INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

CENTRE DE RECHERCHES POUR LE DÉVELOPPEMENT INTERNATIONAL

CANADA

August 16, 1986

PERSONAL

Dr. M.S. Swaminathan
Director General
IRRI
P.O. Box 933
Manila, Philippines

Dear M.S.

Perhaps you read the attached article in the Economist. Frankly, I have never heard of Mr. Benor. Is the statement in any respects correct or is it just a little more pro-Israel propaganda?

With best wishes.

Yours sincerely

J.H. Hulse
Vice-President Research Programs

Encl.

Head Office/Siège social: 60 Queen St./rue Queen, P.O. Box/C.P. 8500, Ottawa, Canada K1G 3H9
Tel./Tél.: (613) 236-6163 • Cable/Câble: RECENTRE • Telex/Télex: 053-3753

FARMING BRIEF

What Africa can learn from India

Last year, thousands of Africans died because they did not have enough food, and famines caused another 10m to abandon their homes. The first response to such misery is to send emergency relief. The second must be to tackle the shortcomings of African farming.

Ways of improving third-world farming have become the development issue of 1986—and with good reason. Some countries farm much better than others, even when account is taken of climate, soil and other factors that influence farm output. Africa can learn much from India's relative success.

India's performance (this year it has a grain hillock) owes much to a national agricultural management programme called T&V. It bombards farmers with advice on how best to make use of new farming techniques. T&V stands for the Training and Visit System of Agricultural Extension, and it is backed by the World Bank.

The World Bank supports it (or something close to it) in 12 out of 16 states. In many areas, around 80% of farmers benefit. The system was founded by Mr Daniel Benor, an Israeli farmer who had seen the desert of his own country bloom. For India's agricultural administrators and its farmers, his name is synonymous with T&V. In Orissa state, one of India's poorest, the director of agriculture, Mr Shir Naik, is forever raising his eyes to heaven and proclaiming "Mr Benor, he is my second god." In Maharashtra state, farmers name their local T&V workers Benor.

The management system is based on simplicity, rigid schedules and a clear definition of roles. It transforms old agricultural extension systems, which date from the colonial era.

Extension, in agriculture, means a system of taking new plant technology (high-yield seeds, improved fertilisers, etc) and new farming methods from the laboratory to the farmer. It is a management system capable of transforming the farming of a country when it is organised properly.

In the old days, extension systems were often ill-defined, rambling, organisational structures, with poor discipline and little supervision along the management chain. Often, local extension workers were too stretched. They were responsible for dealing out agricultural advice to farmers and also for offering other sorts of rural-development advice, from nutrition to women's workshops.

The main features of T&V are:

- Clearly defined hierarchy.
- Regular visits by T&V village extension workers (VEWs) to "contact farmers". The best of these are ordinary but intelligent farmers who can pass on knowledge to inquisitive and envious neighbours. The extension worker will visit a farm once every two weeks, always at the same time.
- Regular training sessions for the VEW every fortnight.
- Clear messages sent to VEWs at each of these training sessions. These tell farmers what they should currently be doing, given local conditions and the time of year.
- Strict supervision at every level of the management pyramid.
- Two-way flows of information. Farmers tell VEWs about their problems, which are fed back through the system, via the training sessions to the research laboratory. For example, Indian villagers complained last year that the new high-yield rice recommended by extension workers had stems too short for thatching roofs. So VEWs sent the complaints through the system, and the boffins responded by coming up with high-yielding, long-stemmed rice.

Like its founder, T&V is strictly practical in nature. At training sessions extension workers spend much time out in the field, getting their boots muddy and absorbing the messages of the week on the job. The benefits of this approach become clear when the VEW visits the farmer in the field. He knows more about farming than the farmer does. In the old days, he did not.

Farmers praise T&V. They talk of dramatic increases in yields, especially in the early years of the system. VEWs also feel that T&V helps them do a much better job. Under old systems they often operated with little training, and suffered from poor morale and low prestige.

The World Bank is happy enough with T&V in India. It is encouraging equivalent systems in other developing countries. But monitoring and measuring success rates is difficult. After all, good management is only part of better farming. New high-yield seed varieties are also important. Experience suggests that good marketing is essential, and that without it T&V, or any other extension system, has a near-impossible job. It is no good teaching farmers how to grow more of a staple crop when the government offers a below-cost price for it and also forbids farmers to sell to private traders. This often happens when a government is keen to keep down food prices for people in cities.

When the Indian government gave farmers an adequate price for the grain they grew, Indian farmers responded by growing lots of it. Growers of other crops are less content. Farmers in Orissa state complain that when advice from T&V helped them raise yields of groundnuts this year, ing them the old price of 110-120 rupees (about $10) for a 75 kilogram bag. Farmers fear they will get no more than the government price of 95 rupees. In consequence, they cannot pay back bank loans taken out to buy fertiliser, or get new credit to pay for next year's crops. In short, the T&V worker has to have the backing of good marketing systems, if his advice is to make economic sense.

India is also keen on subsidising fertiliser prices, something the World Bank frowns upon. In the near-term, the job of the T&V extension officer is made easier if he can recommend increased use of artificially cheap fertiliser. In the longer-term, farmers get hooked on subsidies. In Maharastra, for instance, local "Benors" are recommending that farmers use a newly-designed seed drill, which can be built by village carpenters. In some villages the carpenters are busy making them, but in others farmers say they will only invest in a seed drill if they are given a subsidy to do so. Never mind the price, so long as it is subsidised. Part of the T&V philosophy is that the system should be cheap and have a free-market bias. Subsidies undermine both aims.

In India, it is apparent that T&V has improved the lot of the farmer. He grows more food, and he makes more money. But what about the landless labourers he employs? The World Bank thinks that because T&V means higher yields, it means more demand for labour, and better pay. Snag: the benefits are not evenly distributed. In Orissa, women and children from the untouchable caste complain that they are paid five rupees a day, half the minimum wage. Local men fare better.

I like your yields, Mr Benor

SUITE

Their pay has gone up from five rupees to around 12 rupees for a day's work in the fields at harvest-time.

The increased well-being of farmers does not always flow through to more jobs and more money for their field hands. Inevitably, farmers use some of their higher profits to buy labour-saving machines. In Orissa a few weeks ago, landless labourers looked on anxiously as a farmer from their village demonstrated the new machine he was renting out to his neighbours. It was a small metal box painted blue, with a handle. When the handle was turned it could shell groundnuts ten times faster than local labourers.

Into Africa

T&V has been adopted in 40 developing countries. The World Bank wants the next thrust to be in Africa, where agriculture in many countries is in disarray, and memories of famine are fresh. Kenya, which has done better than most, is seen as the best place in Africa for T&V to make a start.

Earlier this year, Mr Benor went there to assess the early operation of the system. Indian farm advisers who travelled with him say that Kenyan farmers were so keen on T&V that Kenya should not take long to catch up with India. In India conservative village hierarchies and caste inhibitions were cultural barriers to the early spread of the system.

"Contact farmers" in Kenya are already crowing about their yield increases after taking advice on new seed, spacing, pruning and weeding. Their neighbours are impressed and next year many of them are likely to become T&V converts.

The spread of T&V is based on spectacular results in the field and on convincing farmers that they too can do what their neighbours have done, even if they are short of money. If a farmer cannot afford enough fertiliser to follow the T&V recommendations throughout his farm, the VEW will advise him to take a small patch, try the system there, and use any profits to spread the system more widely on his farm each year. In Kenya, many farmers are still at the small patch stage.

The potential for T&V in Kenya is enormous. Most farmers have small holdings in densely-populated areas. This means new technology and methods spread quickly. Extension workers can cover hundreds of farming families without exhausting travel schedules (although they moan about the lack of transport in hilly areas).

The World Bank also thinks Kenyan farming is well fitted to adopt T&V. There are, for example, no subsidies on fertilisers, and there are comparatively good purchasing and marketing systems for some crops, particularly tea.

But the World Bank and other donors to Kenya want the grain trade liberalised. The Cereals Marketing Board lacks cash. For much of this season, it has not had enough money to buy up maize from farmers. Most donors would like to see it become a buyer of last resort, and farmers given freedom to sell on the open market. The government has given ground in allowing farmers to sell their own maize within districts. But inter-district trade still has to be handled by the board. Change is resisted by government officials who benefit from a complicated licensing system, and who are afraid that free trade in grain in Kenya would soon be controlled by the Asian business community. This, they feel, would be politically ticklish.

If farmers are going to benefit fully from T&V in Kenya, the coffee marketing system also needs reforming. Farmers pass their coffee to co-operatives which own the roasters. The Kenyan Farmers Co-operative Union then takes the coffee, and passes it to the Coffee Board, which auctions it to licensed exporters. Payment is then passed back along the system, with everybody taking a slice, and the farmer receiving very little, very late. While marketing is so inefficient, the coffee farmer has little incentive to improve his methods. It is a pity. Kenya grows some of the world's best coffee.

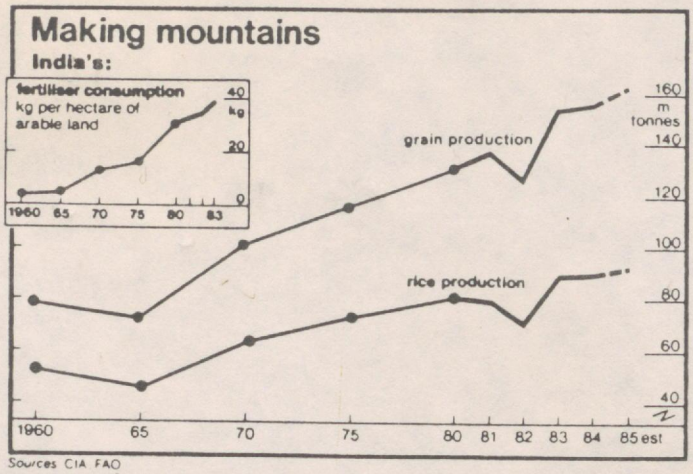
Agricultural credit is also in a mess. Farmers complain about the inefficiency of the state's Agricultural Finance Corporation. The World Bank is considering by-passing the AFC by lending to specific local banks which can in turn lend directly to farmers, rather than channelling funds into the top of the credit pyramid, and letting them filter down.

More backbone

Kenya has learnt from the experience of other developing countries that T&V is best seen as part of a rounded approach that (a) secures supplies of better seeds, fertilisers and other inputs, (b) improves pricing systems, and (c) provides credit more efficiently. Its success elsewhere in Africa will depend on the same factors.

Agricultural progress is central to Kenya's economic development. The 600 aid agencies in the country have left it with several large projects on its hands which it cannot afford to maintain. It is spending one-third of public money on education, and the population is growing at 4% a year, one of the highest rates in the world. Government officials are starting to recognise that agriculture needs more attention if it is to feed a growing population, to stem an exodus from the land into the cities and to create the wealth needed to sustain other development projects. Mr Benor believes that all this is do-able if Africa can manage a green revolution on India's model.

Mr Benor will be pleased if they stick exactly to his way of doing things. He is a mercurial figure, sometimes behaving like a cheeky schoolboy and at other times like an autocratic schoolmaster. But his enthusiasm is infectious, and governments that have had dealings with him usually praise him. This is an opportune moment for his no-nonsense approach to farming to take root in Africa. There is an emerging awareness there that sound and market-driven farming must be the basis of African economic development. Both the Ivory Coast and Burkina Faso have already invited Mr Benor to pay them a visit.



Sources CIA FAO

Can better farming feed the world?

For Mr Benor's supporters at the World Bank, increasing farm output is the order of the day. They see a more efficient farming system as the essential first step toward alleviating hunger in a third-world country. But some of their more radical colleagues have a different starting point. Earlier this year they wrote a report called "Poverty and Hunger", with the provocative opening sentence: "The world has ample food."

The report argues that countries that do not produce all the food they need should be able to import it. Hunger results when they are too poor to do so. *Ipso facto*, lack of purchasing power, not lack of food, is the problem.

In 1980, according to the report, about 730m people in developing countries (excluding China) did not have enough income to obtain enough energy from their diet to allow them an active working life. It reckons that about two-thirds of the undernourished live in south Asia and one-fifth in sub-Saharan Africa. About four-fifths of them live in countries with very low average incomes.

Mr Benor is not put on the defensive by this. He thinks it is always a good first step to increase the incomes of farmers by making them more efficient. This works well in Kenya and India, where small farmers abound and rural poverty is still a big problem. But some of his supporters concede that whether increasing farm efficiency is the best way to feed hungry people is more questionable in places, notably in Latin America, where rich farmers have large landholdings and the poor are increasingly concentrated in cities. Then, they agree with the authors of "Poverty and Hunger" that the nub of the problem is income distribution rather than agricultural technique.