

Why should government fix Bt cottonseed price?

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The current litigation and public outcry over Bt cotton is the consequence of the "alleged" exorbitant technology fee built into the price charged from Indian farmers.

Recently, the MRTPC directed the technology/seed company to bring down the fee to a "reasonable" level consistent with charges in neighbouring countries such as China. Andhra Pradesh and other States even followed the directions.

INDIA VS CHINA

A close scrutiny of Indian price *vis-à-vis* Chinese is needed to understand the present situation. The technology fee for Bollgard seed in India is Rs 900 for a 450-gm packet. For the technology that the company licences to seed companies for commercial sale in China, the technology fee is equivalent to Rs 1,100-1,200 per acre.

Approximately 80 per cent of the cotton planted in China uses Bt traits. The vast majority of that technology is not directly licensed to seed companies for sale but is either pirated technology or that developed and distributed locally by Chinese parties.

In China, a typical cotton farmer sows 8 kg of "varietal" cottonseeds (procured from local/pirated source) per acre. In India, farmers use hybrid cottonseeds and historically have used a much lower planting rate, that is, around 450 gm per acre.

In other words, in China, a typical cotton farmer sows 8 kg of varietal cottonseeds per acre to get cotton plant germination equivalent to 450 gm hybrid cottonseed per acre in India.

In China, thus, farmers need to sow nearly 18 times (8/.45) the quantity of seeds sown in India primarily because of the different methods of sowing for hybrids and varietal cottonseeds.

If the technology fee of Rs 900 for 450 gm hybrid seed in India is compared with the pro-rata cost of 450 gm of "varietal" seed in China, the Indian price would appear to be exploitative.

UNJUST COMPARISON

But the above comparison is illogical and misleading. How can one put a hybrid seed on the same footing as a varietal seed?

A just comparison on per acre basis

An action of the Government in fixing the price of a given item presupposes that there are no alternatives available and that the farmer is unable to make a rational choice. The mere launch of a new product does not mean that established alternative products are withdrawn. The former, in fact, gives more choice to the farmer and he is free to choose the best based on the cost-benefit analysis.

brings out that the technology fee in India at Rs 900 is lower than the Rs 1,100-1,200 charged in China.

We need to address some fundamental questions. Why do we need to use price in another country as reference for fixing our price? And, why should the Government fix the price at all? Why should it not be determined by market forces?

Reference to the international scenario for fixing price in India can have mind-boggling implications, which the Government will just not be able to cope with. In developed countries — the US, the EU, etc — farmers are assured high price/income from their agricultural produce due to monumental subsidy support (for instance, \$1 billion a day in the EU).

Indian farmers receive low price for their agricultural produce due to unfeasible subsidy support, as per the AMS (aggregate measurement support) calculations following the WTO method.

NEED FOR BETTER SUBSIDY

Can the Government extend to Indian farmer the same level of subsidy enjoyed by farmers in developed countries? Or, can it at least reach the *de minimis* level of 10 per cent (of the value of agricultural production) permitted under the WTO?

Under its reforms programme, the Government is committed to progressive removal of controls on pricing and distribution of agricultural inputs. The present development on Bt cotton can set the clock back.

This could lead to demands for control on price of all agricultural inputs — fuel, tractors, irrigation, credit — besides all seeds (conventional or hybrid). Removal of controls on fertilisers where a policy decision has already been taken may hit a speed breaker.

How will the Government cope with these demands?

If it yields to pressure and forces producers to sell at a price lower than what they think is right, it will either have to give subsidy (as in fertilisers) or leave a hole in their pocket.

In case of fertilisers (under control since 1977), the Government directs producers to sell at a price below the supply cost and reimburses the difference as subsidy. The subsidy burden has reached around Rs 25,000 crore (2005-06).

Despite public pronouncements and efforts for a decade and half, the Government has not succeeded in reining-in the fertiliser subsidy. Clearly, the option of giving subsidy support for a host of other agricultural inputs is ruled out.

The alternative of forcing the producers to absorb the concession — that the Government wants to give to the farmers — too is fraught with dangerous consequences.

In the case of Bt cotton, fixing the price at a level significantly below what the technology/seed companies deem fit will affect their ability to recover R&D and stewardship costs. In turn, this will affect extension/advisory services to farmers who will not be able to reap the full benefit of the technology.

The dismantling of the quota regime under the MFA (Multi-Fibre Agreement) from January 1, 2005 has thrown up huge opportunities for increasing textile exports. For this, one needs very good quality cotton. Without proper knowledge transfer, it would not be easy to ensure this.

In recent times, we have seen a proliferation of illegal Bt cotton. Such suppliers have taken advantage of the delay in regulatory approvals. Any setback to R&D companies — resulting from price control — will only

aggravate this problem. Forcing companies to fix the prices for their products and technologies at 'arbitrary' levels will also have a direct and adverse impact on the amount spent on necessary R&D and will hamper efforts in providing cutting-edge technologies to our farmers.

WORK ON GM TECH

A number of companies (Indian and foreign) are working on GM the technology on a variety of crops — food and non-food — and their research holds enormous potential for the farmers to benefit in terms of higher yield, resistance to pest, resistance to drought, adding to nutritional value etc.

The looming threat of price control can impede these efforts. These companies may either abandon the R&D mid-course and even if it is continued, they may like to launch the products in countries where such threat is not there.

In short, Indian farmers will be denied access to newer and safer solutions. This holds not just for products of bio-technology but also, crop protection products (CPP). For, if the Government perceives the price of a new CPP to be high, it might as well control its price.

By amending the Indian Patent Act to provide for product patent in all areas of high technology — CPP, agribiotechnology, etc. — from January 1, 2005, the Government has committed itself to fully respecting the intellectual property right (IPR) of an innovator. Any arbitrary price control will militate against this.

WHY THIS INTERFERENCE

What is wrong if the Government does not interfere with the market mechanism? What has been the experience during the period when the

state was not involved in fixing the technology fee/price of Bollgard?

Since the launch in 2002, the cultivated area under Bt cotton has increased phenomenally, from about 50,000 acres in 2002 to 1.3 million acres in 2005. At present, over one million farmers have taken to Bt cotton.

Last year, under the previous season's seed prices, Indian farmers got back almost Rs 6 in value from reduced insecticide cost and increased yields over conventional cotton for every rupee spent farming genuine Bollgard cottonseed.

Clearly, under market-based pricing, Indian farmers are reaping the benefits of the Bollgard technology. Any form of price intervention will only prove to be counter productive by preventing them from realising the full value of the technology.

An action of the Government in fixing the price of a given item presupposes that there are no alternatives available and that the farmer is unable to make a rational choice. Both these assumptions are wrong.

The mere launch of a product of innovation does not mean that established alternative products are withdrawn. The former, in fact, gives more choice to the farmer and he is free to choose the best based on the cost-benefit analysis.

LURE OF NEW TECHNOLOGY

It is also naïve to believe that the farmer will get carried away by the lure of a new technology/product. He is bound to behave rationally, weigh the pros and cons and go in for a product that suits him the best in terms of economics and other benefits.

The Government is committed to achieving 4 per cent per annum growth in agriculture.

This can happen only by harnessing the full benefits of new seed and crop-protection technologies.

For this, an enabling environment is needed for R&D companies and other agencies/institutions to innovate, develop and deliver newer, safer and more effective products/solutions to the farmers. Certainly, not price controls.

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