

Lankan food crisis shows perils of organic farming

SWAMINOMICS

SWAMINATHAN S ANKLESARIA AIYAR



India has been moving towards organic farming. Narendra Modi has showered praise on “zero budget farming,” with no purchased chemical inputs. Sikkim claims to be the only state with 100% organic farming. Andhra Pradesh, Odisha and other non-BJP states are also enthusiastically encouraging organic farming.

They should pause and learn from Sri Lanka’s agricultural crisis. President Rajapaksa banned the import of chemical farm inputs in April, hoping to make his country the first fully organic one. Alas, the result has been spiralling food prices, severe food shortages, and fears of production crashes of export crops like tea and rubber. Rajapaksa has blamed it all on hoarders and used the army help to crack down on traders. This reminds me of Indira Gandhi’s crackdowns on traders and takeover of the entire wholesale trade in grain in her Garibi Hatao period (early 1970s). Alas, this failed miserably and had to be abandoned.

The notion that inflation is a law-and-order problem to be solved by jailing traders is pathetic. Indira Gandhi moved Home minister Y B Chavan to Finance to tackle rising prices. Laxman produced an immortal cartoon of a perplexed policeman coming out of Chavan’s office saying, “He has ordered us to arrest inflation.” Food inflation in India was finally tamed only by higher production stemming from the green revolution, using massive chemical inputs.

Sri Lankan tea expert Herman Gunaratne warns of potential disaster in his country. “If we go completely organic, we will lose 50% of the tea crop, but are not going to get 50% higher prices.” He estimates that, far from cutting costs, production of organic tea costs 10 times more. Experts cite three scientific meta-analyses comparing organic and conventional crop yields, which predict a fall of 19-25% in output.

Maybe technology will one day provide new techniques of organic farming that do not depress yields or raise prices. But right now, Sri Lanka shows how disaster will follow any forcible measures to make farming organic. India is currently facing agitations by farmers in Bihar and other states over current fertiliser shortages. This is in addition to the year-old agitation against new farm laws by farmers who swear by chemical-intensive Green Revolution technology. The BJP would be foolish to attempt strong-arm tactics to promote organic crops.

Chief ministers can experiment with incentives for organic farming. But let none pretend that yields will not fall, and prices will not rise. The world — and even India — has a growing veneer of rich folk willing to pay fancy



TROUBLE BREWING: Sri Lankan tea expert Herman Gunaratne has warned of potential disaster in his country if the tea industry goes completely organic

prices for organic products. Yes, a small proportion of farmers can cater to them. But mass food production for the poor requires chemical inputs for high yields and lower prices. Organic farming is no more than a niche.

Subhash Palekar, a strong advocate of organic farming, proposes using cow manure and urine mixed with other organic ingredients to replace chemical fertilisers and pesticides. However, India’s National Academy of Agricultural Sciences (NAAS), the premier body of agricultural scientists, has castigated Palekar’s technology as unproven, bringing no gain to farmers or consumers.

Green Revolution varieties give high yields by sucking the maximum possible nutrients from the soil. Before the Green Revolution, even traditional low-yielding varieties depleted soils quickly, so they had to be kept fallow periodically to recover some fertility. This meant lower grain production, and many famine deaths. The Green Revolution then came to the rescue. Many youngsters have no knowledge or memory of the terrible organic era before the Green Revolution when foreign food aid alone prevented mass starvation. Since then the population has tripled, but high-yielding varieties with chemical inputs have saved us.

These simply cannot be replaced by manure. Cow dung has only 2% nitrogen, against 46% for urea. Only a tiny proportion of all crop nutrients go to feed cattle, of which a tinier part goes into their dung. At best, this can replace only a small part of the nutrients sucked out by cropping.

A few crops like pulses and soybeans can fix their own nitrogen in the soil and can be grown chemical-free. Some crops can be grown for green manure but expanding their production means diverting acreage used for food and fibre, creating shortages of both.

I have long hoped for genetically modified rice, wheat, cotton and other major crops, engineered to fix their own nitrogen in the soil, like pulses. But that has not happened. The clamour of Indian greens and the RSS against genetically modified crops means it may never happen. In which case, let us recognise that the bulk of farm production must have fertilisers to revive soils depleted by farming.

The Bihar farmers agitating against fertiliser shortages know this full well. Those in Sri Lanka know it too. When will Indian politicians and ideologues acknowledge this? ❧