## AGRICULTURE POLICY IN INDIA: THE ROLE OF INPUT SUBSIDIES

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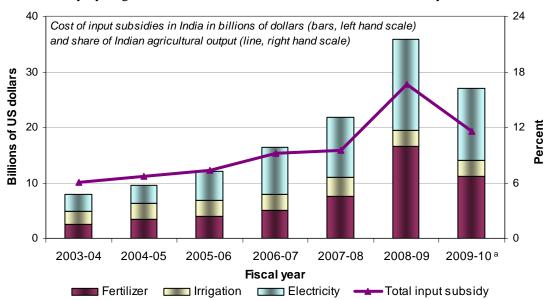
In India, agricultural trade policy is a part of a larger food and agriculture policy regime that seeks to maintain food self-sufficiency while providing income support to the agricultural sector and poor consumers. The Government of India (GOI) uses a variety of policy instruments in attempting to achieve these goals, including:

- Domestic subsidies to inputs, outputs, transportation, storage, and consumption to reduce producer costs and consumer prices.
- Border measures such as subsidies, tariffs, quotas, and non-tariff measures to protect domestic producers from import competition, manage domestic price levels, and guarantee domestic supply.

Input subsidies are the most expensive aspect of India's food and agriculture policy regime, requiring a steadily larger budget share. India subsidizes agricultural inputs in an attempt to keep farm costs low and production high. GOI's intended result is for farmers to benefit from lower costs, but also for them to pass some of the savings on to the consumers in the form of lower food prices. GOI pays fertilizer producers directly in exchange for the companies selling fertilizer at lower than market prices. Irrigation and electricity, on the other hand, are supplied directly to farmers by GOI at prices that are below the cost of production. These policies result in effective subsidies to the farmer of 40 to 75 percent for fertilizer and 70 to 90 percent for irrigation and electricity.

Input subsidies can also produce unintended effects. According to GOI reports, input subsidies have resulted in overutilization of inputs. This overutilization has in turn led to soil degradation, soil nutrient imbalance, environmental harm, and groundwater depletion, all of which have caused decreased effectiveness of inputs. 1 Additionally, input subsidies distort trade by increasing net exports of input intensive commodities while decreasing net exports of commodities which require relatively fewer inputs.

India's expenditure on input subsidies has increased sharply in recent years. The cost of India's agricultural input subsidies as a share of agriculture output almost doubled from 6.0 percent in 2003-04<sup>2</sup> to 11.6 percent in 2009-10, driven mostly by large increases in the subsidies to fertilizer and electricity.<sup>3</sup>



<sup>&</sup>lt;sup>a</sup> Preliminary, some data from 2008-09 used in calculation

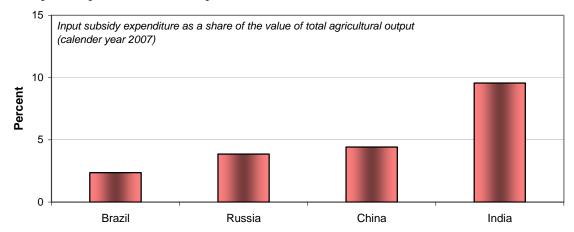
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<sup>&</sup>lt;sup>1</sup> Planning Commission, Government of India, Report of the Working Group for the Eleventh Five Year Plan on Crop Husbandry, Agricultural Inputs, Demand and Supply Projections and Agricultural Statistics (Dec. 2006), pg. 18-21.

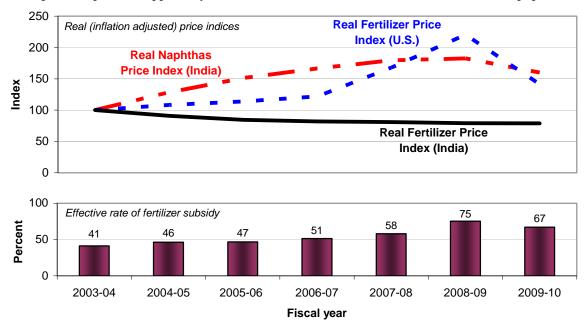
<sup>&</sup>lt;sup>2</sup> The Indian fiscal year goes from April to March.

<sup>&</sup>lt;sup>3</sup> The Budget of the Government of India; Ministry of Chemicals and Fertilisers, Department of Fertilisers and Fertiliser Association of India; Ministry of Statistics and Programme Implementation; Central Electricity Regulatory Commission; Economist Intelligence Unit; and the Lok Sabha Starred Question No. 134 (Nov. 23, 2007).

India's agricultural sector is more dependent on input subsidies than that of the other large emerging economies. In calendar year 2007, India's input subsidies were equal to 9.6 percent of the value of its total agricultural output compared to less than 5 percent for Brazil, Russia, and China.<sup>4</sup>



The fertilizer subsidy exemplifies the effects of price controls on input subsidy rates in India. The effective rate of the fertilizer subsidy increased from 41 percent of the cost of fertilizer production in 2003-04 to 67 percent in 2009-10. The increase occurred because GOI allowed real (inflation adjusted) subsidized fertilizer prices to fall by keeping the nominal (non-inflation adjusted) subsidized fertilizer prices essentially unchanged despite inflation, increased real world prices for fertilizers (represented by the real U.S. price index-blue), and increased real domestic prices for fertilizer industry inputs (represented by India real price for naphthas-red). This type of outcome (where GOI increases its expenditure in order to keep nominal prices unchanged) is typical in India because of the political pressure applied by the farmers, which account for about half of India's population.<sup>5</sup>



For more on agricultural input subsidies in India, look for the upcoming working paper titled "Input Subsidies in Indian Agriculture: a Policy Delineation and CGE Analysis" in early 2011.

<sup>&</sup>lt;sup>4</sup> Ministry of Finance, Government of India; Ministry of Chemicals and Fertilisers, Department of Fertilisers and Fertiliser Association of India; Ministry of Statistics and Programme Implementation; Central Electricity Regulatory Commission; the Lok Sabha Starred Question No. 134 (Nov. 23, 2007); and the OECD

<sup>&</sup>lt;sup>5</sup> USITC, India: Effects of Tariffs and Nontariff Measures on U.S. Agricultural Exports, November 2009, Inv. No. 332-504, USITC Pub. 4107, p. 1-7.