



Historical Overview of Fertilizer Subsidies In Asia

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- Material from
 - 1986 study undertaken by me for the FAO

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Developing World Snapshot (1984)

	1961	1984	% Change
Population (<i>billion</i>)	2.09	3.56	+70%
Cereals production (<i>million tons</i>)	430	941	118%
Fertilizer Consumption (<i>million tons</i>)	3.74	43.10	+1,152%
Population dependent on Agriculture		55%	
Share of Agriculture labor to total labor		58%	
Increase in land area under cultivation		14%	
Increase in foodgrain productivity per unit of land due to fertilizers		56%	

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Factors Influencing Pricing in Developing Countries

- Fast increasing requirement of foodgrains;
- Limited scope for horizontal expansion of agriculture; hence need to increase productivity-fertilizer an important input;
- Preponderance of population below subsistence level-issue of affordability;
- Scarcity of foreign exchange for imports;

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Role of Fertilizer Subsidies

- Initiating farmers to use fertilizers and supporting increasing use to increase productivity and greater food security
- Maintaining reasonable input-output price ratio for farmers and keeping foodgrain prices low to protect weaker sections and ensure income distribution
- Providing gainful employment; increase in labour force in agriculture by 137 million between 1961 and 1983
- Facilitating growth of fertilizer and other agro/ancillary industries.

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Countrywise Characteristics (1984)

- Bangladesh, Indonesia & Pakistan
 - Cheap availability of gas leading to self-sufficiency in urea production, reduction/elimination in imports, increase in urea price to reduce/eliminate subsidy.
- Republic of Korea & Malaysia:
 - High input-output price ratio, yet heavy subsidy. Liberal credit facilities-direct payment and even free distribution of fertilizers to certain extent.
- Nepal
 - Land locked country with hilly terrain entailing heavy Transport cost and subsidy.

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Countrywise Characteristics (1984)

- Philippines
 - Dual pricing based on crops tried and given up.
- Sri Lanka
 - Substantial state subsidies.
- India
 - Low input-low output price policy. High subsidy but objective of increased fertilizer consumption/production and agricultural production achieved.

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Broad Conclusions from Country Case-Studies

- Foodgrain prices generally kept at low levels to protect weaker sections of society
- Fertilizer prices also kept low to encourage use for increased foodgrain production to meet growing demand and self-reliance
- Entailed heavy fertilizer subsidy over the years. Price increases led to reduction or slower growth and consequent impact on agricultural production
- Increased prices of raw materials and other inputs, indigenous and imported, aggravated the problem.
- Differential pricing tried in some countries for different crops but abandoned due to leakage from low to high value crops.

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Alternate Pricing Options

- Low input-low output price: preferred to protect weaker sections of society
- High input-high output price: may price out small & marginal farmers and poorer consumers of food grains

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Removal of Price Control & Subsidy

- Will affect consumption of nutrients and agricultural production
- In India, removal of price control in 1992 on P and K fertilizers had to be reversed by back door
- During 1971-72 to 1979-81, fertilizer use in countries with subsidies increased at much higher pace than in those without:

	Annual Growth in Fertilizer Use			
	Africa	Asia	Near East	Latin America
With Subsidy	16.2%	19.6%	11.0%	13.2%
Without Subsidy	8.9%	10.2%	6.9%	7.8%

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Impact of Fertilizer Price Increase to Reduce Subsidy

- If accompanied with increase in output price
 - Lower income consumers of output will be priced out besides small and marginal farmers with little marketable surplus will also suffer

- If output prices are not increased
 - Farmers will be priced out affecting agricultural production.

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Dual Pricing of Fertilizers

- Well off farmers pay higher price to subsidize loss on sale to weaker farmers
- Based on incorrect notion of subsidy benefiting only well off farmers.
- 1976-77 data for India demonstrates its fallacy

Pattern of Fertilizer Consumption by Farm Size (Hectares)

	< 1	1-2	2-4	4 - 10	10+
Farm Households (%)	40.7%	24.8%	19.8%	12.1%	2.6%
Area Cultivated (%)	9.7%	15.7%	24.3%	31.6%	18.7%
Fertilizer Consumption (%)	12.2%	18.5%	28.2%	29.9%	11.2%

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Elimination of Transport Subsidy ?

- Based on fallacious argument that, under uniform pricing, farmers near source of supply are subsidizing in remote areas.
 - Ignores that farmers at ports or in industrial areas are better off than those far away
- Transport subsidy particularly relevant in land locked countries like Nepal with difficult and remote hilly areas.
- If output prices are same, input prices have also to be same.

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Scope of Containing Subsidy

- Reduction/elimination of various taxes and duties
- Periodic adjustment in farmer price in line with inflation
- Farmers education to improve efficiency of applied nutrients

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Conclusion

- Subsidies have played vital role in increasing fertilizer use leading to increasing agricultural production in developing countries
- Subsidies have helped generate employment and have helped alleviate foreign exchange problems.
- Any drastic or sudden reduction beset with serious implications
- To contain subsidy level, avoidable taxes/duties to be eliminated
- Fertilizer prices should be adjusted in line with inflation to contain subsidy level
- Urgent need to improve use efficiency by educating farmers and fertilizer distribution and crop marketing systems to be made efficient and cost effective.

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Thank You

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