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SOME ASPECTS OF ASSET STRUCTURE IN RURAL KARNATAKA, 1971-82

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The purpose of this paper is to analyse the changes in the distribution of assets among rural households in Karnataka with special reference to cultivator households over the period 1971 to 1982.

Data on distribution of assets in rural Karnataka are taken from the All India Debt and Investment Survey (AIDIS), 1971-72, Reserve Bank of India and NSS 37th Round, January-December 1982 respectively. These are supplemented with data on land holdings from the Agricultural Census for the years 1970-71 and 1980-81. Besides relevant data on various aspects of rural asset distribution available from NSS Reports are also made use of. An inter-temporal comparison of data on assets including land available from these various sources is indeed beset with many limitations and difficulties.¹ But we are hopeful these data enable us at least to capture the directional changes, if not the magnitude in the asset structure, over the reference period, 1971 to 1982.

Asset Distribution in Rural Karnataka

The trend in inequality in the asset distribution among rural households in Karnataka, as measured by the Gini coefficient, decreased from 0.6232 in 1971-72 to 0.4726 in 1982, suggesting an improvement in the asset distribution over the reference period. This was rendered possible largely due to the corresponding reduction in inequality in the assets of cultivator households (Gini coefficient reduced from 0.5284 to 0.3655) while the inequality in the assets of non-cultivator households reduced marginally (Gini coefficient reduced from 0.6567 to 0.6366).

The overall improvement in the asset distribution among rural households over the period 1971-72 to 1982 can hardly make us complacent, as it conceals the highly inequitable and skewed asset distribution between cultivators and non-cultivators. The disadvantaged position in which the non-cultivators are placed economically as against the cultivators is reflected in the fact that in 1971-72, the average value of assets held by the cultivator households was seven times higher than that of the non-cultivator households. Although the margin of difference in the average value of assets held by the cultivator household and non-cultivator household got somewhat narrowed

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1. See "A Pattern of Assets of Rural Households, 1961-71", *Reserve Bank Staff Occasional Papers*, Vol. 2, No. 1, June 1977. L. S. Venkataramanan, M. Prahladachar and R. S. Deshpande: *Dynamics of Rural Transformation in Karnataka, 1956-76*, Institute for Social and Economic Change, Bangalore, 1985, Chapter II (mimeo.).

down by 1982, the difference was still five times more in favour of the cultivator household.

The disturbing fact that non-cultivators in comparison to cultivators are placed in an economically disadvantaged position gets corroborative evidence from a recent study.² According to this study, in 1983 in Karnataka (as in other States), cultivators had the highest per capita expenditure (Rs. 294.74) and the agricultural labourers the lowest per capita expenditure (Rs. 220.69) while the per capita expenditure of non-agricultural workers was in between the per capita expenditure of cultivators and agricultural labourers (Rs. 257.86). Further, this study found that the inequalities in consumption among rural households arose largely because of inequality in land owned/operated by them. It is clear therefore that the levels of per capita consumption which serve as a proxy for the levels of income of rural households are significantly determined by the levels of their owning/operating land.

There is evidence already from the AIDIS survey, 1971-72 that land owned/operated emerged as a crucial factor in exerting its influence over commanding non-land assets by the rural households. The share of rural households in each asset type, by and large, progressively increased with the size of land owned/operated. To put it differently, it is evident from the above survey that the distribution of land and other assets was characterised by inequality with households in higher size-groups of the land ladder owning the major share in each asset type.³ The corresponding details of asset distribution among rural households according to the area of land owned/operated for the year 1982 are not yet available; but it may not be unrealistic to suggest that the relative picture would be very much interlinked with the changes in the land distribution in the intervening period. Therefore, examining the changes in the structure of land asset over the reference period would be quite instructive in this regard. The relevant details of land distribution pattern in 1970-71 and 1980-81 are furnished in Table I.

Land Distribution in Karnataka

The land holding distribution (operated area) changed in favour of marginal and small holdings; their relative share both in number and area has registered an improvement. Semi-medium and medium farmers' relative share in number has reduced, but their share in area has improved, whereas the large farms lost in their relative share both in number and area. But the changes recorded by the medium and large farms only were statistically significant (Table I). Although it is difficult to sort out how far the changes in land distribution across size classes were (i) due to land reform measures set in motion by government policy and/or (ii) due to sub-division of land among family members either due to inheritance or due to circumventing of

2. L. S. Venkataramanan and V. S. Satyapriya; Rural Inequality and Poverty in India: A Survey of Selected Contributions, Institute for Social and Economic Change, Bangalore, January 1987 (mimeo.).

3. For details, see Venkataramanan *et al.*: *op. cit.*, Chapter II.

TABLE I. DISTRIBUTION OF OPERATED AREA IN KARNATAKA, 1970-71 AND 1980-81

Size class of operational holdings (ha.)	Per cent of holdings		Per cent of area operated		Inter-class concentration ratio		Chi-square
	1970-71	1980-81	1970-71	1980-81	1970-71	1980-81	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Marginal (less than 1 ..	30.45	34.55	4.83	6.24	15.86	18.06	0.30
Small (1—2) ..	23.64	24.53	10.74	13.13	45.43	53.53	1.44
Semi-medium (2—4) ..	22.20	21.30	19.40	21.90	87.39	102.82	2.72
Medium (4—10) ..	17.54	15.36	33.36	34.21	190.19	222.72	5.56*
Large (10 ha. and above) ..	6.17	4.26	31.67	24.52	513.29	575.59	7.56*
All classes ..	100.00	100.00	100.00	100.00			

Notes:—(1) * Significant at 5 per cent level.

(2) For Methodology in computing inter-class concentration ratio with a view to understanding which of the size-groups specifically contributed to the overall change in the inequality between two points of time, see C. T. Kurien: *Dynamics of Rural Transformation: A Study of Tamil Nadu, 1950-1975*, Orient Longman, Delhi, 1981.

(3) Cols. (2) to (5): Government of Karnataka; Census of Agricultural Holdings in Karnataka, 1970-71, Agricultural Census Commissioner, Bangalore, 1974 and Census of Agricultural Holdings in Karnataka, 1980-81, State Agricultural Census Commissioner, Bangalore, 1985; cols. (6) to (8): computed based on data in cols. (2) to (5).

land ceiling laws, the fact of the matter is that the relative importance of large farms in the rural economy of Karnataka has declined leaving a substantial portion of land in the hands of small and medium holdings.⁴

The inequality in land holding distribution in the State, as measured by the Gini coefficient, declined marginally from 0.5398 in 1970-71 to 0.5324 in 1980-81. Among the 19 individual districts, the inequality in land holding distribution has reduced marginally in seven districts and increased marginally in 12 districts. Large farmers losing their share in favour of the other land classes between 1971 and 1981 held good in respect of all the 19 districts, but the loss in their share was statistically significant in respect of 12 districts only. Moreover, the area lost by the large farms was diffused over different land holding classes and in the majority of the cases the gain was not statistically significant.⁵

The fact that the land distribution pattern in the State as well as in individual districts did not undergo conspicuous changes over the reference period possibly suggests that the play of forces set in motion in the wake of land reforms (impact of land ceiling laws, abolition of tenancy, redistribution of surplus land and so on) has got stabilised, at least in a macro sense. There-

4. According to Rao, "This small-cum-medium holding based structure of land distribution would be conducive to relatively smooth adoption of technological change by the masses of cultivators as compared to the prospects for technological changes in situations with polarised structures of land distribution." See V. M. Rao, "Changing Village Structure: Impact of Rural Development Programmes," *Economic and Political Weekly*, Vol. XXII, No. 13, March 28, 1987, pp. A. 2-A. 5.

5. For want of space, these and other districtwise results are not furnished in the text.

fore, it may not be a wild guess to suggest that no spectacular changes in the land distribution pattern would come about in the coming years, except for the fact that the demographic compulsions would lead to further sub-division of land, adding an edge to the preponderance of small holdings.

The discriminating role that the inequality in land distribution plays between the cultivator classes in determining their asset holding pattern, income levels, etc., may be expected to be moderated, provided the income augmenting assets like irrigation, cattle and buffaloes⁶ and capital assets like agricultural machinery and implements are more evenly distributed. It is to an examination of the distribution of these specific assets that we now turn.

Irrigation

The striking feature in the distribution pattern of irrigated area across land holding classes is that the relative share appropriated by the large farms in the irrigated area under each of the individual sources of irrigation registered a decline over the decade 1970-71 to 1980-81 (Table II). Medium

TABLE II. SHARE OF OPERATIONAL HOLDINGS IN NET IRRIGATED AREA

Share (percentage) in total number of holdings	1970-71					1980-81			
	Marginal and small	Semi- medium	Medium	Large	Marginal and small	Semi- medium	Medium	Large	
Net irrigated area	..	27.50	23.07	29.45	19.98	33.81	25.72	28.02	12.45
Canal irrigated	..	26.61	22.75	29.61	21.03	35.90	26.11	27.13	10.86
Tank irrigated	..	33.23	24.70	27.74	14.33	39.06	25.63	25.66	9.65
Well irrigated	..	19.80	20.30	31.47	28.43	23.53	24.34	32.98	19.15
Other sources	..	26.85	24.07	30.56	18.52	35.21	27.38	26.42	10.99

Source: Computed based on data available from Agricultural Census, 1970-71 and 1980-81, respectively.

farms also experienced a moderate decline in their relative share in the irrigated area. It is redeeming therefore to observe that the small and semi-medium farms were able to improve their shares in the irrigated area at the expense of the medium and large farms. This perceptible improvement in the shares of lower land holding classes in the irrigated area resulted in the overall reduction in the inequality in net irrigated area (Gini coefficient reduced from 0.3712 to 0.3388). In fact, the inequality in the irrigated area distribution improved in all the 19 districts, the improvement being more impressive in Belgaum, Bijapur, Bidar, Raichur and Uttara Kannada.

6. It would be more appropriate to consider milch animals in particular. For want of data on milch animals across land holding classes for 1981-82, we have considered cattle and buffaloes.

*Cattle and Buffaloes; Agricultural Machinery and Implements;
Irrigation Equipments*

Drawing on evidence available from the NSS Survey 26th Round, a study by Venkataramanan *et al.* showed that in 1971-72 the distribution of owned cattle and buffaloes, agricultural machinery and implements per household operational holding was inequitous in the sense that as one moved along the size class of operational holding, the average number owned was on the higher side.⁷ But a favourable aspect of the distribution of these assets was that the households in the lower groups in general possessed on the average either comparable or higher number of these assets per unit of operated area as compared to those possessed by the higher groups.

The data on the distribution of the above-mentioned assets for the year 1980-81-82 are not yet available. Therefore, we are not in a position to examine the trend in their distribution. But the limited information available for 1975-76 supports, by and large, the persistence of inequitous distribution of these assets across the land holding classes (Table III). For instance, as

TABLE III. SHARE (PERCENTAGE) IN THE VALUE OF AGRICULTURAL IMPLEMENTS, IRRIGATION EQUIPMENTS, ADULT CATTLE AND BUFFALOES OWNED BY HOUSEHOLDS BY SIZE CLASS OF HOUSEHOLD HOLDINGS IN KARNATAKA, 1975-76

Size class of holding (ha.)	Share (percentage) in value			
	Agricultural implements	Irrigation equipments	Adult cattle	Adult buffaloes
Less than 0.5	0.09	2.36	2.22	1.98
0.5—1.0	0.31	5.62	6.96	5.60
1—2.0	0.45	11.34	17.54	13.41
2.0—4.0	1.81	26.74	28.17	24.70
4.0—10.0	32.37	34.89	28.12	31.12
10.0 ha. and above	64.97	19.05	16.99	23.09
All classes	100.00	100.00	100.00	100.00

Source: Computed from data available in NSS 31st Round, July 1976-June 1977, Number 300/1, Tables with Notes on Use of Irrigation in Household Holdings, Karnataka State, National Sample Survey Organisation, Cabinet Secretariat, Ministry of Planning, Government of India, New Delhi, June 1982, Table 14, p. 41.

we move along the size class of operational holding—say upto ten hectares—the share in the value of (i) agricultural implements, (ii) irrigation equipments, (iii) cattle and buffaloes progressively increases. But it is worth noting that the relative share of the highest size class in the value of these assets compared to that of the medium farms (excepting agricultural implements) is low.

7. Venkataramanan *et al.*: *op. cit.*, Chapter II.

Conclusion

The evidence examined in this paper suggests that the distribution of assets including land among rural households in Karnataka is inequitable and skewed. In fact, as Kurien points out, this is a common aspect of asset distribution in all parts of India.⁸ This aspect of inequality in the asset distribution among rural households in Karnataka notwithstanding, we could notice a perceptible reduction in inequality especially among the cultivator households. The relative improvement in the asset distribution among cultivator households was made plausible largely by a reduction in the inequality in land holding distribution, with the large farms losing in favour of the other farm classes. Besides, there are indications to show that the discriminating role that the inequality in land distribution would exert on asset holding of cultivator households is tempered by a moderate yet perceptible improvement in the disposition of selected income-augmenting and capital assets like irrigation, cattle and buffaloes, agricultural machinery and implements across land holding classes.

In a nutshell, the scenario that emerges from the study of changing asset structure in rural Karnataka is a slow but perceptible improvement in the distribution of assets at least among the cultivator households. How far this improvement in their asset distribution over the reference period is the result of state policy and programmes and how far this is due to other dynamic forces operating in the rural economy and society is indeed difficult to answer. But we prefer to agree with Rao that the state intervention is opening up the rural economy and society to a number of potentially important and fundamental changes without being able to complete the tasks of restructuring entirely with its own initiative and thrust.⁹

8. See Kurien: *op. cit.*

9. Rao, *op. cit.*