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BOOK REVIEWS

Mahmood Hasan Khan, Underdevelopment and agrarian structure in Pakistan (Westview Press, Boulder, Colorado, 1981) pp.xvii+308,US$28.00

The relationship of agrarian structure to agricultural development in developing countries is a controversial issue. The polar positions in this controversy can be summarized by the following descriptions of the "technocratic" and "structuralist" schools of thought. According to the former, the major obstacle to agricultural development is not existing agrarian structure but existing agricultural technology. Proponents argue that the marginal return to traditional inputs is too low to generate growth-inducing investment and that developing country farmers are "poor but efficient" so that a reallocation of existing resources (i.e. structural change) is unlikely to promote agricultural development. It follows that government policy should be directed primarily at the provision of more productive and profitable inputs such as high yielding seeds, fertilizers and irrigation [see, for example, Schultz (1964)]. The contending structuralist position focuses on such features as tenancy, land concentration, and debt-peonage – collectively denoted by the term "semi-feudalism" – in attempting to explain agricultural backwardness. Proponents argue that such semi-feudal features inhibit and distort agricultural development and perpetuate the power of landlords on the the one hand and the poverty of a vast mass of peasants on the other [see, for example, Griffin (1979)].

Khan's book appears to be in the second tradition. I say "appears" because Khan does not commit himself explicitly to the structuralist position. He contends that "agrarian structures affect agricultural development in many and significant ways" which is precisely what the evidence in the book suggests. Some of these "ways", however, are contrary to the expectations of the structuralist position as I shall demonstrate below. Khan does, however, imply an affinity with this position. There are many references to landlordism, exploitation, oppression of tenants, monopoly control and so on. His major policy conclusions are also in the spirit of this tradition. He argues that a further land reform should be conducted in order to enhance both efficiency and equity in the agricultural sector, and presents proposals for a reform of the land tax system designed to achieve the same goals.

Khan develops his arguments in the following fashion. First he analyses recent (1971-76) trends in agricultural growth in various regions of the Punjab and Sind. Next, he presents evidence on changes in agrarian structure in these regions over the same period. This enables him to comment on the relationship between agricultural development and agrarian structure. This inter-temporal or dynamic picture is then supplemented by a static cross-sectional analysis of the relationship between productivity, incomes, farm size and tenurial arrangements. On the basis of such analyses he recommends a change towards small, owner-operated holdings. This review concentrates on the issues raised in the dynamic and static analyses mentioned above. Khan also devotes many pages to discussions of land reform experience and politics, and the land tax system. These discussions, while stimulating and insightful, are not dealt with explicitly here. Instead, attention is focused on the analytical and empirical core of the book.

Evidence of the effects of agrarian structure on agricultural performance is examined at both the provincial level and regional level within provinces. The inter-provincial comparison suggests that Sind's relatively "bad" agrarian structure i.e. a higher degree of land concentration and higher proportion of tenants, is associated with relatively "good" agricultural performance, i.e. higher rates of adoption of new seeds and higher rates of growth of output. Punjab, with a better agrarian structure, has fared worse in agricultural performance over the seventies. The regional comparison (19 districts) suggests a similar picture. Khan regresses the average annual rate of growth of major crops (over 1972-77) against the ratio of cultivated area owned by large farmers (i.e. those owning more than 150 hectares) to total cultivated area and reports a positive and significant relationship (p.59).

What should we make of this evidence? To begin with it is worth pointing out that it contradicts the notion that "good" agrarian structure is a precondition for "good" agricultural performance. The extreme structuralist positon is not supported by Khan's evidence. It also runs contrary to the findings of a recent study along these lines by Ghose where the Indian provinces of Bengal and Punjab are compared and the comparatively better structural features of Punjab's agriculture are argued to lie behind its "good" performance over the sixties [Ghose (1979)]. Similarly, it does not fit with the spirit of another study in which it is concluded that the better agrarian structure of East Punjab lies behind its superior performance when compared to West Punjab [Sen and Amjad (1977)].

Identifying "good" agricultural performance solely with high rates of output growth and innovation may not be fair to the structuralists. They usually contend that changes in the distribution of income are also welfare-relevant features and agricultural development must be judged on this basis also. Khan's assessment of the effects of agrarian structure seems to rest specifically on the income distribution aspects of Pakistan's agricultural development. He claims that rural income distribution must have worsened because the areas with higher land concentration also show faster growth. Recognising the hazard of basing such an assertion on what is likely to have happened, he attempts to bolster his speculation by examining what has actually happened as far as changes in land concentration over 1971-76 for different regions are concerned.

This examination reveals four noteworthy findings:

(a) The province-level Gini index of land concentration improved marginally for both Punjab and Sind between 1971-76.
(b) District-level Ginis show wide variation; some districts show sharp improvements and others sharp deterioration.
(c) The number of marginal owners (those owning less than five hectares) and the area farmed by them appears to have increased, while the shares of most other groups appear to have decreased.
(d) The incidence of tenancy appears to have declined in most districts (over 1960-72); however, there appears to be little change in this in Sind over 1971-76.

It is difficult to see how these findings could support the contention that rural income distribution must have worsened. In the first place, finding (a) indicates that agricultural growth has not led to an exacerbation of income inequality at the provincial level. Disaggregation leads to a similar conclusion. There appears to be no systematic relationship between the percentage change in Gini coefficients or the percentage change in the incidence of tenancy and the percentage change in agricultural output growth when all variables are calculated at the district level. Khan is silent on this interpretation of his evidence even though it can be verified by a simple correlation exercise. What he chooses to emphasise are findings (c) and (d). Even these findings, however, do not necessarily support the argument of increased inequality.

As Khan himself points out, the increase in the number of marginal farmers is probably a consequence of the transfer of state lands (previously unrecorded) to such farmers and perhaps also of subdivision under increased population pressure. If the first explanation is correct, and Khan appears to lean towards it, one cannot interpret this finding as showing a deterioration in welfare. If population pressure is primarily responsible one could argue that the position of the poorest class of farmers has worsened. However, Khan also reports that the average area per marginal owner increased in Sind and remained unchanged in Punjab over the seventies (Table 3.7). It is difficult to reconcile the possibility of increased subdivision of holdings with the fact of increased or constant acreage per marginal owner.

Can the decline in tenancy (over 1960-72) be interpreted as welfare-reducing? This depends partly on the causes of this phenomenon. Casual empiricism has it that the spectre of land reforms over these years has prompted pre-emptive tenant evictions. It is also generally agreed that the increased profitability of farming over this period has led many absentee farmers to re-assess the costs of absenteeism and to become owner-cultivators. Land values shot up spectacularly over the sixties and seventies and there is much evidence of renting in of land by medium scale farmers. It is also possible that some tenants may have voluntarily left their landlords and taken up owner-cultivation because of changes in farming profits. Tenancy may have become a bad bargain for tenants as well as landlords. Further we do not know what such people have done after leaving or being evicted. They may have started marginal farms and earned more or less than before. They may have become wage labourers and earned more or less than before. It is not even clear, since many tenants operate fairly large holdings, whether a deterioration in their position improves or worsens the overall rural income distribution. This multiplicity of considerations renders difficult a judgment as to the eventual welfare effect of declining tenancy. It might also be pointed out here that Ghose regards the sharp decline in tenancy over 1900-1960 to have been a major cause of East Punjab's remarkable agricultural performance over the sixties [Ghose (1979)].

Most arguments for land reform are based on the contention that small farmers produce more per acre and use more labour (the abundant resource) and less capital (the scarce resource) per acre than large farmers. This contention is supported by several studies [see Berry & Cline (1979)]. While the source of the small farmer's greater productivity remains an unresolved issue the fact that there is a yield gap (at least upto 1970) is beyond dispute. Khan has contributed to this barrage of studies earlier [Khan (1975)]. In addition to this efficiency argument, proponents of land reform argue that rural employment, marketed surplus and savings are also apt to rise with a redistribution of land. All these issues are part of Khan's case and are discussed sequentially below.

The inter-temporal evidence discussed earlier fails to establish a clear relationship between initial agrarian structure and subsequent agricultural growth or land distribution. Khan now attempts to discern such a relationship from a cross-section analysis of 732 farms of various sizes and tenure. He finds that productivity and labour intensity are negatively related to farm size. He also finds that the marginal returns to non-land inputs tend to be higher on owner farms. Putting these findings together with information on relative output growth rates in different regions, Khan argues that growth in some regions "must have been" efficient and equitable and, in others, inefficient and inequitable (p. 206). More specifically, he argues that growth in the Eastern Region of the Punjab must have been of the former kind because concentration of land ownership and tenancy is lower there while that in the Western Region must have been of the latter kind because of a relatively worse agrarian structure. For Sind he argues that "with little change in the concentration of land ownership, the distribution of new income must have increased the economic power of landlords even more".

Several qualifying objections come to mind when one comes across these assertions. To begin with the intertemporal evidence discussed earlier does not support the argument that changes in land distribution are related to changes in growth rates. Furthermore, agricultural growth in the Western Region of the Punjab was apparently achieved largely because of a net expansion in area. Such growth does not rob poor farmers of their livelihood. If anything, it increases the net demand for labour. In this case even if the growth leads to increased income disparities should one be excessively concerned? This case illuminates a serious theoretical weakness of inequality measures, i.e. these measures may suggest deterioration in cases where, by other reasonable criteria, welfare has improved.

Finally, it should be noted that whereas the cross-sectional analysis does suggest that a yield gap exists between small and large farmers, the intertemporal analysis suggests that this gap has been decreasing in the seventies. Larger farmers have tended to increase yields faster than smaller farmers. This finding is supported by a number of other studies, a relevant recent one being Roy's examination of yield gaps in three technologically different regions of East Punjab. He finds no gap at all in the region which is characterized by Green Revoultion technology [Roy (1981)]. Apparently larger farmers have whittled down the yield gap by increasing their output and their use of non-labour inputs at a faster rate than smaller farmers. This may have been due to economies of scale and privileged access to such profitable (and subsidized) inputs as fertilizer and government credit. Khan's cross-sectional evidence suggests that constant returns to scale obtain in Pakistan's agriculture – even in the presence of Green Revolution technology. There is other evidence, however, which indicates that larger farmers have a scale advantage particularly in the case of tractors and other heavy agricultural machinery. It is probably wise to reserve judgment on this matter for the present.

It seems to me that inequality of access is perhaps the more important determinant of differential performance. While convincing evidence on the nature and dimensions of privileged access to critical inputs is lacking casual empricism and much sociological documentation indicates that access is unlikely to be anything but unequal. Given that access and power are positive functions of wealth, land redistribution would strike at the very root of the access problem. With the same ease of access it is quite possible that small farmers would perform just as well as large farmers. Research on the connection between farm size and access to inputs and subsidies is likely to be quite useful. There has been some movement in this direction. A recent study [Guttman (1980)] shows that village characteristics that are likely to increase the political power of large landowners, are positively associated with the demand for agricultural extension agencies in India; such agencies provide a crucial input, information, at the governments' expense.

The employment effects of land reform are typically assumed to be positive even though the theoretical possibility exists that wage employment might actually decline. This possiblity depends on the level of surplus family labour on small farms, labour that for one reason or another cannot be hired out. While this is a significant possibility in areas where cultural factors influence female and child labour force participation (as in South Asia) the one relevant empirical study that I have come across suggests that land reform should raise employment in agriculture [Rosenzweig (1979)]. This study pertains to pre-Green Revolution India. It is probably safe to expect a similar effect in Pakistan. However, given that Pakistan seems to be passing out of the rural surplus labour phase (there is evidence showing an increase in the real wages of agricultural workers since independence), it is unlikely that this effect will be very large.

Khan argues that, contrary to general expectation, marketed surplus is higher on small owner farms than on tenant farms in Pakistan and land reform is likely to increase the overall surplus. He also argues that agricultural savings are likely to rise once access to investment opportunities is granted to small farmers. Both of these are empirical questions that remain to be settled. In the case of savings, however, a comprehensive and rigorous recent study [Bhalla (1980)] suggests that the savings rate is higher for larger, richer farmers in India. This supercedes the less firmly based evidence cited by Khan. While the general equilibrium savings effect may yet be shown to be positive by future research the presently available evidence does not warrant the optimism displayed in the book.

Where do we arrive then in the matter of land reform? My assessment is that arguments for land reform in the post-Green Revolution period should be based primarily on empirically demonstrated relationships between land ownership and access to inputs and government subsidies. The efficiency argument is rapidly weakening and the "technocratic" school has a strong case here. The "technocratic" solution of providing new inputs has generated sizable increases in agricultural output and is also capable generating some arguably desirable changes in agrarian structure, e.g. declining tenancy.

Khan has performed a very useful service in organising existing and new data relating to Pakistan's agriculture. In particular, the new data on land ownership that he has culled painstakingly from revenue records is likely to be of much help to other researchers. The lack of such data has been an impediment to research in the past. Khan's work is also notable for his construction and use of disaggregated statistics. All too often sweeping generalizations are made on the basis of crude, aggregate data when the true underlying picture could be rather different. A good example of the possibly misleading effect of aggregate information is provided by the evidence on charges in the Gini index of land concentration – when measured at the provincial level this index shows a barely discernible change; when measured at the district level, however, a considerably more complex and fluid situation is revealed in which some districts show marked improvement and others an equally notable deterioration.

It is to the credit of the author that he makes an initial attempt to delve beneath the surface to the underlying structural aspects of Pakistan's agriculture. The complexity of the underlying situation makes it difficult, however, to draw firm conclusions. Khan's book acquaints the reader with a wealth of detail and a number of provocative hypotheses but it does not establish broad generalizations of the sort favoured by those who like to reduce complex issues to simple propositions. To conclude then we have been shown lots of trees but get only a vague impression of the forest is merely to recognise that some forests are indeed murky.

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Ragaei El Mallakh, The economic development of the United Arab Emirates (Croom Helm Ltd., 2-10 St. John's Road, London SW11, 1980) pp.xx+215, £13.95

The book is a useful addition to the country study series. The mass of information, contained therein, provides detailed accounts of the various aspects of the UAE economy, particularly the role of oil, foreign trade and finance sectors and the state of social and economic infrastructure and should prove to be valuable to a student of the Middle East economy. It is, however, essentially a narrative lacking in analytical content. A wealth of information is provided but there is little in terms of statistical data.

The book begins with a profile of the Emirates with a brief political history of the creation of the federation. Formed in 1972, the United Arab Emirates comprises the Shiekdoms of Abu Dhabi, Dubai, Sharjah, Ajman, Ras Al-Khaimah and Umm Al-Quwain and together covers an area of 30,000 square miles with a combined population of about 1.1 million persons. Abu Dhabi and Dubai are the two most important constituents with Abu Dhabi comprising 85% of the total area and producing over 78% of oil and Dubai accounting for 32% of total population and 20% oil output. Historically, Dubai was also an important port for pearl and gold trade.

Economic cooperation between the shiekdoms dates back to the early 1950's with the establishment of the Trucial States Councils and its offshoot, the Trucial States Council Development Fund. The process of economic integration was accelerated with the political unification of the States.

The UAE is basically a single commodity oil based export economy with foreign trade accounting for the bulk of the GNP and oil accounting for 95% of total exports. The UAE is a capital surplus and, at the same time, an under-developed country; the principal bottleneck to development being the absorptive capacity of the economy. The abundance of capital is highlighted as a guarantee of long term economic promise, largely ignoring the fact that oil is a depleting resource with an uncertain future demand.

The author devotes succeeding chapters to the discussion of the development with specific reference to agriculture, fishing, industry and social and economic infrastructure like education, health, housing, airports, ports, telecommunications, etc. The basic aim is stated to be the development of infrastructure and diversification of the economy. The development strategy appears to be based upon the report of a US-based firm of consultants which perhaps shows the expatriate nature of the economic leadership of the Emirates.

Considerable space is devoted to development in Abu Dhabi which is not only the largest and the richest of the shiekdoms but, having pioneered the first $612.13 5-Year Development Plan in the region in 1968, has the largest development effort underway. In the industrial sector alone, twelve out of twenty-two industrial development projects are located in Abu Dhadi

The potential for agricultural development is limited with most of the country being arid wastes. Ras Al-Khaimah, with 90 square miles of cultivated land, greater rainfall and sufficient underground fresh water deposits, however, has better prospects particularly in view of the technology-intensive farming practices being introduced in the agriculture sector.

Industry in the UAE is estimated to contribute only 4 per cent to the GNP. A multi-billion-dollar industrialization effort is, however, currently underway with the bulk of the investments being concentrated in petroleum-based and construction materials-related industries. Herewith, the reader is forced to note the lack of consistency with the declared long term aim to render the economy less oil-dependent.

One of the major bottlenecks to development is recognized as the chronic shortage of manpower, both skilled and unskilled. The development of highly capital intensive industries is seen as a possible long term solution to the problem of the scarcity of unskilled labor. Such a policy will, however, exacerbate the scarcity of skilled labor in the short run. As such, no alternative is seen to the use of expatriate labor at various skill levels. The low population base also limits the size of the market thereby constraining th development of large scale industry due to the inability to fully exploit the economies of scale.

A chapter each is also devoted to the oil, foreign trade and finance sectors, underlining their crucial importance to the economy. The strategic role of oil does not need any elaboration. First discovered in 1958 at a depth of only 5,500 feet, production has increased from 6 million barrels in 1962 to 636 million barrels in 1980. Oil exports and imports of consumer and capital goods comprises the principal components of gross national product. Total imports in 1979 were valued at more than 7 billion dollars with about 72% originating from US, Western Europe and Japan. Pakistan's share was only 1.1%. The exorbitant rise in oil revenues and the concomitant increase in the volume of foreign trade has inevitably led to a massive increase in financial transactions as testified by the phenomenal growth of the banking sector. The author also discusses, in passing, the feasiblity of developing the UAE as an international financial centre.

Thanks to the discovery of oil, the UAE has registered tremendous gains. From a subsistence level economy upto the 1940's, it now boasts of an annual per capita income of about US$15,000 as compared to $11,000 for West Germany, $10,000 for the United States and $9,000 for Japan. Development in the social sectors has been the most impressive with educational institutions multiplying from one in 1953 to 370 in 1980, including a full fledged university at Al-Ain and with total enrollment exceeding 96,000. Technical education has, however, not fared as well with enrollment falling from 258 in 1972 to 170 in 1977. No explanations or reasons for the causes or implications of the decline are forwarded.

Details of progress in health, housing, public utilities, roads, airports, ports and telecommunications are similarly spelt out in equally laudable terms. The author's yardstick for the measurement of progress is generally the millions of dollars spent on the various sectors of the economy. No effort is made to evaluate the impact of such projects, either individually or collectively. The approach is also somewhat biased and lacking in objectivity. The billions of dollars spent on constructing port and airport facilities within a few miles of each other and a sophisticated telephone system whereby a person 100 Km in the desert can call directly to the United States are extolled as indicators of advancement rather than a colossal waste of resources. Likewise, no mention is made of the state of interpersonal income distribution within the Emirates.

The book would have been more useful to a researcher in the area of development economics or of the economy of the Middle East if the stress had been less on detailing the specific projects at the firm level and more on the macro aspects of the pattern and trend of development activities. To the credit of the author, it must, however, be said that perhaps the book is aimed not at the acadamic but at the potential investor in the UAE. And in conclusion one cannot help but compliment the sheer effort in collecting and compiling the mass of detalis on the various developmental operations in the key sectors of the UAE economy.

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