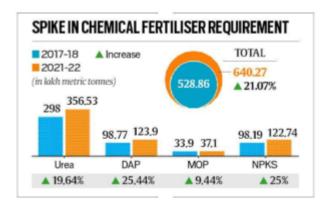
How much fertiliser does India require?

- The kharif season (June-October) is critical for India's food security, accounting for nearly half the year's production of foodgrains, one-third of pulses and approximately two-thirds of oilseeds. A sizable amount of fertiliser is required for this season.
- The Department of Agriculture and Farmers Welfare assesses the requirement of fertilisers each year before the start of the cropping season, and informs the Ministry of Chemical and fertilisers to ensure the supply.
- The amount of fertiliser required varies each month according to demand, which is based on the time of crop sowing, which also varies from region to region.
 - For example, the demand for urea peaks during June-August period, but is relatively low in March and April, and the government uses these two months to prepare for an adequate amount of fertiliser for the kharif season.

Why is the scheme being introduced?

- Due to increased demand for fertiliser in the country over the past 5 years, the overall expenditure by the government on subsidy has also increased.
- The total requirement of four fertilisers Urea, DAP (Di-ammonium Phosphate), MOP (Muriate of potash), NPKS (Nitrogen, Phosphorus and Potassium) — increased by 21% between 2017-2018 and 2021-2022, from 528.86 lakh metric tonnes (LMT) to 640.27 LMT.
- In light of the increased demand, the government has also been increasing the subsidies it provides for chemical fertilisers.
- In the Union Budget 2021-22, the government had budgeted an amount of Rs 79,530 crore, which increased to Rs 1.40 lakh crore in the revised estimates (RE).
 - However, the final figure of fertiliser subsidy touched Rs 1.62 lakh crore in 2021-22.

- In the current financial year (2022-23), the government has allocated Rs 1.05 lakh crore, but the fertiliser Minister has stated that the **fertiliser subsidy figure** could cross Rs 2.25 lakh crore during this year.
- PM PRANAM, which seeks to reduce the use of chemical fertiliser, will likely reduce the burden on the exchequer.



• The proposed scheme is also in line with the government's focus on promoting the balanced use of fertilisers or alternative fertilisers in the last few years.

When will it be introduced?

- Top officials of the Union Ministry of Chemicals and fertilisers, which raised the idea of PM PRANAM, shared information about the proposed scheme to state government officials during the National Conference on Agriculture for Rabi Campaign, which was held on September 7. The ministry has also sought their suggestions on the features of PM PRANAM.
- The ministry has begun inter-ministerial discussions on the proposed scheme and that its draft will be completed after incorporating the views of the departments concerned.

Potential benefits of the PM PRANAM

 Reduced Use of Chemical fertiliser- The proposed scheme explicitly aims at promoting the reduced use of chemical fertilisers.

- Reduced Fertilisers Subsidy- The scheme is aimed at reduction in fertilisers subsidy. This will be diverted for the use of scheme. The scheme will result in saving the public resources.
- Promotion of Increased use of Other nutrients and fertilisers-The scheme will promote the use of other fertilisers including natural and other nutrients.
- Improved Soil quality- reduced use of chemical fertilisers may result in improved quality of soil in the long run. This will improve the productivity and yield of Indian agriculture.
- Human health— Excessive exposure to chemical fertilisers can have long term effects on human health in the form of cancers and other diseases caused due to DNA damage. This will promote a safer work environment.
- Prevent environmental damage-Environmental pollution due to excessive use of chemical fertilisers can pollute water bodies. This can lead to algal bloom, affecting aquatic life.

Challenges associated

- No separate funding for the scheme can lead to slower adoption of less chemical intensive farming.
- Can impact the productivity and output given the situation India is already facing shortage of many essential agriculture commodities.
- Willingness of the farmer is very crucial. It must ensure reduced input cost and increase output ,otherwise will be rejected.
- More voluntary in nature with no specified targets for the states.
- Other related schemes have limited success so far.

Other Government Initiatives to reduce fertiliser usage

• The Soil Health Card scheme to ensure accurate

assessment of land before using fertilisers.

- Neem-coated urea has been put into practice. This ensures slow release of nutrients into the soil and is longer lasting. Thus reducing the total amount of urea needed.
- The Fertiliser Control Order-1985 was also updated by the government to include modern nutrients such as Nano urea and bio-stimulants.
- Paramparagat Krishi vikas yojana to promote organic farming.
- Promotion of Zero budget Natural farming.

<u>Wayforward</u>

- Lessons can be learnt from Srilanka's failed attempt to become an organic state. The shift must be gradual and sustainable.
- It can be made an umbrella scheme by incorporating other schemes related to replacement of chemical fertilisers.
- Focus must be on research and development of viable alternatives and extension services to farmers.
- Centre and State must work in joint collaboration along with all the stakeholders to make it a success.

Mould your thoughts

1. PM PRANAM can truly revolutionise the fertiliser ecosystem in the country. Critically analyse. (250 words)

Approach to the answer

- Introduction about PM PRANAM
- Need for such a scheme
- Potential benefits
- Challenges associated.
- Wayforward and conclusion.