

Promoting Agricultural Research

Derek Tribe, Feeding and Greening the World: The Role of International Agricultural Research, CAB International in association with the Crawford Fund for Agricultural Research, Wallingford, 1994

Reviewed by Grant M. Scobie

THE sustainable production of the world's food supply is prominent on the agendas of many national and international forums. But the quality of the debate is mixed. Doomsayers paint a picture of inevitable famine, usually as a prelude to the case for population control. Green lobbies depict modern agriculture as raping the environment. Those claiming to speak for the rights of indigenous peoples berate the first world for the alleged theft of plant materials. Yet many from the rich countries, with their obscenely subsidised agricultural sectors, are more preoccupied with disposing of their surpluses and limiting production than with the challenge of maintaining adequate food supplies in the developing world.

The rhetoric of these groups stems more from emotion, politics, ideology, and even genuine altruism, than from fact and analysis. Those international agencies whose mandates include addressing the question of food production and the environment are themselves under increasing attack, being seen as part of a capitalistic mafia, operating largely in the interests of their wealthy donor members, enriching their own bureaucracies at the expense of the poor who they are meant to serve. The extensive protests at the annual meetings of the Asian Development Bank in Auckland by students, the unemployed and the champions of indigenous rights exemplify some of the difficulties faced by the international community.

Not for one second should we dismiss the voices of protest out of hand. There are serious questions that underlie all of the concerns. But it is not always easy to put these in proper perspective when the message is delivered in an aggressive manner.

To this confused and tempestuous debate, Professor Derek Tribe, currently executive director of the Melbourne-based Crawford Fund for International Agricultural Research, brings a cool, reasoned, yet forceful message. In short, investment in agricultural research has a demonstrably high pay-off. The systematic application of new knowledge to farming is necessary to ensure continued growth in world food supplies. Above all, the good news is that such an approach has been, and can continue to be, consistent with better stewardship of the environment.

That Professor Tribe concludes with his own plea for more funding for that investment comes as no surprise. In fact, doubtless conscious of the potential for critics to point the finger at him, he notes that 'The argument for greater funding for agricultural research and development [R&D] is far from being just another case of special pleading' (p.242). Any such criticism would be totally unwarranted. True, Professor Tribe is among a handful of academics (disproportionately from Austra-

lia) who, in addition to a distinguished career within their universities, have played an important role in guiding and managing the international agricultural research community. Truth in advertising requires that the reader be aware that your reviewer could be tarred with the same brush, being Director-General of one of the largest international research centres, whose case for funding is so eloquently made by Professor Tribe.

Feeding and Greening the World is at once a history of agriculture, an overview of the world food and population scenes, a guide to emerging technologies, a reference work on the origins and structure of the international agricultural research systems, and a statement of the costs and benefits of investment in research. It is a breathtaking agenda, which is both its strength and its weakness. Those who have had little or no contact with the topic will find a comprehensive and balanced treatment. Those who stridently push particular barrows would find reason, not emotion or ideology. For all, its simply written, uncluttered prose will be a joy. Those who seek a deeper treatment may be left a little frustrated. But to have covered this range of material in a cogent 274 pages is a commendable feat. To those wanting more, a brief but up to date list of further readings is incorporated. I would have preferred more citations in the text. Sometimes, other studies are used to illustrate a point, but only referred to as, for example, 'a World Bank study' (p.23). But freedom from citations and footnotes surely enhances the readability and widens the access.

Access by whom? The only clue is in the author's preface where he refers to the book as 'a plea to politicians and bureaucrats'. But I suspect that it will be more widely read. There is a large community of people with interests and concerns for questions of international development. Scientists, policy-makers, analysts, students and journalists could well be added to Professor Tribe's own modest list.

The hugeness of the task of feeding the world is highlighted by the fact that in the next 30 years the world will need to produce twice as much food as was produced in the last 30 years. The increase needed in the next 30 years will be more than all the food ever produced in the history of the world up until 1920. And all of this has to be accomplished with little or no expansion in the cultivated area. Above all it will have to be accomplished in a way that preserves the productive capacity of the natural resources.

Based on the past experience of the application of knowledge to agriculture which he documents, Professor Tribe is optimistic that this can be achieved. His caveat is that a necessary condition will be adequate investment in research to ensure the continued expansion of the stock of knowledge. Nor does he see a necessary threat to the environment. Modern agriculture, when based on sound practices has the capacity to increase output on existing lands, and in the process relieve the pressure on marginal and fragile areas where so much of the degradation has occurred.

While we might well accept that the science industry can deliver, we should continue to be concerned about the political and social contexts. Almost every challenge that is faced in enhancing food supplies has a political dimension. The

pollution of the environment, the misuse of water, the salination of lands, the claims to rights over plant materials, and the very mechanisms for funding research all have a common theme involving property rights and the institutional frameworks needed to ensure increased, sustainable food supplies.

Professor Tribe recognises these issues. But in the end he returns to his plea for increased funding. Unquestionably, that is a necessary input. But the reader will be largely left to contemplate the ways in which institutions will need to evolve. New systems for the ownership and control of water, new linkages between the public and private sectors, new roles for the non-governmental organisations, new relations between national, regional and international bodies, new structures of property rights for plant materials and new arrangements for the governance and funding of agricultural research will need to emerge in response to today's pressures.

Professor Tribe has set the scene and highlighted the challenges of demonstrating the benefits from that elusive international public good called international agricultural research, in a way that sustains the funding. What must follow is the evolution of the institutional settings, and the adoption of policies conducive to realising the benefits of research.

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