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NOTES ON
AGRARIAN STRUCTURE AND FAMILY FORMATION

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I

The paper is an attempt to formulate hypotheses which relate characteristics of family formation to the agrarian structure under transition. It is restricted in scope to differentials in rates of partitioning among the agrarian classes. The analytical framework is one which takes into account the division of labour within both the household and the agrarian society. The hypotheses are concerned with the economic rationale of partitioning or resistance to it and hence with the advantages and disadvantages springing from market forces, specific to different classes, which can arrest or promote partitioning.

The specified agrarian structure is one which is associated with developing capitalist relations. It can be made to correspond to regional structures emerging within the country during the post-independence period only after modifying it sufficiently by taking into account the nature

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and strength of pre-capitalist relations specific to the regions. The structure we discuss in this note is designed to approximate that of Kerala and has the following elements.

(A) The class of agricultural labourers who derive subsistence mainly from wage income. They may or may not own (or lease in) land and include 'attached' workers.

(B) The class of poor peasants who derive a part of their income from cultivating (owned or leased in) land but also depend on wage income.

(C) The class of middle peasants who derive subsistence mainly from cultivating (owned or leased in) land through family labour.

(D) The classes of rich peasants and capitalist farmers on whose farms cultivation is done mainly by wage labour. Economic activity among households belonging to these classes is diversified and incomes are earned, apart from agriculture, from trade, transport, salaries and activities allied to agriculture to a varying extent.

(E) The class of landlords who lease out their land wholly. They do not exist, however, in a pure form. They derive substantial incomes from sources other than agriculture as those in (D) do.

Some hypotheses can now be formulated. Agricultural labourers and poor peasants are involved in the markets mainly

as sellers of labour power and buyers of wage goods, and only to a limited extent as sellers of agricultural produce. The labour market, characterised by a high degree of unemployment, does not confer any special advantage to a joint family (loosely defined); on the other hand, uncertainty of finding work, especially in the lean seasons, may make intra-family income-sharing difficult for joint families. With regard to buying of commodities and the limited selling of agricultural produce no gains accrue to undivided households. There are thus no economic forces to arrest partitioning among such households. Moreover, low levels of expectation of life among them induce a faster-than-average time rate of reproduction (of households) which is realised through early marriage. The latter reinforces the tendency towards partitioning. For 'attached' labour households, however, because of lack of freedom to partition or of security of employment that such attachment entails, forces working against partitioning may operate.

In rich peasant and capitalist farmer households, wherein economic activity is diversified, work - both on-farm and off-farm-is mainly supervisory in nature and is associated with not only cultivation but also the processing and marketing of produce. There are thus distinct economic advantages which a joint family with a large number of adults enjoys over a nuclear family (with more or less children). Besides, the involvement of such households in trade and

transport confers economic advantages in buying (of inputs) and selling (of output) and hence constitutes a disincentive to partitioning. Apart from all this, the difficulties of liquidation of indivisible assets (which may be necessary for partition) also tend to slow down the process of partitioning. What is important in this context is not merely the relationship between 'cumulation of economic advantage' and accumulation (the effect of inter-linked markets) which is external to the household but also the diversification of economic activity within the household itself. Salary earnings can play an important role in bringing about such diversification.

Since we have assumed that in landlord households also the range of economic activity is wide, much of the above reasoning applies to them as well. Although the organisation of work within such households does not involve supervision of cultivation, it includes the collection of rent and its disposal (including marketing).

We thus hypothesise that rates of partitioning will be high among agricultural labourer and poor peasant households and low among rich peasants, capitalists and landlords. In the process of differentiation the middle peasantry is a transistory category (not withstanding its ability to survive in some periods of history). At any point of time the middle peasantry is not a homogeneous category, especially with respect

to the nature and extent of their market involvement. The category thus contains some who resemble poor peasants and some who resemble rich peasants in relation to the markets. When, as in the case of Kerala, a high degree of commercialisation of agriculture coexists with a high incidence of family farming, middle peasant involvement in the market as sellers of agricultural produce can be quite considerable. We may therefore expect rates of partitioning among middle peasants to lie between those of the rich and poor peasants.

II

While being not very useful for categorisation of the type we have discussed, available data do throw some light on the hypotheses. Before discussing the implications, in this respect, of some well known empirical observations it is necessary first to sort out some methodolgical issues.

What we generally have are data relating to average household size among different population groups. For a closed population, this average, in the long run, is determined by the birth, death and partitioning rates. Household size increases with the birth rate and decreases with the death rate. Partitioning reduces the average household size since a partitioned household gives rise to two or more households of smaller size. More precisely, the rate of increase in the average household size can be shown to be

(b-d-p)/(1+p) where b, d and p are the birth, death and partitioning rates respectively. Accordingly, when we look at empirical correlations involving household size we can indirectly infer something about the rates of partitioning provided we have some knowledge about the rate of natural increase (b-d). This is possible, however, only if there are reasons to believe that the correlations are the result of long-run tendencies. A second issue relates to the relationship between rates of birth and mortality and the age distribution. It is well known in demographic theory that age distributions are more sensitive (by a factor of 10 to 1 or more) to birth rates than to mortality rates. If one population has a significantly higher proportion of children than in another, it is a reasonable inference that the first population has higher rates of birth and natural increase*. Let us now turn to the empirical observations.

(1) Among agricultural labour households those with land have higher average size than those without. This holds among both the 'casual' and 'attached' labour households. Among agricultural labour households without land,

*See (1) Ansley J. Coale, The Growth and Structure of Human Populations, A Mathematical Investigation, Princeton University Press, 1972 and (2) Nathan Keyfitz, Applied Mathematical Demography, John Wiley, 1977.

attached households have higher average size than that of casual labour households.

These relationships (based on the data in the various Agricultural Labour Enquiries) appear to have a universal validity over space and time and hence we must look for an explanation in the rate structure. The age distributions among the different categories look practially alike. One can thus infer that while the birth and death rates do not differ among these classes, rates of partitioning are lower among those with land; further that among households without land casual labourers partition their households at a rate faster than do the attached labour households. It is quite significant, in this context, that among labour households with land, the relationship (with respect to average size) between attached and casual labour households is not unambiguous: in some States one category has the higher average size and in some the other has. Two factors may be at work here: attachment and landsize.

(2) Data based on the First Agricultural Labour Enquiry (1951) show that average household size among agricultural labour households is smaller than among owner cultivators and tenant households all over India. The proportion of children (below 15 years) is not, however, strikingly different among the different classes. It may be inferred that rates of partitioning among agricultural labour households are higher

than among the other classes. The comparison between owner cultivators and tenants does not lead to an unambiguous relation. Land size could be responsible for this. The 1951 census data show that landlord (rent-receiver) households have the highest, and agricultural labour households the lowest, average number of persons per self-supporting male, among all the agrarian classes. Nothing can be inferred from this in the absence of data on number of households (which are not available) and the age distributions.

(3) We now turn to the universally observed correlation between the size of land holding (or asset holding or wealth in general) and the size of the household. Because of the universality of the correlation, we must look for an explanation in differentials in rate structures. The explanation need not, however, be universal, for different configurations of the birth, death and partitioning rates can bring about the correlation. We shall indeed argue that in at least two cases, viz., the Russian data analysed by Shanin* and others and the Kerala (and possibly other Indian) data, the rate structures are strikingly dissimilar.

*See Teodor Shanin, The Awkward Class, Cambridge University Press, 1972.

Before we do that it is necessary, however, to clear up a methodological point. Land distribution data do not refer to closed population groups. In particular, newly partitioned households are smaller in size than parent households and constantly move into a lower size-class of landholdings. It can be shown through a simple mathematical model that if the rates of natural increase of population are not widely different among the different size-classes, then even uniform rates of partitioning can, in the long run, produce a positive correlation between size of holding and size of household; however, such a possibility would depend on the extent of skewness in the distribution as well as the precise magnitudes characterising the rate structure.

But, roughly speaking, if the rates of natural increase decline significantly with the size of holding, and the distribution is highly skew, uniform rates of partitioning cannot systematically lower the average size of household in the small holdings so as to bring about the positive correlation. At any rate the correlation cannot be unambiguously interpreted without a knowledge of the variations in the birth and death rates.

Table 1

Age Composition of the Population by Size of Landholdings: Kerala, 1970-71

Size of operational holding (hectares)	Average size of household	Age-group (years)				
		0-15	15-55	55-65	Above 65	Total
		(percent of population in size-group)				
0.04 - 0.25	5.97	40.42	50.04	8.02	1.52	100.00
0.25 - 0.50	6.38	40.02	50.13	8.20	1.65	100.00
0.5 - 1	6.73	40.23	50.70	7.45	1.62	100.00
1 - 2	7.24	39.22	51.08	8.07	1.62	100.00
2 - 3	7.39	38.38	52.12	8.29	1.21	100.00
3 - 4	7.59	36.56	52.96	8.33	2.15	100.00
Above 4	8.38	36.03	52.56	9.19	2.22	100.00

Source: The Third Decennial World Agricultural Census, 1970-71, Report for the Kerala State, Bureau of Economics and Statistics, Kerala.

Bearing the above remarks in mind let us consider the data in Table 1. The changing age-distribution indicates that rates of natural increase are higher in the smaller holdings; however, the differences could be narrow. If we are willing to assume that death rates are higher in the small holdings (this appears to be a reasonable assumption) it would follow

that birth rates must also be higher. However, the possibility of uniform rates of partitioning bringing about the positive correlation between land size and household size cannot be ruled out on the basis of these data.

A factor which could make the data more favourable to our hypotheses is the nature and scale of land transfer through sale. If we identify the latter with the process of dispossession of poor and middle peasants, and if we assume that there is a close correspondence between size of land holding and class-status, mobility in terms of land size induced by such sale will be associated with the movement of higher sized households into smaller holdings and vice versa. Thus the differentiation process works against the positive correlation in the short run and the persistence of positive correl tion can result only from higher rates of partitioning in the smaller holdings. However,

on both counts viz., land transfer through sale and the correspondence between landholding and class-status, data are lacking. The scanty data available in fact show the existence of small holdings in which cultivation is done largely by wage labour. Hence, no firm conclusions emerge from the data we have been discussing.

The Russian data present a different pattern: the rates of partitioning rise with the size of land holding, but surprisingly, so do the rates of birth and natural increase*

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* Rates of Natural Increase in Veronezh Gub. by Land Held per Household (per 1000), 1897

Land held (Des)	Birth rate	Death rate	Natural Increase
Less than 5	51.8	35.0	16.8
5 - 15	53.8	33.2	20.6
15 - 25	53.0	28.6	24.4
More than 25	55.8	26.2	29.5

Source: Teodor Shanin, op.cit

These data would imply that the proportion of children must have been higher in the larger holdings (in Kerala it is the other way round). Shanin combines these figures with data showing higher rates of partitioning in larger holdings, to buttress the life-cycle (Chayanov's) theory of mobility. For a critique, which shows that partitioned households were better off than undivided households and constituted the base for the emergent rural bourgeoisie, see Mark Harrison, Resource Allocation and Agrarian Class Formation, Journal of Peasant Studies, Vol.4, January 1977.

III

Let us now consider some evidence which is more direct. Table 2 summarises data relating to a stratified random sample of 133 households chosen from a village in South Kerala. These data show that agricultural labour households have the smallest proportion of joint families (defined as those in which more than one related couple live); and that this proportion rises with the size of land holding. The average age of the head of the household also increases with the land size (Table 2).

Table 2

Household Size and Related Characteristics: A Kuttanad Village, 1976

Category of household and size of land (acres)	Average household size	Average age of head (years)	Proportion of joint families (%)	Total number of house-holds
Agricultural labour				
Less than 0.10	5.21	45.6	12.12	33
More than 0.10	5.06	47.3	12.50	16
Cultivator households				
Less than 1 acre	5.77	48.4	31.80	22
1-5	5.78	51.6	36.11	36
More than 5	6.00	58.4	38.50	26

Source: Data collected by Joan Mencher and P.G.K. Panikar

Table 3

Household Characteristics in a Sample of 521 Households : Kerala, 1977-78

	Size of landholding (Acres)	Number of house holds	Average size of land holding (Acres)	Average size of household	Percentage distribution of households by types				
					O	A	A'	B	B'
Cultivators	0 - 1	43	0.66	4.46	37	54	9	0	0
	1 - 2	83	1.89	5.44	14	51	23	10	2
	3 or more	74	5.83	6.32	7	39	32	20	1
Agricultural labour	with land	196	0.32	5.45	16	51	19	8	6
Plantation labourers	without land	89	0.00	5.85	6	66	18	8	2
"	with land	36	1.12	6.41	0	69	8	19	3

Note: Household types are defined with respect to the number of married persons with spouse living in the household (M) and number of persons widowed, divorced or seperated (W).

O : M = 0 (i.e., the household is headed by an unmarried person or one who is widowed etc.)

A : M = 2, W = 0

A': M = 2, W $\geq$ 1

B : M $\geq$ 4, W = 0

B': M $\geq$ 4, W $\geq$ 1

Table 3 gives data relating to 521 households chosen from 4 districts of Kerala. They constitute a subsample of

a larger sample of households surveyed by the Bureau of Economics and Statistics. These data show that there are no joint families (of the B or B' type wherein there is more than one related couple living) in holdings below 1 acre in size. The proportion of joint families increases with size. The data also show the existence of joint families in both agricultural labour and plantation labour households (giving them a higher average size than among all but the large cultivators). However, all but 4 agricultural households had land and among the plantation labour households the differences between those with land and those without are as expected. The existence of joint families among agricultural labour households may be due to the fact that recent legislation has conferred on them rights to ownership on huts and hutment land. Among plantation labourers it may be due to the type of labour contracts which ensure continity of employment to the members of the labourer's family. We do not, however, have any direct evidence on these issues.