
The book under review is a comparative study of agricultural development in the Indian (East) and Pakistani (West) Punjab. Although the growth of agricultural output and productivity in the two Punjabs was about the same between 1950 and 1965, it became significantly higher in East Punjab than West Punjab in the period that followed, with the result that the Indian Punjab enjoyed productivity levels in 1985 which were double those of the Pakistani Punjab. As the two Punjabs offer a sort of laboratory to gauge the agro-ecological conditions as well as the language and cultural traditions, any differences in their development experience must be explained by reference to the divergent economic policies towards agriculture followed there.

Sims thinks that development experiences of the two Punjabs can be attributed to a political dichotomy and the consequent role of the political leadership in the formulation of economic policies. In the case of Pakistan, the Muslim League lacked mass support in the rural areas. Its middle class forces and political institutions were weak, with a predominance of landed aristocracy and bureaucrats. As a consequence, there was hardly any zest for democratic rule. By contrast, the Congress Party, under the charismatic leadership of Nehru, enjoyed full support of the rural masses. At the national level, it was devoid of landed interests and created a new administrative class to run government affairs.

The strength of the political system was instrumental in India for the implementation of radical agrarian reforms from the beginning, i.e., the Fifties. The more powerful landlords in Pakistan held off land reforms until 1959, and even the more drastic land reforms of 1972 redistributed only 200 acres. As a result, Indian Punjab had much better land distribution than Pakistani Punjab. Being elected representatives, Indian leaders were committed to the provision of electricity, roads, and health services to the rural areas, but, in Pakistan, political instability threatened the very survival of the frequently changing leadership of the 1950s and government policies were mainly designed to serve the need of cities and industrial establishments. Although both countries depended on food aid until 1965, India, as a result of the U.S. embargo, decided to evolve a strategy of food self-sufficiency, which was facilitated by the provision of social infrastructure to the rural areas along with political legitimacy, technological capacity, physical resources, and a vast internal market. Pakistan’s leaders did not share such advantages, and did not try to extract greater resources from society. As a part of the food self-sufficiency strategy, the Indian leadership was quick to emphasize the need for research as well as material
incentives in agriculture. Both policies met with success as India had large reserves of trained research personnel and the farmers were responsive to price changes. On the other hand, a rapid growth of food grain production in Pakistan was limited by the severe deficiency of qualified research staff and the lack of price incentives. Policies in Pakistan continued to emphasize the production of export crops and low food prices for the urban consumers. Indian policy-makers were quick to assure a broad-based dissemination of almost all the new technologies with increasing supplies of credit and appropriate machines. In Pakistan, this was denied to all but the wealthiest commercial farmers. Agriculture in Indian Punjab is more labour-intensive and faces a lower constraint of labour shortages than that in Pakistani Punjab.

Further, the author states that the higher agricultural productivity of East Punjab as compared with that of West Punjab from 1965 onwards follows from time-series production data valued at Indian prices and the trends in wheat and rice yields. The analysis is further supplemented by primary data collected by a field survey carried out in the districts of Ludhiana and Amritsar in East Punjab and in the districts of Sialkot and Lahore in West Punjab. In each of the selected districts, two villages, one with a co-operative society and the other without it, formed the basis of an investigation of 120 farmers. The collection of primary data was considered essential for further elaboration of various factors responsible for the productivity differences between the two Punjabs.

Although official priorities during the Fifties were for canal water in Indian Punjab and for tubewells in Pakistan, this situation was reversed in the mid-Sixties. Private tubewells became a more important source of irrigation water in Indian Punjab but in Pakistan little effort was made to reduce the farmer’s dependence on public water supplies. The result of this contrasting policy was that East Punjab had 8 tubewells per 100 crop hectares against less than one in West Punjab during 1984-85. In the surveyed districts nearly 88 percent of Indian Punjab farmers were tubewell owners against the 29 percent in Pakistani Punjab. The widespread development of private tubewells in Indian Punjab was facilitated by public policies which established an elaborate system of roads, liberal credit for tubewell installations, subsidy on electricity, and fractional tubewell technology. The supplies of these facilities in West Punjab were erratic at best. Also, the continuing emphasis of West Punjab on public water supplies placed the farmer at the mercy of corrupt irrigation officers to a greater degree than in East Punjab. As far as the distribution of tubewells across farm size in concerned, there is a general absence of a bimodal pattern of tubewell development in both the Punjabs. Tubewell irrigation explained nearly 57 percent of the variance in yields between Amritsar and Lahore, and 29 percent of the variance between Ludhiana and Sialkot.

Tubewells also offer the advantage of recovering land from waterlogging and salinity. Nearly 2.7 million acres of each of the Punjabs are affected by water-
logging and salinity and between 14 to 17 percent of their crop-land suffers from saline soils. The higher density of tubewells in Indian Punjab is indicative of the fact that vertical drainage was practised more effectively there than in West Punjab. The inefficiency of management of public tubewells further undermined Pakistan's efforts to deal with water logging more effectively. Attempts at surface drainage in Pakistan have been futile at best. By comparison, East Punjab had an elaborate system of well-maintained surface drains. As a consequence of this negligence, field investigation shows that waterlogging was a far more serious problem in Lahore and Sialkot districts than in Amritsar and Ludhiana districts. Similarly, the problem of salinity remains quite serious in West Punjab. Most farmers in the survey area were unaware of the use of gypsum as an effective measure of getting rid of salinity. Although large deposits of gypsum rock are available in Pakistan, the government provided neither a price incentive nor ran a campaign for popularizing the use of gypsum. The emphasis of extension staff and a 50–75 percent subsidy on gypsum has resulted in the widespread use of the powdered rock in East Punjab.

A wide gap in the levels of fertilizer use and nutrient balance in the two Punjabs is one of the major reasons for the higher productivity in Indian Punjab. Despite low prices of fertilizers relative to wheat prices, fertilizer application rates in West Punjab were lower than those in East Punjab. Although fertilizer application varied directly with farm size in Indian Punjab, no relationship was visible in West Punjab. Higher labour costs, uncertain irrigation supplies, poor roads and bottlenecks in fertilizer distribution are some of the causes of low fertilizer use in West Punjab. Availability of credit and problems therein were an added factor. By contrast, East Punjab channelled institutional credit through rural co-operatives run by farmers themselves and it faced fewer administrative, managerial and disbursement problems.

There appear to be no visible differences in the performance of the extension staff in the two Punjabs. But Indian Punjab farmers were better placed in terms of knowledge and importance of scientific wheat cultivation. The author concludes the book by discussing the impact of farm lobbies on agricultural policies.

The book by Holly Sims is laudable for its multi-disciplinary approach. It is correctly argued that the higher productivity of East Punjab as compared to West Punjab emanated from the well-established facilities in social infrastructure, higher irrigation intensity of private tubewells, a greater use of fertilizers and insecticides, and a more stable price policy for agriculture in India than in Pakistan. Holly Sims also demonstrates empirically for West Punjab that farm size was inversely related to fertilizer use and that small farmers had as much access to tubewell water as the large ones.

In spite of these merits, the book has drawbacks. There can be no justification for the assumption that the two Punjabs offered laboratory-like conditions. The
book lacks objective analysis and its conclusions are based on the biases of the author. One outcome of this bias is the overstatement of productivity differences in the two Punjabs along with an overstatement of the contributions of the included and an understatement of the excluded variables. Being contentious, these deficiencies of the book are taken up in the following paragraphs.

The assumption that the two Punjabs offer laboratory-like conditions cannot be upheld. Those familiar with the region would agree that the two Punjabs are significantly different from each other in natural endowments. Although the same proportion of area of the two Punjabs benefits from irrigation, West Punjab is far more arid than East Punjab. In a normal year, rainfall barely exceeds 40 inches in West Punjab and the range of annual precipitation in its major areas falls well below 8 inches. In Indian Punjab, the average annual precipitation ranges from 16 inches to 130 inches. Most of the Barani area in East Punjab lies in the heaviest rainfall region, but in West Punjab a significant part of the Barani area falls in the lowest rainfall zone. The proximity to high mountains, and the higher elevation of East Punjab than the West, ensures a prolonged and colder winter season, which is more conducive for maximising wheat growth. Being canal-irrigated for more than 60 years, West Punjab inherited waterlogging and salinity from the pre-independence period whereas in East Punjab the problem did not exist. Most of the Indian Punjab has fresh underground water reservoirs but the underground water in West Punjab is largely unfit for irrigation. The deep slope and topography of almost all of East Punjab provides adequate natural drainage. However, the flat plateau of West Punjab, has to be provided with artificial drainage. These differences in natural factor endowment have widespread implications for greater dependence on public irrigation sources, fewer private tubewells per unit area, greater need for artificial drainage, and low productivity of agriculture in West Punjab as compared with East Punjab.

The differences in natural factor endowment clearly tip the balance in favour of East Punjab as far as the potential productivity growth is concerned. As stated by the author, it is incorrect to conclude that West Punjab had a higher potential for growth of agricultural productivity at the time of independence. Given the endowment of natural factors, it was quite natural to reap higher productivity in East than West Punjab. The smallness of Indian Punjab farms and the availability of family labour only accentuated these differences. However, the productivity differences reported in the book seem to be considerably overstated for a number of reasons. It is not clear from the book as to which of the 11 major crops were used in the calculation of the gross value of agricultural production of the two Punjabs. Use of Indian prices in this calculation would underestimate the value of output for West Punjab for it grows superior varieties of rice and cotton. Intertemporal comparison of gross value per acre and that of rice yields are likely to move overtly in favour of East Punjab as it shifted increasingly to the growing of the inferior of the two varieties.
of crops with the passage of time in contrast to a reverse trend in West Punjab. Underestimation of productivity of West Punjab is also obvious from the selection of Districts. Ludhiana and Amritsar are among the leading districts of East Punjab. By contrast, Lahore and Sialkot represent below-average districts of West Punjab. The same applies to the villages selected. While the district data for East Punjab are not available, the reported wheat yields of the villages selected fall short of the respective average yields of the irrigated Lahore and Sialkot districts.

Undue credit given to the role of political institutions, administrative establishment, extension, research, and private organizations in raising agricultural productivity in East Punjab is, at best, untenable. It is wrong to state that the Muslim League did not enjoy mass support in the rural areas. In predominantly rural India, Pakistan's appearance on the world map, despite strong opposition from the Indian National Congress, is a testimony of the active rural support given to the Muslim League. There was nothing charismatic about Nehru's leadership as far as economic progress of the two Punjabs is concerned. The fact that the growth rate and productivity of the two Punjabs were identically the same until the mid-Sixties should indicate that the results of Nehru's policies were not better than those achieved by the policies formulated by the Pakistani leadership. It is debatable if the Indian political leadership was more responsive to rural problems than Pakistan's leadership. It is clear from the book that land reforms met the same fate in the two Punjabs. If the agricultural land was better distributed in East Punjab than in West Punjab, it was not, as the author would hold, due to more effective land reforms. Instead, it was the result of higher productivity ratings of East Punjab lands than those in West Punjab. At par with these ratings, refugees from East Punjab were entitled to land allotments in West Punjab which were many times the land left behind. By contrast, the refugees from the West received in East Punjab only a fraction of the land left behind.

Contrary to the author's statement, Pakistan has been in active pursuit of comprehensive programmes of land consolidation and food self-sufficiency since the 1950s. As part of the self-sufficiency programme, Pakistan was ahead of India in the adoption of High-yielding Varieties (HYVs) of wheat and rice and attained self-sufficiency in food since 1969-70, in the sense that its export proceeds from rice exceeded the amounts spent on wheat imports. By contrast, India had to wait until the 1980s to achieve self-sufficiency in food. It may not be without interest to note that this has happened in Pakistan amidst rapid growth of food consumption. But, in India, food intake remains at the bare minimum subsistence level. There is also little point in criticizing Pakistan's export promotion policy. Export of men and materials is always a good policy for raising the incomes of the masses. It is basically this policy that has enabled the wage earners to earn a respectable living. In India, on the other hand, wage earners, because of low wages and high food prices, find it
hard to make both ends meet.

Neither the Indian administration nor the government bureaucracy in Pakistan has made sincere efforts to develop the rural areas. Both were equally guided by their vested interests. Given the higher salary structure and fringe benefits in Pakistan, it is hard to accept the author's view that work conditions were more deplorable in the Pakistani Punjab than in the Indian Punjab. Although the book includes two chapters on the contributions of extension and private organizations, I do not see any legitimacy for their inclusion in the book. Despite all her efforts, the author fails to show any visible differences in the contribution of the two factors in the two Punjabs. While she shows that the Indian Punjab has a higher research capability than West Punjab in terms of the availability of qualified research staff, she fails to recognize that West Punjab researchers enjoyed an enviable position over their counterparts in East Punjab. In addition to the successful adaptive research on HYVs of wheat and coarse rice common to both Punjabs, West Punjab researchers have also been successful in the evolution of HYVs of Basmati rice and American cotton. Apart from qualitative improvements, the new varieties of Basmati rice and American cotton have, at least, doubled the yield potential compared to the old varieties.

It follows from the above that the book fails to provide a fair assessment of the developments in the two Punjabs. Because of the exclusion of certain relevant variables, it is natural that the contributions of the included variables to productivity will be overestimated and those of the excluded variables will be underestimated. Apart from these unconscious biases, the book cannot be divorced from the deliberate biases of an unknown magnitude. While such biases seem to be the direct result of scolding Pakistan and its policies to please the Indian publishers and readers, the course taken by the author is highly unprofessional. She is sympathetic to the problems in the Indian Punjab but would cite every small problem of West Punjab with considerable exaggeration even at the cost of contradictions and distortions of available data. Although her survey data clearly negate the existence of a bimodal pattern of agricultural development in West Punjab, she continues to maintain that the wealthiest commercial farmers were the major beneficiaries of the fruits of economic development. Among the many distortions, some of the important ones could be listed as follows. For example, to score the point that rural electrification in West Punjab was well below the Indian average, she states that only 38 percent of the West Punjab villages were electrified in 1984-85. Checked from the cited source, the figure exceeds 46 percent, which is above the Indian average. Similarly, West Punjab's rural literacy rate was 20 percent as against the 17 percent reported in the book. It is ridiculous to believe that only 200 acres were redistributed under the 1972 land reforms in the face of the available figures of redistributed area of nearly 875 thousand acres. As pointed out, orchards were not exempted from
ceilings under the 1972 land reforms. It is erroneous to report that only 6 percent of the Pakistani Punjab farmers used hired labour. The 1980 Census data would show that 54 percent of West Punjab farmers used hired labour against the 52 percent of the East Punjab average. Adding up Rs 30,000 and Rs 12,000 makes only Rs 42,000; but the author would come up with a figure of 60,000 as the tube-well installation cost in West Punjab.

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