Cause of Indian famines?

Krishnapillai¹ has stated that the famines in India cited in my note² were not due to failure in agriculture, but the policies of the then British rulers were responsible for them. Since the note was a comment on Tiwari's paper3 on agriculture based on 'Vedic' wisdom, Krishnapillai endorses that the agrarian traditions based on ancient knowledge were the best. Even if his line of reasoning is accepted, how can the famines in India before the Mogul rulers be explained? Famines in the past, globally as well as in India, were largely due to the failure of successive crops. The productivity of the crops grown with primitive methods provided little spare food for survival during the prolonged periods of crop failures. Long drought spells, severe disease and pest epidemics, or sometimes, other natural calamities such as earthquake or floods were the cause of crop failures. Religious wars and civic turmoil were responsible for famines in Europe during the fifteenth century, and in Congo and Ethiopia in the recent past. Famines in India listed in table 1 of ref. 2 were due to crop failure for several consecutive years.

The author further defends the traditional agricultural practices by saying 'After all the same agricultural techniques were supporting a far more larger population in the nineteen fifties'. The fact remains that food grain production during 1950–51 was 51 million tons, and the country imported about 5 million tons⁴.

This was in spite of the fact that scientific inputs into Indian agriculture started with the establishment of agricultural colleges at Poona, Nagpur, Coimbatore, Kanpur and Layalpur (now in Pakistan) and the Imperial Agricultural Research Institute at Pusa (Bihar)⁵ (now, Indian Agricultural Research Institute, New Delhi). The Imperial Council of Agricultural Research (now, the Indian Council of Agricultural Research) was established by the British rulers in 1926. The purpose of communicating my reaction to Tiwari's³ call for reverting to 'Vedic' farming technology was that India cannot feed a population of billion plus without further modernizing its agriculture based on contemporary scientific knowledge and techniques. It is scary to read the condemnation of green revolution technology, and propagation of an irrational belief that the traditional methods can feed the present population. Without genetic enhancement of crop cultivars, balanced use of water, plant nutrients, management of soil fertility, pest and disease control crop productivity cannot meet the food needs of the economically ascendant and growing population. Only contemporary scientific knowledge and tools can provide productive, profitable and sustainable cropping systems⁶.

Though not referred in my correspondence², Krishnapillai¹ out of the context mentions nuclear waste, global nuclear

war and transgenics – the favourite clobbering points of anti-science advocates. It is stated, 'Transgenic life forms have the potential to poison the entire planet'. The author should provide scientific evidence on which the statement is based. With freedom of speech and writing in a free country, one can make any wild proclamation but an assertion in *Current Science* calls for scientific evidence.

- Krishnapillai, M., Curr. Sci., 2004, 86, 625.
- 2. Bhatia, C. R., Curr. Sci., 2003, 85, 101.
- 3. Tiwari, S. C., Curr. Sci., 2003, **85**, 578–581.
- 4. Pursuit and Promotion of Science: The Indian Experience, INSA, New Delhi, 2001, p. 399.
- Menon, K. P. A., Indian Agriculture: Administrative and Organizational Constraints, Arthshastri Prakashan, New Delhi, 1985, p. 236.
- Atlas of the Sustainability of Food Security, M.S. Swaminathan Research Foundation, Chennai, 2004, p. 294.

C. R. BHATIA

17 'ROHINI', Plot 2-30, Sector 9-A, Vashi, New Mumbai 400 703, India e-mail: neil@bom7.vsnl.net.in

Late arrival of science journals

It is not uncommon to see in many university and college libraries, the late arrival of science journals; sometimes even four or five weeks after the date of publication of the journals. Science journals are the source of information on workshops, summer training programmes and short-term courses, with programme schedule, last date for applying, etc. These advertisements are of little use when the

journals enter the libraries late. The last date will be over even before the journals would be read by many of eligible candidates using such libraries. Sponsors could plan to advertise their programmes much earlier, or could advertise them giving a long time gap between the date of publication and the last date to receive applications from eligible candidates. Also, they should advertise their programmes

in newspapers, which reach almost all available eligible candidates.

M. Selvaraj

Department of Plant Physiology, Acharya N.G. Ranga Agricultural University, Rajendranagar, Hyderabad 500 030, India e-mail: cryptochrome2003@yahoo.co.in