Agricultural Subsidies & Air Pollution

What is the issue?

- Our current system of subsidies is a big reason for air pollution.
- So, some changes could be made in the subsidies of the power, fertilizer and procurement fronts.

What is the situation?

- People in Delhi and Indo-Gangetic Plain are choking due to air pollution.
- As winter dawns, the wind slows, temperatures drop, and suspended particulate matter (PM) accumulates.
- The high pollution in Delhi and its surrounding is due to the congested traffic, dust, construction, waste burning, etc,
- It gets a top-up from paddy-stubble burning in Punjab, Haryana and Western Uttar Pradesh.

What contributes to air pollution?

- **Agriculture's** contribution to air pollution runs even deeper than what happens between crop seasons.
- Atmospheric ammonia comes from fertiliser use, animal husbandry, and other agricultural practices.
- This combined with emissions from power plants, transportation, and other fossil fuel burning form fine particles.

- Agriculture is a victim of pollution as well as a perpetrator.
- **Particulate matter** and **ground-level ozone** (from industrial, power plant, and transportation emissions among others) cause losses in crop yields.
- Ozone damages plant cells, handicapping photosynthesis, while particulate matter dims the sunlight that reaches crops.

What is the irony?

- The irony of agricultural pollution is that taxpayers are essentially paying for it through a system of subsidies.
- These subsidies motivate the very behaviors that drive the agricultural emissions that the taxpayers breathe.

How does subsidy contribute to air pollution?

- **Free power** - hence “free” water, pumped from the ground - is a big part of what makes growing rice in these areas attractive.
- **Open-ended procurement** of paddy, in spite of bulging stocks of grains with the Food Corporation of India, adds to the incentives.
- Subsidies account for almost 15% of the value of rice being produced in Punjab-Haryana belt.
- **Fertiliser**, particularly urea in granular form, is highly subsidised.
- Urea is one of the cheapest forms of nitrogen-based fertiliser, but it is also one of the first to release ammonia into the air.
- This loss of nitrogen leads to a cycle of more and more fertiliser being applied to get the intended benefits for crops.

What could be done?

- An important element to correct in the policy matrix is the policy of subsidies on power, fertilisers and procurement.
- The nature of support to farmers should be shifted from input subsidies to **investment subsidies**.
- A **diversification package**, equally contributed by the Centre and states, may be done to reduce agricultural pollution.
- The approach to diversification has to be demand-led, with a holistic framework of value chain, and not just focused on production.
- On the **fertiliser** front, instead of massive subsidisation of urea, the farmers could be given an input subsidy in cash on per hectare basis.
- **Government procurement** of paddy from farmers burning stubble in their fields may also be **restricted**.
- Taken together, these measures could double farmers’ incomes, promote efficiency in resource use, and reduce pollution.

Source: Financial Express