

A young green plant with three leaves is growing out of a stack of gold coins. The plant is positioned in the center of the frame, with its stem rising from the top of the coin stack. The background is dark, making the green leaves and the metallic sheen of the coins stand out. The overall image conveys a message of financial growth and investment in agriculture.

**FIVE FORMULAS FOR FARM
AND FINANCE: GROW GREEN,
SAVE FOREIGN EXCHANGE**

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Five Formulas for Farm and Finance: Grow Green, Save Foreign Exchange

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Introduction

Higher crude oil prices increase agricultural costs by raising prices for fertilizers, pesticides, and fuel for machinery. This elevates transportation costs, driving up food prices and reducing farm income. With Brent crude oil climbing to \$107 per barrel on May 12, 2026, the burden on farmers has grown heavier. Prime Minister Narendra Modi's recent message to farmers, delivered on May 10, 2026, focuses on cutting input costs by slashing dependence on chemical fertilizers and pesticides, shifting to natural/traditional-style farming, and reducing fuel and import-linked expenses across the economy. These farmer-priority measures align with his "cost-cutting formula" for salvaging the Indian economy.

Cut fertilizer and chemical use

The core idea Modi is pushing is: reduce chemical fertilizer use by up to 50%, while protecting yields through better soil-health practices. Solid farmer-level measures include:

- Adopt natural farming / zero-chemical practices (e.g., **Jholamrit, Bijamrit, Jiwamrit, mulching, mixed cropping**) to cut NPK-fertilizer and pesticide bills.
- Use soil-testing and balanced nutrition (right dose at right time) instead of "more fertilizer =

more yield" thinking.

- Integrate organic manure, compost, and farm-yard-waste so synthetic inputs are only supplements, not the base.

Shift to traditional and natural farming

Prime Minister is emphasizing a return to traditional, low-cost, chemical-free systems that also protect soil and biodiversity. Practical steps for farmers:

- Join National Mission on Natural Farming (NMNF); it is designed specifically to reduce input costs, improve soil health, and promote biodiversity-based systems.
- Practice crop-rotation, mixed cropping, and agro-forestry instead of monoculture, which lowers pest-pressure and fertilizer demand.
- Use cow-based bio-inputs (like cow-dung, urine preparations) as traditional, low-cost alternatives to synthetic pesticides.

Reduce fuel and energy costs on farms

PM Modi has asked farmers to move

away from diesel-run pumps and fuel-heavy operations to cut import-linked bills. For farmers this means:

- Switch to solar-powered irrigation pumps instead of diesel pumps; the government is already promoting this to cut fuel and forex-linked costs.
- Use conservation-tillage and minimum-tillage tools to reduce tractor-fuel use per acre.
- Optimize timing and intensity of operations (e.g., fewer passes, grouped activities) so fuel and labour costs drop together.

Cut chemical-pesticide and input dependency

The PM's call to farmers is not just about fertilizers, but reducing overall chemical-input dependency. Concrete measures:

- Shift to Integrated Pest Management (IPM): traps, bio-pesticides, neem-based solutions, and intercropping to reduce synthetic-pesticide use.
- Grow trap-crops and



pest-repellent crops around main crops to lower pesticide sprays.

- Use public-sector extension services and KVKs to access low-cost, science-backed, chemical-lite practices instead of blindly following dealer-advised inputs.

Macro-policy levers that support farmers

At the national level, Modi is linking farm-level cost-cutting with macro-economic saving of foreign exchange. Key supportive measures that farmers benefit from:

- Boost domestic fertilizer / bio-input production to reduce import-bills and price-volatility.
- Scale up subsidies and schemes for natural farming, solar-pumps, and organic inputs, so the transition is financially safe for small farmers.
- Promote local and regional value chains (e-NAM, FPOs, organic-certification) so farmers get better prices without relying on export-linked, high-input crops.

How this “single formula” can help the Indian economy

In simple terms, Modi’s “formula” is: farmers cut fertilizer/chemical use by 30–50%, adopt natural-traditional methods, and reduce fuel-and-import-linked costs → lower import-bill, healthier soil, cheaper farm-inputs, and stronger rupee. If scaled across even 30–40% of farmland, this can significantly reduce India’s import-dependence on fertilizers, diesel, and pesticides, while improving farm profitability and ecological resilience.

If you tell me your state and crop (e.g., wheat in Punjab, sugarcane in UP, rice in Telangana), I can give you a practical 1-page checklist for your farm to follow this “formula” in a systematic way.

One study in Haryana demonstrated that a maize–mustard–mungbean rotation improved total productivity by 28% over traditional rice–wheat, while reducing irrigation needs by 40% (Singh, 2025). Additionally, diversified systems are more resilient to market and climate shocks.



Note: *Views expressed in the article are author's personal*

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