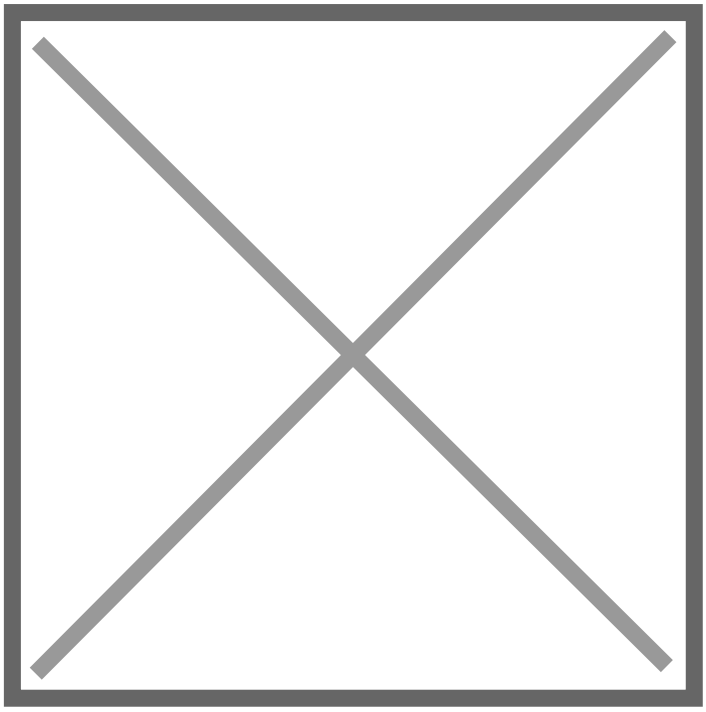
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It is not wise for Thailand to use GM tag for its Jasmine rice

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Dr Suman Sahai

The National Biotechnology Committee of Thailand plans to use GM technology to improve the quality and productivity of Jasmine rice, ordinary rice and rice for food processing. The plan for Jasmine rice is to use genetic engineering and molecular breeding to introduce resistance to flood and drought. This is not a wise move. Flood and drought tolerance can be more easily achieved by conventional breeding than by genetic engineering and the price for adding the GM tag may be too high.

With the GM tag, Thailand would jeopardise the special status accorded to Jasmine rice. It would also risk its rice gene pools since the contamination of other rice varieties and their natural relatives with foreign genes from the GM Jasmine rice would be a certainty.

Thailand has been fighting to protect its Jasmine rice from biopiracy. It has contested claims by US based companies to use its name in a trademark violation called 'passing off' as 'Jasmati'. The Jasmine rice of Thailand, is claimed by the Thai as a special Thai product and the Thai have sought to exercise their rights over this product invoking the IPR protection called 'Geographically Indicated (GI) Rights, in the WTO. Provided in Articles 22, 23 and 24 of the TRIPs chapter, GI protection can be claimed by countries for products that are exclusively associated with their region. At present, GI protection is available only for wines like Champagne and Spirits like Scotch whiskey. Developing countries are, however, fighting hard to increase the scope of GI protection so that products of interest to them can also be given GI IPR protection and be considered exclusively theirs. India for example has an interest in Basmati rice and Darjeeling tea, to name just two products. Thailand has claimed Jasmine rice as its own.

Once Jasmine rice becomes a GM variety, not only is Thailand likely to lose its markets in those countries (particularly Europe) that are not favourably inclined to GM food, it will also forfeit its claim to GI protection. Is it willing to do that? Have the Thai authorities thought through the consequences of turning their premium Jasmine rice into a controversial GM food? The Thai thinking is probably like India's, which has invested in Bt Basmati. The Basmati project in India has been put on hold after protests from rice traders and groups like Gene Campaign which has pointed out that Basmati would acquire an 'untouchable' status if it were tainted with the GM label. The intention is to increase production of a premium product like Basmati or Jasmine rice and thus increase earnings in an assured high-end market. This will backfire because consumers will shy away from the GM label.

Jasmine rice is not the food of the masses. It is an expensive premium product, much like India's Basmati rice. The poor, who cannot afford its high price, consume neither, so there is no pressure to increase its production from the point of view of food security. Like truffles and caviar, Jasmine rice is a luxury food, which brings good revenue for its farmers. Tampering with it by adding the GM label is likely to jeopardise the assured earnings of the farmers who grow Jasmine rice.

Apart from the issue of special protection under GI , in WTO/TRIPs, is the question of environmental safety . Thailand belongs to the Indochina Centre of biological diversity. It has a great deal of diversity in rice, which includes farmer varieties, landraces and wild relatives of rice. One of the principle environmental concerns with respect to GM crops is the matter of gene flow and its consequences for agro-biodiversity. It is a fact of biology that pollen will fly around and along with pollen will fly around the foreign genes contained in the pollen of the GM crop. When there are other rice varieties and wild relatives in the vicinity, the pollen with foreign genes can cross pollinate with them, thus transferring the foreign genes to them . Although rice is largely a self-pollinated crop, high enough rates of cross-pollination have been recorded to cause concern for genes to be transferred from the GM Jasmine rice to the neighbouring rice varieties and the natural rice gene pool.

We do not know yet what the long term consequences of such gene transfer and gene introgression can be since no studies have been done under developing country conditions. Western nations have done gene transfer studies on crops of interest to them but developing countries have not done enough of this kind of basic work. If there is no impact in the long term or the impact is harmless, it does not matter. But should we discover that there is a negative impact, we would have possibly jeopardised the integrity of one of the most important gene pools in the world. The consequences for food security could be unimaginable if the rice gene bank in nature were to be endangered.

The implementation of GM technology is meant to be guided by the Precautionary Principle. This Principle was formulated because we know so little about the long-term impact of cultivating GM crops. The Precautionary Principle says that if we do not know enough or if there is uncertainty about the safety of a process or product, then it is best to avoid that product. We know practically nothing about the behaviour of GM rice in a natural agricultural environment, particularly in a centre of diversity. The precautionary principle dictates that we do not take a chance. In my view, no nation should cultivate a GM crop for which it is a centre of diversity. Mexico has taken this intelligent decision. Since 1998, the Mexican government has placed a ban on the cultivation of GM corn since Mexico is a centre of origin and diversity for corn. In 2002, the Mexicans went a step further; they banned even research on GM corn, since they were not prepared to take a risk with their corn gene pool. China does not allow the cultivation of GM soybean for which it is a centre of origin and diversity. Thailand and India should learn from these countries and leave GM rice alone.

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