

CRISIS ON THE MENU

Understanding The Four-Fs Shaping The Future Of Food Security

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When Vikram notices his favourite thali getting costlier, he turns to Mr Naresh for answers. What follows is a conversation about four interconnected forces namely Food, Fuel, Fertiliser, and Finance and how wars, supply disruptions, and rising costs can change the price of an everyday meal.

Vikram: Mr Naresh, why has my usual thali become so expensive? Last month, it cost 120 INR. Today, it's 150 INR.

Mr Naresh: Things have become more expensive, *beta*. Cooking gas costs more, diesel is pricier, and even fertilisers have become costlier.

Vikram: Fertilisers? What do they have to do with my lunch?

Mr Naresh: More than you think! Food, Fuel, Fertiliser, and Finance (the four Fs) are all connected. When one is affected, the others feel the impact too. External Affairs Minister Dr S Jaishankar has warned of a possible 'major food crisis', highlighting how geopolitical conflicts, disrupted grain shipments, fertiliser shortages, and financial pressures can threaten food security, particularly across the Global South.

Vikram: But the wars are happening far away. How do they affect my lunch?

Mr Naresh: Think of the journey from farm to plate. Farmers need fuel for tractors and irrigation, fertilisers for crops, and money to buy these. After harvesting,

the produce must be transported and processed. Disrupt any link, and costs can rise.

Vikram: Has this happened before?

Mr Naresh: The Russia-Ukraine war disrupted supplies from two major grain-producing nations. Meanwhile, tensions in West Asia have threatened energy and fertiliser routes through the Strait of Hormuz, a vital international shipping passage.

Vikram: Why is this route so important?

Mr Naresh: Because it carries essential agricultural inputs as well as energy supplies. According to the International Chamber of Commerce (ICC), Persian Gulf producers dependent on this route accounted for around 40% of global urea trade before its closure in February 2026. The International Energy Agency estimates that more than 30% of global urea trade and around 20% of ammonia and phosphate trade move through the Strait. The ICC also highlights that approximately 50% of the world's sea-borne sulphur trade passes through it.

Vikram: And what happens when ships cannot move freely?

Mr Naresh: Supplies can tighten, shipping costs can rise, and fertilisers can become more expensive. The World Bank reported that international urea prices crossed 850 USD per tonne in April 2026.

Vikram: Does India depend on imported fertilisers too?

Mr Naresh: Yes. India imported 17.69 million tonnes of fertilisers in 2023-24, according to NITI Aayog. Higher import bills can put pressure on foreign exchange, government subsidies, and finances.

Vikram: Does this mean global

food prices rise as well?

Mr Naresh: They can, although global and domestic prices do not always move together. The FAO Food Price Index averaged 136 points in September 2026, up 5.8% year-on-year. Separately, India's food inflation reached 7.74% that month, while overall retail inflation stood at 5.54%, according to provisional government figures.

Vikram: Why are these numbers different?

Mr Naresh: The FAO tracks international commodity prices, while India's food inflation measures price changes faced by domestic consumers. Local harvests, transport costs, and exchange rates influence how global shocks reach our markets.

Vikram: Let me get this straight. Fuel affects fertiliser, which affects food. Where does finance fit in?

Mr Naresh: Natural gas is a key input in urea production. Fuel also powers tractors, irrigation pumps, and transport. Fertilisers supply crops with essential nutrients, while finance determines whether farmers can afford these inputs.

Vikram: So, how do the Fs work together?

Mr Naresh: Think of it this way:

Fuel: Powers farm machinery, irrigation, fertiliser production, and transportation.

Fertiliser: Supplies the nutrients crops need, but depends on energy, manufacturing, and international supply chains.

Finance: Determines whether farmers can afford inputs and whether governments can support production through subsidies.

Food: The final product affected by changing production, supply, and transport costs.

Moreover, a Super El Niño can bring extreme weather and disrupt rainfall. The four Fs can amplify one another: costlier fuel raises production expenses, fertiliser shortages threaten yields, and financial constraints make adaptation harder.

Vikram: Can India do anything to prevent these shocks from affecting our plates?

Mr Naresh: We cannot control every conflict, but we can reduce our vulnerability.

Vikram: Okay, I am understanding, but if India produces enough food, shouldn't that solve the problem?

Mr Naresh: Strong domestic production certainly helps. The government's third advance estimates placed India's 2025-26 foodgrain production at approximately 376.56 million tonnes. Yet high output cannot eliminate dependence on imported fertiliser inputs or protect every harvest from extreme weather.

Vikram: What can farmers do to manage these challenges?

Mr Naresh: They can adopt water-efficient irrigation, conservation agriculture, better soil management, and site-specific fertiliser use. More than 26 crore Soil Health Cards had been issued by July 2026, helping farmers make informed nutrient-management decisions.

Vikram: Now I realise how my bill is connected to ships crossing international waters, gas supplies, fertiliser factories, farmers' loans, and government policies!

Mr Naresh: Precisely. Food security depends not just on how much grain we store, but on whether we can keep producing and delivering it affordably.

