

ANALYSIS OF VARIATIONS IN THE PROPORTIONS OF  
AGRICULTURAL LABOURERS IN UTTAR PRADESH, 1961-71.

by

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Submitted in partial fulfilment of  
the requirements for the Degree of  
Master of Philosophy

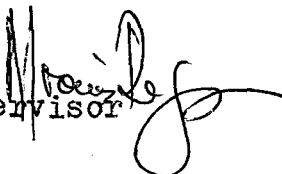
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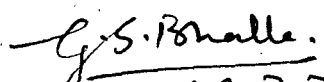
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## CHAPTER - I

### INTRODUCTION

#### I

Uttar Pradesh, situated in the northern part of India, has traditionally been an area where the proportion of agricultural labourers was low, compared with the southern and eastern parts of the Country. However, during the decade 1961-71 the total number of agricultural labourers in the State increased from 3,261,178 to 5,443,829. In terms of absolute numbers, therefore, there has been a 67 per cent growth in the employment of wage labour. The proportion of agricultural labourers to the total 'agrarian working force'<sup>1</sup> increased from 15 per cent to 25.7 per cent. Thus, in relative terms the rate of growth of agricultural labourers in Uttar Pradesh has been 71.5 per cent during the decade under review.

Some economists and demographers have, however, expressed doubt about the correctness of the comparisons made on the basis of census data of 1961 and 1971 regarding working force. Moreover, the concept of 'worker' was itself changed in the 1971 census and it appears that this also has reduced the feasibility of making a correct comparison. However, by any estimate and correction the growth of agricultural labourers is too large to be brushed aside as 'statistical' or 'definitional'. In fact, it has been pointed out that figures for male workers withstand the definitional changes, and hence are more dependable as a basis for estimates regarding work force.

(2)

If one considers only male workers<sup>2</sup>, employment of wage labour is seen to have increased by 78.7 per cent.

## II

Thus, the transformation of the traditional agrarian economy of the State has been so rapid that today more than one-fourth of the rural population is composed of landless agricultural labourers who have nothing to call their own but their labour power. The agricultural labourers stand at the base of the socio-economic pyramid. The birth and growth of this class is closely associated with the changing class composition in the rural economy. It may be noted that growing dependence on wage labour is generally regarded as an important indicator of the development of capitalism in agriculture. "In considering the development of capitalism, perhaps the greatest importance attaches to the extent to which wage labour is employed. Capitalism is that stage in the development of commodity production in which labour-power, too, becomes a commodity."<sup>3</sup> It is generally observed that an increasing number of peasants are thrown into the ranks of agricultural labourers, and simultaneously there is an increase in the demand for wage labour. However, capitalism in agriculture can develop only spasmodically, and hence the number of persons offering to hire themselves out far exceeds the demand for hired labour. The development of capitalism in agriculture is not to be judged by the forms of wage-labour, as they are extremely diverse in capitalist societies and contain

survivals and institutions of pre-capitalist agrarian relations<sup>4</sup>.

Here it may be interesting to refer to a debate that has been going on regarding the moment or extent of capitalist development in Indian agriculture. It is not our intention to go into the details of the debate or to provide a final answer. Hence, we shall only give a brief summary of the main lines on which discussion has been going on.

Pranab Bardhan (1970)<sup>5</sup> pointed out on the basis of Agricultural Labour Enquiry and N.S.S. (19th round) data that the percentage of agricultural labour households in the total number of rural households had gone down from 24.5 in 1956-57 to 21.8 in 1964-65<sup>6</sup>. On this basis he argued that "assertions made about the development of capitalism in Indian agriculture with increased proletarianisation of agricultural workers are yet too premature."<sup>7</sup> However, on the basis of Census data we find that in India the proportion of agricultural labourers in the agrarian working force increased significantly from 24 per cent to 37.5 per cent during the decade 1961-71. Even in Uttar Pradesh there has been a noticeable, if not very large, growth of agricultural labourers and hence the conclusions of Bardhan may not be true.

The controversial debate, however, started with a series of papers by Ashok Rudra and associates (1969,70)<sup>8</sup> and their replies and counter-replies by Utsa Patnaik (1971,72)<sup>9</sup>, Paresh Chattopadhyay (1972a, 1972b)<sup>10</sup>

and others.<sup>11</sup> Rudra and associates while studying the big farmers of Punjab set up five criteria for finding out the 'capitalist farms'. On the basis of their study they concluded that none of the 261 big farms (over 20 acres) thus studied could be called a 'capitalist farm'. The theoretical shortcomings of their study has been extensively pointed out by Utsa Patnaik (1971) and P. Chattopadhyay (1972a).

Utsa Patnaik argues that alongwith the pauperisation and proletarianisation of the peasantry, India did not experience a "parallel rise of modern industry at a pace fast enough to absorb the proletariat so created."<sup>12</sup> But the creation of an industrial reserve army is an essential part of capitalist development. Thus, in Uttar Pradesh, particularly in the eastern part, one finds the emergence of a mass of industrial reserve army. She argues again that in colonial India the surplus value created by agricultural labour was not invested in Indian agriculture but was instead siphoned off for investment in industry in Great Britain.<sup>13</sup> It has been pointed out<sup>14</sup> that this criterion - the reinvestment of surplus value produced by farm labour on the same farm itself - cannot be considered as a necessary condition for the development of capitalism in agriculture. What is relevant is the creation of surplus value. Utsa Patnaik's argument that rural wage labourers are 'tied to agriculture' (though free to choose their masters) and thus are forced to accept subsistence wage, also has been challenged by Paresh Chattopadhyay.<sup>15</sup> He argues that the existense of free

labourers as a condition for capitalism is satisfied if agricultural labourers are not tied to particular employers.<sup>16</sup>

Paresh Chattopadhyay points out that the proportion of 'free' wage labourers has grown with increasing commodity production and expropriation of the peasantry from land.<sup>17</sup> He holds the view that "capitalist development was reality even during the British period."<sup>18</sup> Utsa Patnaik admits that a new class of capitalist farmers is emerging and that a vigorous capitalist development is indeed taking place in India.<sup>19</sup>

In a related discussion Ashok Rudra (1974)<sup>20</sup>, replying to Nirmal K. Chandra (1974)<sup>21</sup> writes that : "In many parts of West Bengal we have encountered landowners who are very much engaged in capital investments in the form of irrigation, fertilisers and HYV seeds, and where this tendency is present, it is found to be equally shared by landowners who give their land out on lease to sharecroppers, and those who cultivate it themselves with the help of hired labour."<sup>22</sup> In fact, in another study published in 1975 it has been pointed out that the 'Kisheni' system has been virtually replaced by the employment of wage labour in the Birbhum district of West Bengal.<sup>23</sup> Rudra further points out that "there has indeed been a very acute increase in the concentration of the value of capital in the form of land as a result of investments on land carried out by the large landowners."<sup>24</sup> This is indeed quite different from the conclusions he arrived at in his earlier studies.<sup>25</sup>

By all estimates, therefore, capitalist development in Indian agriculture seems a greater reality today than it was during the British rule.

### III

The traditional village economy was self sufficient. There was an interdependence of agriculture and domestic industry which guaranteed every member of the community a customary share of the total produce. "In this traditional village economy", writes S.J. Patel, "there was no place for a distinct class of persons working solely as agricultural labourers on the lands of others."<sup>26</sup> Sir George Campbell stated that during the first half of the nineteenth century farming in India was not carried on by hired labour.<sup>27</sup> In 1842, Sir Thomas Munro, as Census Commissioner, reported that there were no landless peasants in India.<sup>28</sup> This according to R.P. Dutt, was undoubtedly an incorrect picture, but indicated that the numbers were not considered to require statistical measurement.<sup>29</sup>

The decline of handicrafts and village industries led to the disintegration of the self-sufficient village economy and resulted in the pauperisation of a large mass of artisans, who were gradually transformed into agricultural labourers. In traditional literature on Indian economy this decay of domestic industry is termed as 'de-industrialisation' which occurred during the nineteenth and early twentieth centuries.

In the 'Zamindari' areas, in which Uttar Pradesh also fell, the peasant proprietors were being continuously expropriated by the money-lenders and

zaminder cum money-lenders, who were backed by the entire legal and political machinery of the state.<sup>30</sup> Thus large masses of the peasantry began to roll down the social ladder, first as tenants-at-will and then as agricultural labourers. However, the process of dispossession was somewhat delayed in the 'zamindari' areas, compared to the 'raiyatwari' areas, because of the fact that "before the landlord threw out his tenant into the class of agricultural labourers, he tried to rack-rent him as much as possible; therefore, their terms of tenancy continued to deteriorate for the cultivators in the zamindari areas."<sup>31</sup> The British had introduced the fixed and unalterable money rents and had made land transferable. These two factors also helped large scale dispossession of land.

The process of dispossession and eviction of the tenants was further quickened by the abolition of zamindari.<sup>32</sup> Doreen Warriner<sup>33</sup> observes that rising food prices during the war enabled landowners to make higher profits by managing their holdings themselves than by letting them to occupancy tenants at regulated rents. Thus, even before the 'Zamindari' bills were introduced, they had begun to evict tenants and then hire them as labourers; "but the bills gave them a stronger inducement to evict tenants, and the long delays in enactment gave them the opportunity of bribing the village accountants to falsify the land registers."<sup>34</sup> Where land records were faulty or lacking, as in Uttar Pradesh, or officials were corrupt, a landowner could claim that land should be classified as 'under

personal cultivation', which had in fact been leased to tenants, and these tenants could be evicted.

In Uttar Pradesh large numbers of former occupancy tenants were made 'sirdars',<sup>35</sup> The sirdars could obtain 'bhumidari',<sup>36</sup> rights on payment of ten times the annual rent. Despite all this, however, large scale eviction of tenants could be observed in Uttar Pradesh after the abolition of Zamindari.<sup>37</sup>

#### IV

The high proportion and the high rate of growth of agricultural labourers in Uttar Pradesh today is also accounted for by the fact that the pace of industrial development has been too slow to create employment opportunities for the rapidly growing labour force. During the decade under review the decline of small scale and village industries (in terms of employment) has been more rapid than the growth of employment in factory industries. This "non-compensating industrial growth" has pushed a vast majority of the surplus workers into the ranks of landless agricultural labourers.

One must also mention that during the decade 1961-71, new agricultural practices have been introduced in varying degrees in many parts of the State. This includes not only tractorisation, which some economists argue may be labour displacing, but also better irrigation through canals, tube-wells and pump-sets, more use of fertilisers, pesticides, HYV seeds and implements, and, consequently, double and multiply-cropping. These have



generally increased the demand for hired labour. In some areas of the State, for example, in the western part, this demand generating factor, alongwith a slight increase in real wages,<sup>38</sup> has been more significant and has resulted into proletarianisation of the farm population.

However, in the eastern part of the State the growth of agricultural labourers has resulted from the pauperisation of the peasantry and artisans. The dwarf-holding farmers have been pauperised and bonded by an indissoluble debt burden. The artisans have been pauperised by a rapid decline of traditional industry without a compensating industrial growth. The pressure of population being already high in this part of the State, these have resulted in the swelling of the ranks of agricultural labourers.

## V

The agricultural labourers are economically one of the weakest of the agricultural classes. They are mostly landless belonging to the lower castes. The Census Commissioner of 1951 remarked: "their chief support is labour. In a very few cases they have holdings of their own, which are extremely small in size, or get land to cultivate on sub-lease, again very small in area. They get work only seasonally and not regularly..... The wages they get are often inadequate and their payment frequently irregular and unsatisfactory..... In short they are the exploited class."<sup>39</sup> The minimum wage regulations have been in force but have seldom been enforced

strictly. The numerous sellers of labour power have accepted the big farmer's terms in a buyer's market. These labourers are unorganised and have no bargaining power at all. They have thus been unable to obtain better wages, more human conditions of work and a measure of social security which the industrial worker is steadily securing.

Whereas a very high proportion of agricultural labourers in a region generally means that a large part of the population of the region is poor, the opposite is not necessarily true. The proportion of agricultural labourers is very high in the eastern districts of Uttar Pradesh which are much backward and poverty stricken compared to the western districts of the State. On the other extreme, the proportion of agricultural labourers is the lowest in the Himalayan hill districts of Uttar Pradesh, which again have very low development indices. In this region the employment of wage labour is low because of natural difficulties of cultivation and irrigation, and primitive agricultural practices, like the continuance of 'padiyal',<sup>40</sup> system of cooperative labour.

## VI

The proportion of agricultural labourers varies very widely from district to district. The proportion is generally very high in the eastern parts of Uttar Pradesh and extremely low in the northern hill districts. During the decade 1961-71, however, the employment of wage

labour has steadily increased in some of the western districts of the State, and today they rank very high in the employment of wage labour.<sup>41</sup> Similarly, the growth of agricultural labourers during the decade 1961-71 varies widely from district to district. It has been very rapid in the west and low in the east, though there are some noteworthy exceptions.

In the present study an attempt is being made to make a comparison of the 1961 and 1971 Census data on cultivators and agricultural labourers. On this basis we shall try to locate the regions where the proportion of agricultural labourers is higher compared to others, and also the regions where the growth of agricultural labourers during the decade 1961-71 has been relatively high. An analysis of these regional variations should provide useful guidelines in drawing a development programme for the State which reaches the relatively backward regions, districts and groups. As Gunnar Myrdal points out, "...the promotion of social and economic equality is a pre-condition for attaining substantial long-term increases in production."<sup>42</sup>

#### N\_O\_T\_E\_S

1. The agrarian working force includes cultivators and agricultural labourers.
2. The growth rate is obtained by considering the total male workers in 1971 and male workers in ~~1971~~ the age group of 15 to 59 in 1961

3. V. I. Lenin : Development of capitalism in Russia (Moscow, 1967), p.587.
4. Ibid., pp. 590-91.
5. Pranab Bardhan : 'Trends in Land Relations - A Note', Economic and Political Weekly (EPW), Annual Number, 1970.
6. Ibid., pp. 263-65.
7. Ibid., p.265.
8. (a) Ashok Rudra, A. Majid and B.D. Talib: 'Big Farmers of Punjab', EPW, September 27, 1969.  
(b) ---: 'Big Farmers of Punjab', EPW December 27, 1969.  
(c) ---: 'In search of the capitalist Farmer', EPW, June 27, 1970.
9. (a) Utsa Patnaik : 'Capitalist Development in Agriculture - A Note', EPW, September 25, 1971.  
(b) ---: 'On the Mode of Production in Indian Agriculture - A Reply', EPW, Review of Agriculture, September 30, 1972.
10. (a) ~~Pareek~~ Chattopadhyay: (1972a): 'On the Question of the Mode of Production in Indian Agriculture - A Preliminary Note', EPW, Review of Agriculture, March 1972.

- (b) ---: (1972b): 'Mode of Production in Indian Agriculture - An 'Anti-Kritik' ', EPW, Review of Agriculture, December, 1972.
11. Among other important contributors to the debate mention may be made of
- (a) Andre Gunder Frank: 'On 'Feudal' Modes, Models and Methods of Escaping Capitalist Reality', EPW, January 6, 1973.
- (b) (i) Jai<sup>26</sup>rees Banaji: 'For a Theory of Colonial Modes of Production', EPW, December 23, 1972.
- (ii) ---: 'Mode of Production in Indian Agriculture - A Comment', EPW, April 7, 1973.
12. Op. cit., 1971.
13. Op. cit., p. A-149. She describes this as "the accumulation of colonial super-profits by the bourgeoisie in Britain." Ibid.
14. A. G. Frank: Op. cit., p. 37.
15. Op. cit., 1972a.
16. Ibid., (1972a) p. A-45.
17. Op. cit., (1972b) pp. A-190-191.
18. Ibid., (1972b) pp. A-190, A-192.
19. Op. cit. (1971).
20. Ashok Rudra : 'Semi Feudalism, Usury Capital, Etcetera', EPW, November 30, 1974

21. Nirmal K. Chandra : 'Farm Efficiency under Semi-Feudalism: A Critique of Marginalist Theories and some Marxist Formulations', EPW, Special Number, August, 1974.  
Ranjit Sau challenges Chandra's views that superiority of large scale farms is a necessary and sufficient condition for initiating and sustaining the process of differentiation among the peasantry.  
See, Ranjit Sau : 'Farm Efficiency Under Semi Feudalism: A critique of Marginalist Theories and some Marxist Formulations - A Comment', EPW, Review of Agriculture, March 1975, p. A-19.
22. Op. cit., p. 1996.
23. Khoda Newaj and A Rudra : 'Agrarian Transformation in a District of West Bengal', EPW, Review of Agriculture, March 1975, p. A-22.
24. Op. cit., (1974), p. 1996.
25. Op. cit., p. 1970.
26. S. J. Patel : Agricultural Labourers in Modern India and Pakistan (Bombay, 1952), preface.  
See also, D.R. Gadgil : Industrial Evolution of India in Recent Times (Oxford University Press, India, 1971), pp. 9-12.

27. Sir George Campbell : Modern India (London, 1852), p. 65. (Quoted by S.J. Patel, Op. cit.)
28. R. P. Dutt : India Today (London, 1940), p. 218.
29. Ibid.
30. S. J. Patel : Op. cit., pp. 59-60.
31. Ibid., p. 67
32. Zamindari was abolished in Uttar Pradesh on 1st July, 1952.
33. Doreen Warriner : Land Reforms in Principle and Practice (Oxford, 1969), p. 162.
34. Ibid.
35. 'Sirdari' is a heritable occupancy right without the right of transfer.
36. 'Bhumidari' is a heritable and transferable ownership right over land.
37. Baljit Singh and S. Misra : 'Land Reforms in Uttar Pradesh', an article in Seminar on Land Reforms (Socio-Economic Research Division, Planning Commission, 1966) p.67.
38. A.V. Jose : 'Trends in Real Wage Rates of Agricultural labourers', EFW, Review of Agriculture, March 1974, p. A-27.
39. Census of India, 1951, Volume II, U.P., Part I-A, Report, p. 242.

40. 'Padiyal' is a form of co-operative labour practice found in the Himalayan Hill districts of Uttar Pradesh.
41. The proportion of agricultural labourers is very high today in Saharanpur and Muzaffarnagar and quite high in Meerut and Aligarh.
42. Gunnar Myrdal : Asian Drama : An Enquiry into the Poverty of Nations (New York, 20th century Fund, 1968), Vol.II, p.1369.

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CHAPTER - IIConcepts, Data Base and Methodology

## I

In this section a beginning has to be made defining the term agricultural labour. The Census of India defines an agricultural labourer as an employee of a cultivator, whose business merely is to perform physical labour in the manner required by the cultivator. The Census of 1961 distinguished between a cultivator and an agricultural labourer in the following words:

"In brief, any person was to be treated as cultivator if he or she was engaged either as employer, single worker or family worker in cultivation of land or supervision or direction of cultivation of land.... An agricultural labourer was defined as a person who worked in another person's land for wages in money, kind or share. He must have no right or lease or contract on land on which he worked."<sup>1</sup>  
(Emphasis added).

The definition of agricultural labour adopted by the Census of 1971 is similar to the one adopted in 1961.<sup>2</sup>

Such a definition of agricultural labourers is obviously narrow. It fails to distinguish between a landless agricultural labourer and a worker who derives his livelihood from both cultivation and agricultural labour. It is likely, therefore, that the latter are generally included in the category of cultivators. The dwarf-holding marginal farmers generally augment their earnings by accepting agricultural wage employment. Besides, a part of the other rural workers (artisans, craftsmen, etc.), many of whom belong to lower castes, are obliged to work as agricultural labourers in order to make both ends meet. It may be worth noting that in Uttar Pradesh 73 per cent of the cultivators and 16 per cent of workers in household industry reported agricultural labour as secondary work in 1961.<sup>3</sup>

We may, therefore, define agricultural labourers as those who derive the 'major' portion of their income from agricultural labour, irrespective of whether they own land or not, derive income in cash or in kind, are employed as attached<sup>4</sup> or casual<sup>5</sup> labourers *and get work regularly* for seasonally. [One may, however, use the 'employment criterion' (quantum of hired employment measured in number of days worked) in place of this 'income criterion' (major source of income being agricultural wage employment)]. A recent enquiry<sup>6</sup> into the application of these criteria shows that they give almost similar results.<sup>7</sup> Thus, a wider definition of agricultural labourers should include not only the casual and attached agricultural labourers,

but also a part of dwarf-holding farmers and other rural workers deriving the major part of their income from agricultural labour.

The census estimates generally include the first two categories in agricultural labourers and overlook the remaining.<sup>7</sup> Census data, therefore, underestimate the proportion of agricultural labourers, vis-a-vis cultivators. However, for want of comparable and comprehensive districtwise data we have depended quite heavily on the Census data of agricultural labourers (and cultivators). The limitation of the Census definition should be borne in mind while making a study of agricultural labourers.

## II

### DATA BASE

This section specifies the limitations of our data base, and briefly mentions the possible objections that may be made.

Questions have been raised about the comparability of 1961 and 1971 Census data on the working force. The 1961 data for the districts of Uttar Pradesh have been drawn from Volume XV, Uttar Pradesh, Part II-B(i), Table B-1. The data for 1971 have been collected from Uttar Pradesh, Part II-(b)(i), Economic Tables.

A comparison of the raw Census data reveals that while population of India increased about 2.2. per cent

per annum between 1961 and 1971, the working force declined from 188.6 millions to 180.6 millions. In Uttar Pradesh the total number of workers declined from 28.85 million to 27.33 millions, during the same period. The work participation rate for the country as a whole had a sharp fall from about 43 to 33.4. The decline in participation rate was remarkably large for the females - from 28 to 12.7.<sup>8</sup> Commenting on the all-India participation rate of workers of 1971, B.R. Kalra writes that it is "the lowest ever recorded in Indian Census over the last hundred years or the participation rate of any other country with similar socio-economic and demographic conditions."<sup>9</sup>

What is more remarkable is that there is a great decline in the number of cultivators between 1961 and 1971, while the number of agricultural labourers seems to have shot up. An idea of this can be obtained from the following table :

Table - II.1

Cultivators and Agricultural Labourers in Uttar Pradesh, 1961 and 1971				
	<u>Cultivators (in m.)</u>		<u>Agri. Labourers (in m.)</u>	
	<u>1961</u>	<u>1971</u>	<u>1961</u>	<u>1971</u>
Persons	18.43	15.70	3.26	5.45
Males	14.30	14.52	2.035	4.22
Females	4.13	1.18	1.225	1.23

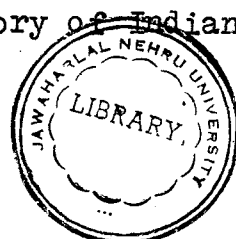
Source : For 1961, U.P., Part II-B(i), Table B-(i) .  
For 1971, U.P., Part II-B(i), Economic Tables.

(21)



The above changes cannot obviously be accepted as realistic. During the 1971 Census, a person was categorised as worker or non-worker according to his 'main' activity, his secondary work was not taken into consideration. However, the concept of worker in 1961 tended to inflate the number of workers, as unpaid family workers like housewives, students, etc., who were basically non-workers, and made a marginal contribution, were also included in the category of workers.<sup>10</sup> Commenting on the change in the definition of work, the Census report of 1971 states : "... the persons basically engaged as housewives, students, etc., had reported their main activity accordingly at the present Census and they have not been taken as economically active workers unless their contribution to work was substantial and the persons concerned returned that work as their main activity. This can particularly be noticed when we consider the female participation rate which shows a big decline between 1961 and 1971."<sup>11</sup>

Demographers are not in full agreement with this statement. B.R. Kalra<sup>12</sup>, for instance, points out that "... the participation rates of 1971 are not comparable not only with 1961 but all earlier Censuses including 1951 which was admittedly an underestimate." He further points out that "For the first time in the history of Indian Census and the Censuses conducted in



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other countries, the concept of 'main activity' was adopted to include only full-time workers and exclude part-time workers."<sup>13</sup> It has also been pointed out that the term 'main activity' was defined vaguely both in quantitative and qualitative terms and was self-contradictory.<sup>14</sup>

We may now take up the question of a decline in the proportion of cultivators during the decade under review. From our point of view this has more serious implications, and needs to be taken up in some greater detail. It is submitted that this phenomenon (over-estimation of cultivators in 1961) resulted from the following reasons.

First, a close look at the 'individual slip'<sup>15</sup> for 1961 reveals that some overweightage was given to cultivation. A part of the questions listed in the slip are presented below:

"The following economic questions were asked in the 1961 Census in the order they are presented... (emphasis added)

8. Working as Cultivator
9. Working as Agricultural Labourer
10. Working at Household Industry
11. Doing work other 8, 9 or 10.
12. Activity, if not working."

As a result of this particular ordering of questions, and since land is associated with rural social-status,

any one who had some land (however small) perhaps preferred to be recorded as a cultivator, even though, cultivation was not necessarily his main activity. This had the built-in tendency of inflating the numerical strength of cultivators at the expense of agricultural labourers.

Second, the 'household schedule'<sup>16</sup> of 1961 enquired about cultivation and household industry only. It is rather unfortunate that agricultural labour households were not considered worth inclusion. Besides, in all the schedule a cultivator was defined as follows:

'A person was a cultivator if  
 he had some regular work of  
 more than one hour a day  
 throughout the greater part  
 of the working season.'<sup>17</sup>

Thus it is probable that persons owning some land and doing some cultivation work, however marginal, were returned as cultivators, even if some of them worked primarily as agricultural labourers.

Third, when the Census enumeration work in 1961 had already started, a decision was taken that secondary work would also be recorded. It may be noted that in the 'individual slip' for 1961 Census there was no provision for recording secondary work. The enumerators were thus instructed as follows:

"After positive answers to two or more  
 questions (noted above) had been obtained,

the principle work, decided on the basis of time spent, would receive a ring round the question (e.g. (10) ) and the secondary work would receive a tick (e.g. 10✓)"<sup>18</sup>

But this instruction could not reach all enumerators in time. Many slips were without the ring or tick mark, even when answers to more than one question had been obtained in the positive. It was thus decided by the Census Office that all such persons were to be treated as cultivators on whose slip cultivation had been returned as one of the occupations.<sup>19</sup> Generally, a part of the working population engaged in household industries or working as agricultural labourers also do some cultivation work. It is highly probable, therefore, that in the 1961 Census the numerical strength of the cultivators was boosted at the cost of the agricultural labourers, as also other rural workers. It must be pointed out again that there is reason to believe that the Census definition of agricultural labourers is narrow. However, the 1961 Census, greatly deflated the proportion of agricultural labourers in the agrarian working force.

The objective of the present study may be recalled here. The Census estimates are being used in this study with the following aim:

- (1) To reveal the variations in the proportion of agricultural labourers in the districts of Uttar Pradesh in



1961 and 1971, and isolate the areas where the proportion of agricultural labourers is extremely high or extremely low. These variations are to be explained.

- (2) To reveal the regional variations in the growth of agricultural labourers in Uttar Pradesh during the decade 1961-71, to isolate the areas of remarkably large growth, and to explain this phenomenon.

If one can assume that the underestimation of the proportion of agricultural labourers in 1961 was uniform for all districts of the State, the districtwise or regional variations will not be materially affected.

However, the relative underestimation of the proportion of agricultural labourers in the base year (i.e. 1961) may lead to an overestimation of the rate of growth of agricultural labourers during 1961-71. Shrinivasan and Sharma<sup>20</sup>, Sinha<sup>21</sup>, Krishnamurthy<sup>22</sup> suggest that comparability of data on males can be obtained by excluding from the 1961 data workers between the ages 0-14 and 60+. Exercises on this basis (for male workers) have been carried out which is proposed to be explained in the next section. Besides, two other sets of growth rates have been calculated for a comparative study. The growth rates show such striking similarity that they cannot be discarded as a statistical or definitional

revolution. Besides, there is little difficulty in isolating the districts or regions where the employment of wage labour has markedly increased during the decade under review.

### III

#### Methodology

The proportion of agricultural labourers in the agrarian working force has been calculated for each district of the State for 1961 and 1971 on the basis of the following method:

$$\frac{A_{Li}}{A_{Li} + C_i} \times 100 \quad \dots (1)$$

where,

$A_{Li}$  = agricultural labourers in the  $i^{\text{th}}$  district,

$C_i$  = cultivators in the  $i^{\text{th}}$  district,

$A_{Li} + C_i$  = agrarian working force in the  $i^{\text{th}}$  district.

Three sets of growth rates have been used in the text. The emphasis is on the use of the growth rate for male workers calculated in terms of their proportions in 1971 and 1961. It has been pointed out that the figures for females are relatively unstable, and hence figures for males may be used for calculating growth rates. Further, 'marginal workers' need to be excluded from 1961 data to make it comparable to 1971 data. Since the marginal workers are generally found in the age groups '0-14' and '60 and above', it is suggested that they be excluded from the 1961 data. Further, it is

suggested, that workers in the category 'age not stated' may be excluded. This (ANS) category, however, constitutes only 0.01 per cent of the working force.

Thus, the proportion of agricultural labourers for 1961 in the age group 15 to 59 is being compared to the total male workers in 1971. It may be observed that the proportion of male agricultural labourers thus calculated are slightly lower than that for the total workers.<sup>22</sup> This suggests that for the State as a whole, the proportion of agricultural labourers is higher among the females.

The rates of growth of agricultural labourers have been calculated by the following methods :

$$\text{Method I : } \frac{\text{Prop. of AIm in } i^{\text{th}} \text{ district in 1971}}{\text{Prop. of AIm' in } i^{\text{th}} \text{ district in 1961}} \times 100-100$$

....(2)

where,

AIm = Agricultural labourers among the males(total)

AIm' = agricultural labourers among the males  
in the age group 15-59.

$$\text{Method II: } \frac{\text{Number of AL in } i^{\text{th}} \text{ district in 1971}}{\text{Number of AL in } i^{\text{th}} \text{ district in 1961}} \times 100-100$$

....(3)

$$\text{Method III: } \frac{\text{Prop. of AL in } i^{\text{th}} \text{ district in 1971}}{\text{Prop. of AL in } i^{\text{th}} \text{ district in 1961}} \times 100-100$$

....(4)

For correctly locating the regions of high growth the following method has also been used.

$$\text{Location Method : } \frac{\frac{\text{Prop. of AL in } i^{\text{th}} \text{ district in 1971}}{\text{Prop. of AL in U.P. in 1971}}}{\frac{\text{Prop. of AL in } i^{\text{th}} \text{ district in 1961}}{\text{Prop. of AL in U.P. in 1961}}}$$

....(5)

It may be noticed that the growth rates calculated by the three methods mentioned above yield strikingly similar and high values. Besides, the growth rate calculated for males by method I shows the highest growth rate.<sup>23</sup>

#### N\_O\_T\_E\_S

1. Census of India (CI) 1961, Vol.XV, U.P., part I-A(ii), General Report, p.190.
- ✓2. An agricultural labourer is defined in 'A person who works in another person's land for wages in money, kind or share was regarded as an agricultural labourer. He has no risk in the cultivation but he merely works in another person's land for wages ....' (emphasis added)  
CI, Monograph No. 1 of 1971, 'Indian Census in Perspective', p. 170.

3. CI, 1961, Vol.XV, U.P., Part I-C(ii) subsidiary Tables.
4. An 'attached' labourer is defined as a permanent workman working on a farm on contract. The contract may be seasonal or annual, with or without debt bondage, with or without tie-in-allotment. It may be mentioned that 'bonded labour' is a specific form of attached labour where there is debt bondage with or without tie-in-allotment. Such a bonded labourer is not free to choose his employer.  
See 'Agricultural Labour in India - A compendium of Basic Facts', Labour Bureau, Govt. of India, 1969, pp. 2-3.
5. 'Casual' agricultural labourers are generally employed on an ad-hoc basis. They do not enjoy regular employment, but are free to choose their employers.
6. Shri Ram Centre for Industrial Relations and Human Research : 'Some aspects of Agricultural Labour Problems: An Exploratory Study'. New Delhi, 1973, pp. 38-39 (Mimeo.)
7. This point is further explained in the section on 'data base'.

8. CI 1971, Series 1 - India, Paper 3 of 1972 p. 83. See also J. Krishnamurty: 'Working Force in 1971 Census - Unilluminating 'Final' Results', EPW, Special No., August 1973, p. 1511.
9. B.R. Kalra : 'A Preliminary Appraisal of 1971 Census Economic Results', p.1.
10. CI, 1961, U.P., Part I-A(ii), General Report, p. 146.  
For definition of 'work' in 1961 and 1971 Censuses, see Monograph No. 1 of 1971, p. 169.
11. CI, 1971, Provisional Population Totals, p. 29.
12. Op. cit., p.2
13. Ibid.
14. Ibid., p.3.
15. CI, 1961, U.P., Part I-A(i), General Report, p.1.  
Also CI, 1961, Vol.I, India, Part II-B(i) p.2.
16. CI, 1961, U.P., Part I - A (i) , p.28.
17. CI, 1961, Vol. I, India, Part XI - A (i), ' Land Tenures in India', p.(ii).
18. CI, 1961, vol.I, Part II - B (i), p.6.  
( emphasis added ).

19. This point was made by Dr. M.K. Premi of the CSRD, J.N.U., in a discussion the researcher had with him.

Also, see the paper by K.N. Shrinivasan and R.N. Sharma : ' On Making Comparisons of the Data on Economically Active Population Collected in the Censuses of India, 1961 and 1971 .' pp. 5 and 14.

20. Op. cit.

21. ' A Rational view of Census Economic Data', 1971.

22. See Tables 1 to 4.

23. See Tables 5 to 7.

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## CHAPTER - III

### Variations in the proportions of Agricultural Labourers, 1961 and 1971.

#### I

The Uttar Pradesh is a land of diversities. The Himalayan hill districts are thickly wooded. Land is stony and not much cultivation is possible. It is carried on in scattered areas - river valleys and terraced hill slopes, wherever culturable land is available.<sup>1</sup> Little or no irrigation facilities exist in this part of the State. In contrast, the western and eastern plains are fertile. However, as rainfall gets less and less in the western part of the State, more and more irrigation is needed. The chief sources of irrigation in the western plains are the Ganga, Yamuna and Sarda canals and tubewells. In the eastern part of the state wells and tanks have been the more important sources of irrigation.<sup>2</sup> However, during the decade under review flow and lift irrigation have also made a headway. The southern hills and plateau are not very well suited for agriculture.<sup>3</sup>

#### II

The proportion of agricultural labourers in the agrarian working force varies widely from district to district. In 1961, the proportion of agricultural labourers was as high as 34.6 per cent



in Mirzapur in the East to as low as 0.25 per cent in Chamoli in the north. The proportion for the state as a whole was 15 per cent. In almost all the districts in the east of the State the proportion of agricultural labourers is very high. Out of the 14 districts in the upper quartile, as many as 10 are eastern.<sup>4</sup> Of the remaining, 2 are western, viz. Saharanpur and Muzaffarnagar, and 2 southern, viz. Hamirpur and Banda. At the other extreme, the proportion of agricultural labourers is very low in all the 6 Himalayan hill districts. The proportion is also low in the central plains of the State.<sup>5</sup>

For the purpose of mapping of the 1961 data, districts have been ranked in accordance with the proportion of agricultural labourers and distributed in four quartiles as follows :

Table III.1

Division of Districts in Four Quartiles, 1961

Quarter	Range (percentage)		No. of Distts. in the Region
	Lowest	Highest	
1.	0.25(Chamoli)	7.49(Farrukhabad)	14
2.	7.88(Moradabad)	11.73(Mathura)	13
3.	12.04(Dehra Dun)	18.87(Deoria)	13
4.	19.14(Hamirpur)	34.57(Mirzapur)	14
		Total	54

A study of the spatial patterns given by the 1961 data clearly brings out the following regions.<sup>6</sup>

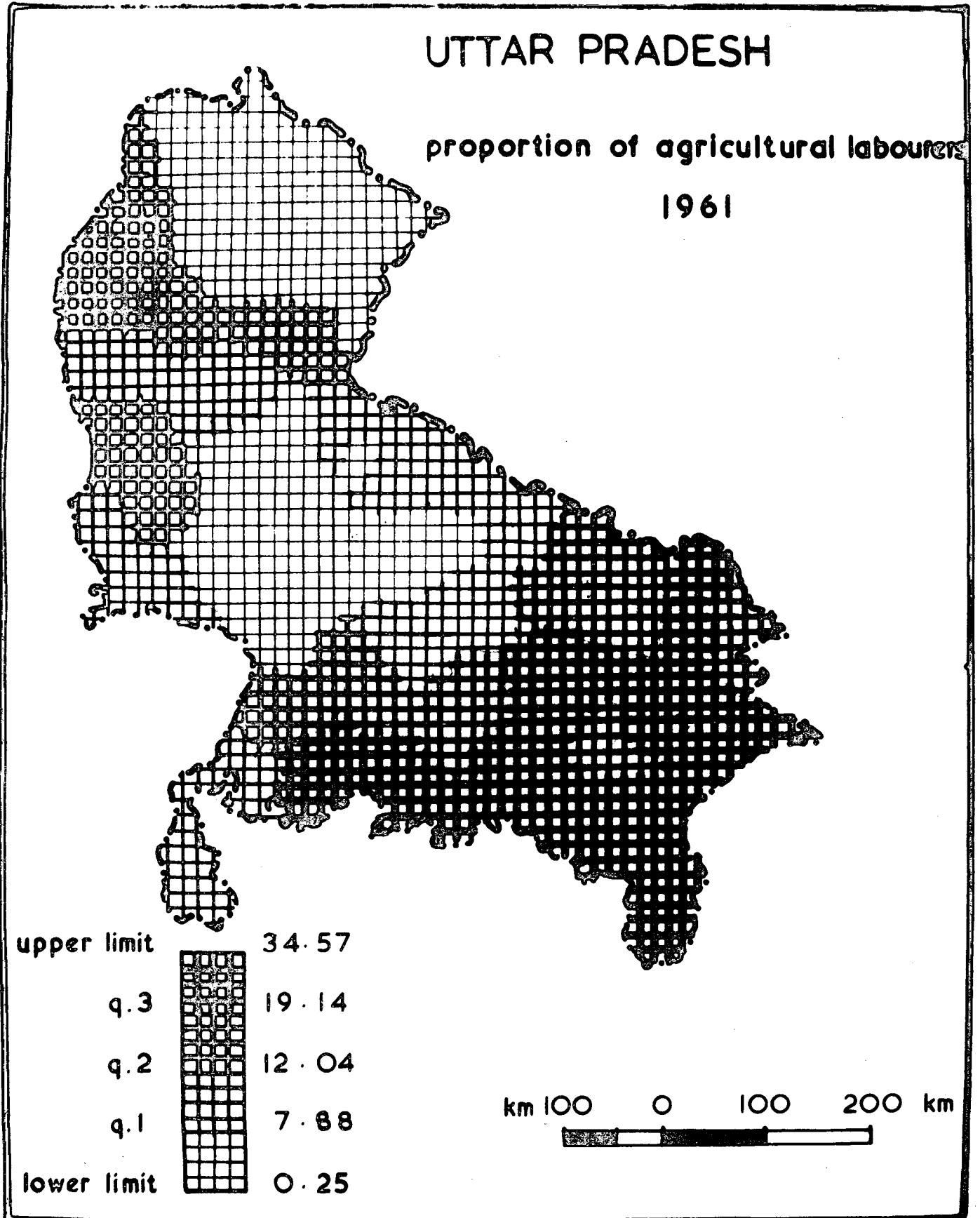


fig. 1

A. Regions where the proportion of agricultural labourers is very high (districts in the uppermost quartile).

1. Eastern and South-Eastern Uttar Pradesh.

This is a big and continuous region consisting of 12 out of the 14 districts in the uppermost quartile. It includes Mirzapur, Varanasi, Ghazipur, Ballia, Azamgarh, Gorakhpur, Faizabad, Sultanpur, Pratapgarh and Allahabad of eastern Uttar Pradesh and Banda and Hamirpur of southern Uttar Pradesh.

2. A small part of western Uttar Pradesh

In the western part of the State there are two neighbouring districts where the proportion is high. These are Saharanpur and Muzaffarnagar.

B. Regions where the proportion of agricultural labourers is very low (districts in the lowest quartile).

1. The Himalayan Hill Districts in the North.

This region consists of the 6 hill districts Uttar Kashi, Chamoli, Pithoragarh, Tehri Garhwal, Garhwal and Almora. In all these districts the proportion is less than 1 per cent.

2. The Central Plains.

The proportion of agricultural labourers is also low in 8 districts of the central plains.<sup>7</sup> However, the proportion in these districts is much higher compared to the 6 hill districts mentioned above.

Considering the third and fourth quartile districts together one finds that the proportion of

agricultural labourers is very high in the entire eastern and southern parts of the State, as also over a wider area in the western part of the State.

### III

The proportion of agricultural labourers among the males in the age group 15 to 59 in 1961 varies from 28.91 per cent in Mirzapur to 0.32 per cent in Chamoli.<sup>8</sup> The proportion of agricultural labourers among the males in Uttar Pradesh (12.6 per cent) is seen to be lower than that for the total workers in agriculture (15 per cent).<sup>9</sup> This indicates that the participation rate of females in agricultural labour is higher than that for the males. This phenomenon has also been indicated by certain recent studies on participation of female workers in agricultural labour.<sup>10</sup>

The regions where the proportion of agricultural labourers was highest earlier undergoes some minor changes.<sup>11</sup> In the eastern region Azamgarh and Pratapgarh are excluded (though they are among the highest in the third quartile), and in the western region Bijnor, Naini Tal and Aligarh are included, while Saharanpur is excluded. However, if we consider districts in the third and fourth quartiles together the eastern region remains almost intact and the western region undergoes only minor changes.

The six hill districts still retain their position at the bottom of the ladder in terms of the proportion of agricultural labourers. The central region is diffused and two separate blocks emerge in place of one.<sup>12</sup>

(35-A)

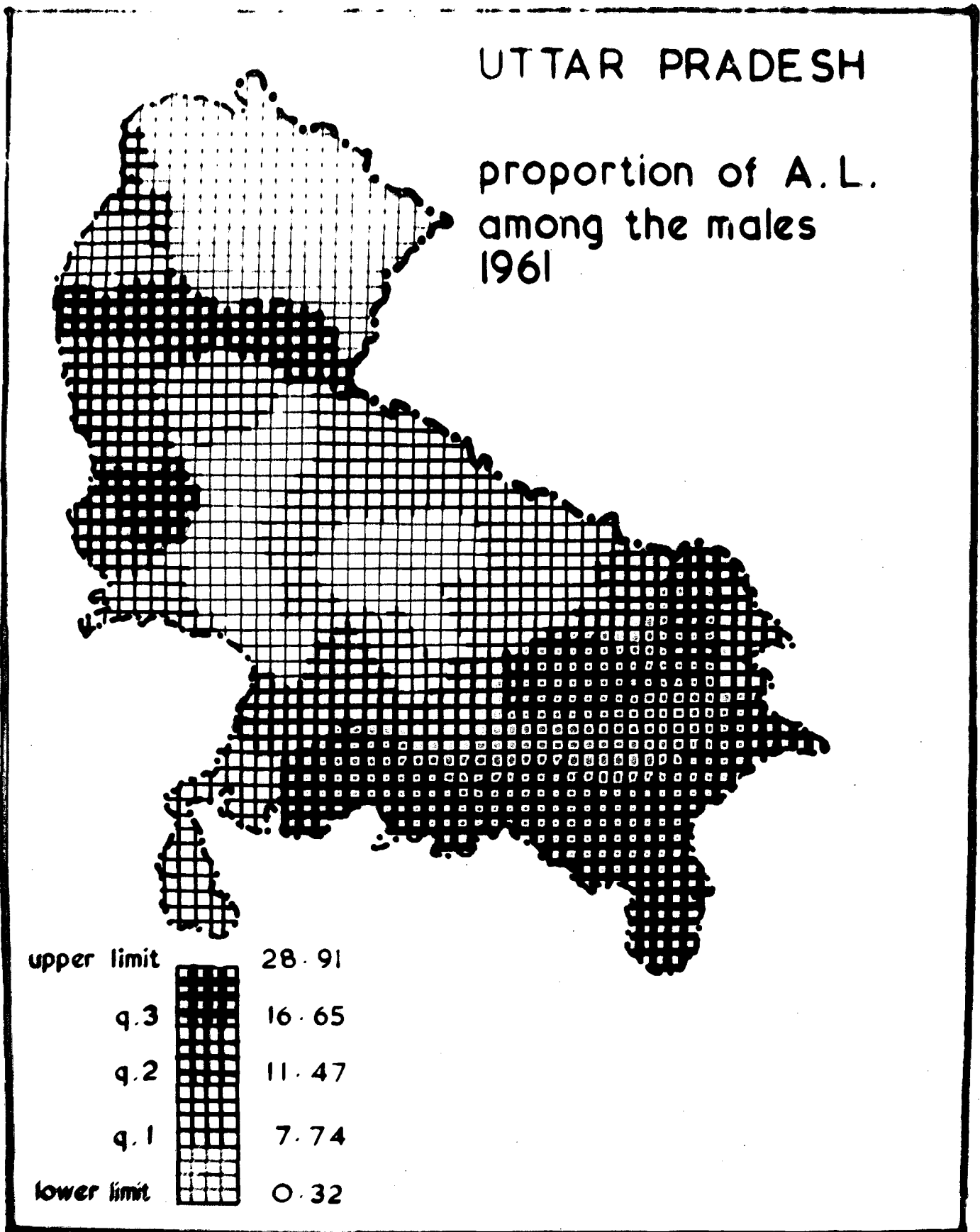


fig. 2

## IV

The proportion of agricultural labourers in Uttar Pradesh in 1971 varies from as high as 51.26 per cent in Mirzapur to less than one per cent in Tehri Garhwal.<sup>13</sup> The proportion for the whole State is 25.8 per cent which is considerably higher than the corresponding figure for 1961.

If one considers the male workers in agricultural in 1971, the range is slightly reduced. The highest proportion of agricultural labourers (42.4 per cent) is found in Saharanpur district in western Uttar Pradesh (Mirzapur follows closely behind with 41.3 per cent). The lowest proportion (0.64 per cent) is found in Chamoli district in the extreme north. The proportion of agricultural labourers in the State is 22.5 per cent, which is slightly less than the proportion for total workers in agriculture.

The eastern and south-eastern parts of the State form a compact block showing the highest proportion of agricultural labourers in the agrarian working force.<sup>14</sup> A comparison of the 1961 and 1971 data for males reveals that Deoria in the eastern and Saharanpur in the western parts of the State have found their places in the uppermost quartile replacing Faizabad and Aligarh. The Himalayan hill districts form a contiguous region where small scale family-farming predominates and very little hired labour is employed.

(36-A)

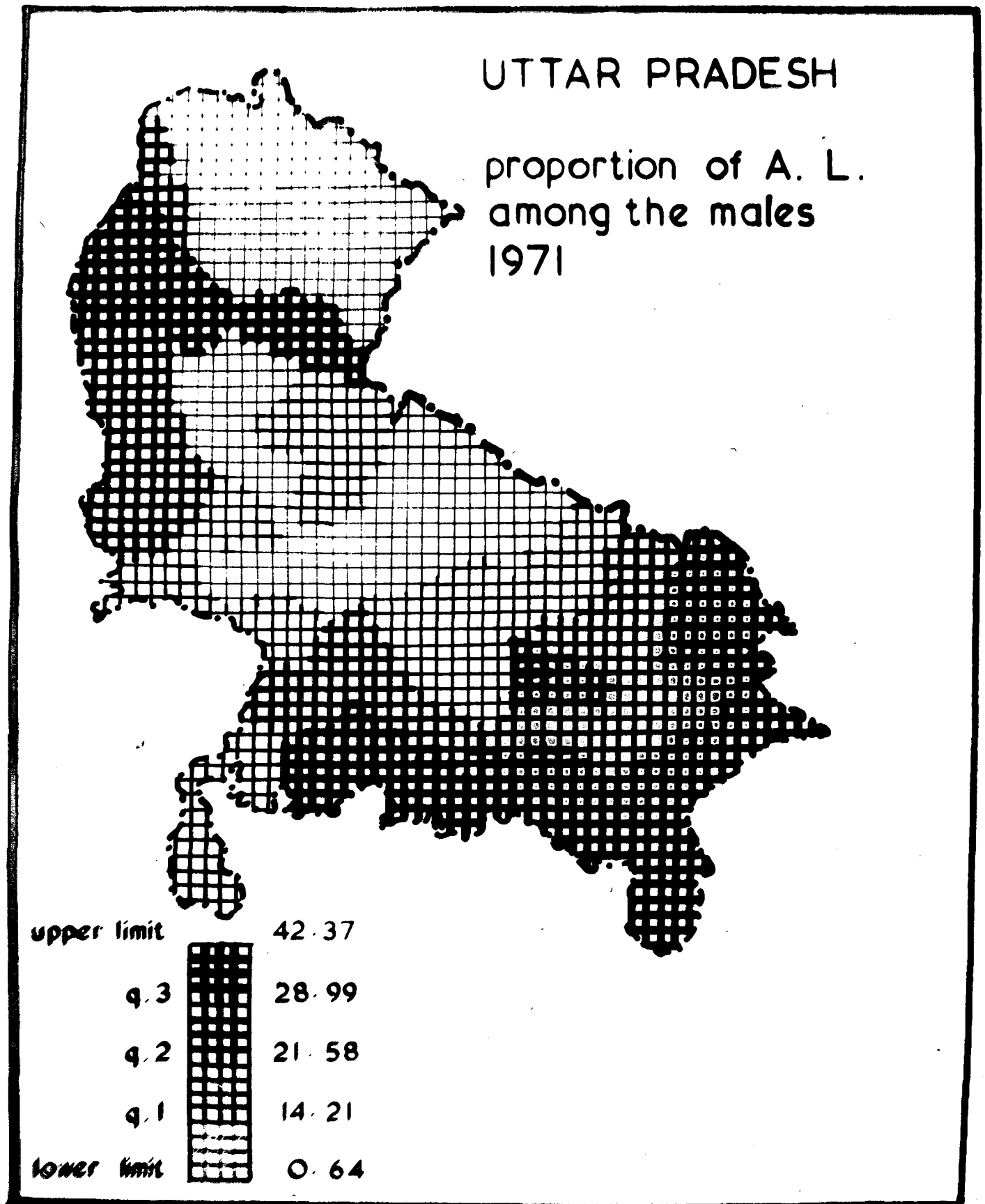


fig. 3

It was mentioned earlier<sup>15</sup> that three sets of growth rates have been calculated in order to locate the districts and regions where the growth of agricultural labourers during the decade 1961-71 has been very high. In using these growth rates one limitation should be kept in mind. In certain cases where the base values were small, the growth rates turn out to be too large. Thus, for example, in some of the Himalayan hill districts of Uttar Pradesh there seems to be a virtual transformation of the rural economy. This is not true. For instance, during 1961-71 the rate of growth of agricultural labourers in Chamoli has been of the order of 222 per cent<sup>16</sup>, while the proportion of agricultural labourers in this district remained below 1 per cent even in 1971. Similarly, in Mainpuri the rate of growth of agricultural labourers works out to be 218 per cent<sup>17</sup>, whereas in 1971 only about 14 out of every 100 workers in agriculture were agricultural labourers.

During the decade 1961-71, the rate of growth of agricultural labourers among the males in Uttar Pradesh has been 78.7 per cent. Regional variations are very great, the rate of growth being as high as 296 per cent in Saharanpur in western Uttar Pradesh to as low as 14 per cent in Rampur. In as many as ten districts (excluding the three Himalayan districts Almora, Garhwal and Chamoli) the rate of growth of agricultural labourers is more than 100 per cent.<sup>18</sup>



# UTTAR PRADESH

growth of male A.L.  
1961 - 1971

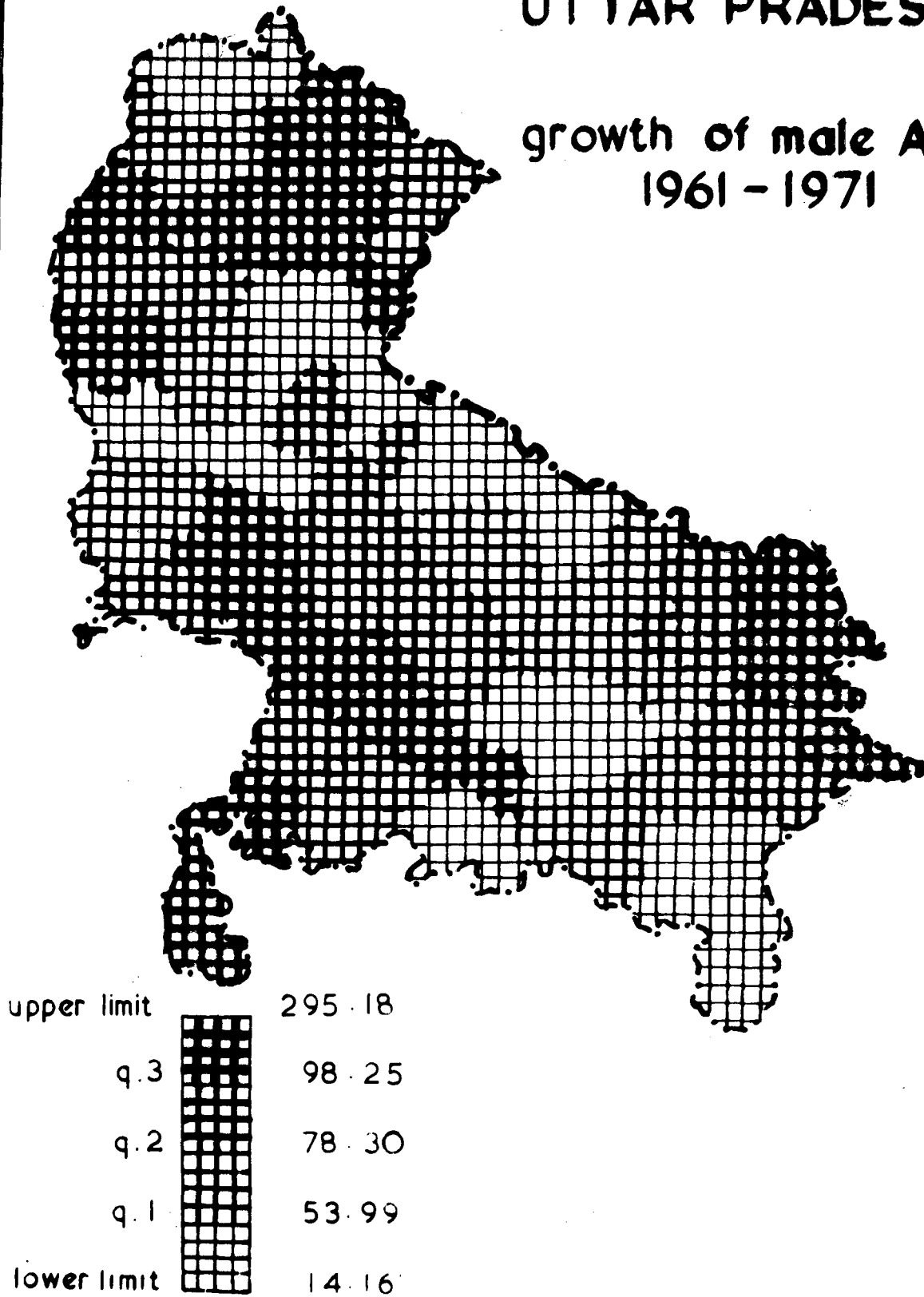


fig. 4

The rate of growth of agricultural labourers calculated by method II<sup>19</sup> is slightly more than 67 per cent. Saharanpur again has the highest growth rate (233.5 per cent) and Pratapgarh the lowest (9.5 per cent). Saharanpur is closely followed by Meerut, Bijnor and Muzaffarnagar. More than 100 per cent growth of agricultural labourers is recorded in 15 districts (excluding the four Himalayan districts Chamoli, Garhwal, Tehri Garhwal and Almora).<sup>20</sup> Nine out of these fifteen districts are in western Uttar Pradesh.

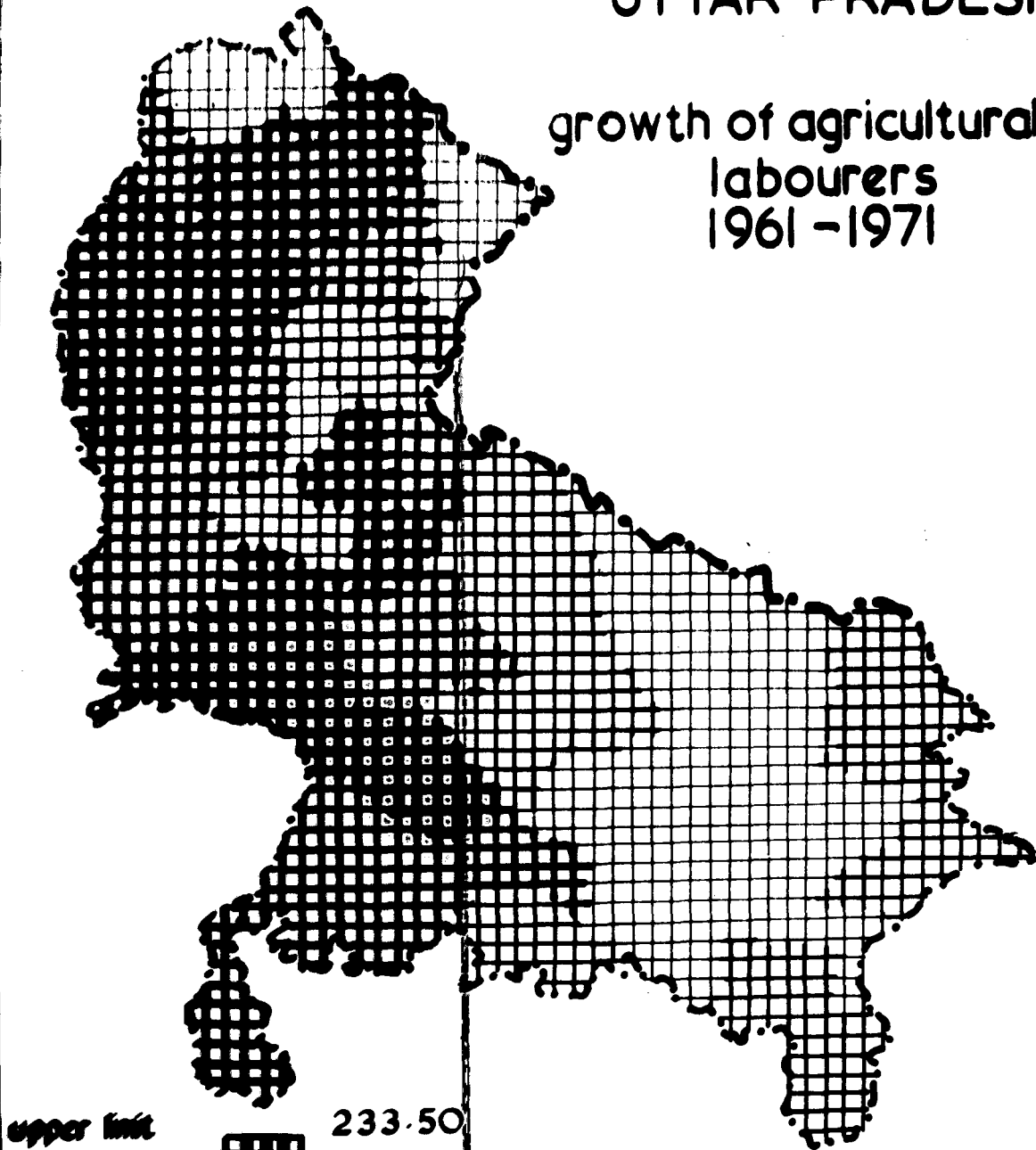
Method III gives a growth rate of 71.5 per cent. In fourteen districts (excluding the four Himalayan districts mentioned above) the proportion of agricultural labourers ~~less~~ has been doubled during the decade under review.<sup>21</sup>

A close examination of the spatial patterns reveals that the rate of growth of agricultural labourers is very high in the western part of Uttar Pradesh and diminishes as we move toward the east, although there are some exceptions to this rule.<sup>22</sup> The picture is very clearly brought out by map 5, based on the growth rates calculated by method II (Table VI), in which a big and continuous region appears in western Uttar Pradesh showing high rates of growth. This region includes Saharanpur, Muzaffarnagar, Bijnor, Meerut, Moradabad, Bulandshahr, Aligarh, Mathura, Agra, Etah, Mainpuri and Etawah which are in the western part of the State. On the other hand, the entire eastern and south-eastern parts of the State show low rates of growth.

(38-A)

# UTTAR PRADESH

growth of agricultural  
labourers  
1961-1971



upper limit		233.50
4.3		120.95
4.2		90.05
4.1		47.97
lower limit		9.49

fig. 5

The fact that the growth of agricultural labourers has been rapid in the western part of the state is corroborated by the growth indices calculated on the basis of the location quotients of 1971 and 1961. The highest increase in the employment of hired labour is recorded in Saharanpur, followed by Mainpuri, Etawah and Meerut. Bijnor and Etah also have relatively high growth indices.<sup>23</sup> What is noticeable, however, is that even with this method two eastern districts, Ballia and Deoria, and three hill districts, Almora, Garhwal and Chamoli, show a significant growth in agricultural labourers during the decade 1961 - 71.

## VI

On the basis of the foregoing analysis one can draw the following general conclusions :

First, the proportion of agricultural labourers is relatively higher in the eastern part of the state.

Second, the proportion of agricultural labourers is extremely low in the Himalayan hill districts of the state.

Third, during the decade 1961 - 1971, there has been a rapid growth of agricultural labourers in some of the western districts of the state.

There is no unique set of factors which can explain these regional variations. In fact one has to study different sets of socio-economic factors in order to explain these phenomena. This is proposed to be taken up in the next chapter.

N O T E S

1. C.I., 1961, vol. XV., part I-A (ii), General Report, p. 53.
2. Ibid., p. 54.
3. Ibid. Mirzapur is also hilly and afforested and only one-fourth of the area is cultivated. But in this area rainfall is plenty, and the kharif crop is good.
4. See Table I.
5. Ibid.
6. See Map I.
7. These are Bareilly, Budaun, Etah, Mainpuri, Etawah, Farrukhabad, Hardoi and Sitapur.
8. See Table II.
9. This is also true for 1971.
10. A.B.Mukherjee (1971) : 'Female Participation in Agricultural Labour in Uttar Pradesh : Spatial Variations, 1961'.

11. See Map II.
12. Ibid.
13. See Table III.
14. See Map III.
15. Chapter II, Section III- Methodology.
16. See Table VII.
17. Ibid.
18. See Table V.
19. Chapter II, Section III.
20. See Table VI.
21. See Table VII.
22. See Map IV. This map is based on the rates of growth calculated by method I and relates to Table V.
23. See Table VIII.

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## C H A P T E R - I V

### Analysis of Main Findings and Conclusion.

#### I

In the foregoing pages we have undeavoured to delineate the regional variations in the proportions of agricultural labourers in Uttar Pradesh in 1961 and 1971. In this chapter an attempt is being made to explain these variations. We begin by explaining the phenomenon of pauperisation in eastern Uttar Pradesh in section II, before going on to explain small scale family farming in the Himalayan hill districts in section III. In section IV we shall explain the rapid growth of agricultural labourers and proleterisation of agricultural workers in western Uttar Pradesh in terms of the introduction of new technology and the growing demand for hired labour.

#### II

A large part of eastern Uttar Pradesh was the domain of the Oudh nawabate till 1952 (when the Zamindari Abolition Act was put into effect)<sup>1</sup>. The peasantry was being continuously expropriated by the zamindars and money-lenders.<sup>2</sup> A large section of the peasantry was pauperised and thrown into the ranks of agricultural labourers. A vicious debt bondage kept them attached to big landowners and zamindars. The abolition of zamindari quickened the process of transformation of

tenants and sub-tenants into agricultural labourers.

Fluctuations in the prices of agricultural produce militated against the small farmer who had very little staying power and increased their debt burden.<sup>3</sup> The artisans were slowly, but surely, losing their traditional industry. Thus, the proportion of landless rural workers was continuously increasing. However, this was not accompanied by a parallel rise of modern industry in this region. In the absence of non-agricultural employment, therefore, large masses of pauperised and indebted rural workers were compelled to accept employment as agricultural labourers. The heavy pressure of population on land, as a consequence of high density of population and high proportion of workers in agriculture, has further worsened the situation.

The growth of agricultural labourers in this region has not been accompanied by any large scale modernisation of agriculture. Thus, on the whole, the demand generating factors have been relatively weak, compared to the forces of supply, and it is only natural to expect wages of agricultural labourers to be low.

Eastern Uttar Pradesh is industrially much backward compared to the western part of the state. Modern industries have grown mainly in Varanasi (Sahu Jain Chemicals), Mirzapur (Hindalco and Rihand Dam) and Allahabad (Triveni Structural). The remaining districts of Gorakhpur, Varanasi and Faizabad Divisions are industrially backward and, in fact, on the basis of 35 socio-



economic indicators of development the Census of 1961 put all of them in the lowest rung.<sup>4</sup> In 1954 there were only 174 registered factories in the Revenue Divisions of Gorakhpur and Varanasi, compared to 579 in Meerut and Agra Divisions.<sup>5</sup> In terms of employment in large scale industries, which is an indirect estimate of the level of industrial development, the position in 1960 was as follows :

Table - IV.1

Employment in Large Scale Industries, 1960

<u>Districts</u>	<u>No. of workers</u>	<u>Rank in State</u>
Deoria	10672	7
Varanasi	6739	10
Mirzapur	3062	18
Jaunpur	853	32
Ghazipur	732	34
Azamgarh	396	40
Ballia	-	49
Pratapgarh	-	50
Sultanpur	-	51
Kanpur	69248	1
Lucknow	18723	2
Meerut	16104	3
Agra	13793	5
Saharanpur	11278	6

Source : Large Industrial Establishments in India, 1960.  
Quoted by N.C.A.E.R., 'Techno-Economic Survey  
of U.P.' Table 44, pp. 267-68\_7

This table brings out the fact that employment opportunities in manufacturing industries are very limited in eastern Uttar Pradesh. Even in terms of employment in small scale industry, this part of the State is much behind the western part. The Census Commissioner of 1961 aptly pointed out that in respect of industrial development "...the centre of gravity has shifted from the East Plain to the West Plain."<sup>6</sup>

During the decade 1961-71, employment in industries other than household industries has increased in all the districts in the eastern part of the State, though in varying degrees. But the fall in employment in household industries has been much greater, and, hence the growth of other industries have not been able to absorb the surplus industrial workers. This "non-compensating industrial growth" has pushed the surplus labourers into the ranks of agricultural labourers and has led to further pauperisation in eastern Uttar Pradesh. The following table<sup>7</sup> will make our point clear. (The table is presented on the next page).

It is evident from the table that the growth of modern industry was too small to compensate for the decline of household industry. In Ballia, the decline in employment in household industry was more than 62 per cent, and overall decline in industrial employ-

T A B L E - IV.2

Changes in Industrial Employment in some  
Districts of Eastern U.P., 1961 and 1971

<u>Distt.</u>	<u>Workers in HHI*</u>		<u>Workers in OI**</u>		<u>Net changes</u>
	<u>1961</u>	<u>1971</u>	<u>1961</u>	<u>1971</u>	<u>(1961-71)</u>
Billia	50967	19116	4564	7134	
		(-31851)		(+2570)	-29281
Ghazipur	40603	20490	4835	7684	
		(-20113)		(+2849)	-17264
Varanasi	117257	101052	37553	49520	
		(-16205)		(+10757)	-5448
Mirzapur	34490	19577	14933	20476	
		(-14913)		(+6053)	-8860

\* Household industries.

\*\* Other industries.

ment was more than 57 per cent. The overall decline in industrial employment, both in absolute and in relative terms, has been much less in industrially more developed districts of Varanasi and Mirzapur.

One may question the comparability of 1961 and 1971 Census data again.<sup>8</sup> Changes in the definition of 'work' led to a decline in the number of workers in Uttar Pradesh from 28.85 m. in 1961 to 27.33 m. in 1971, a decline of 5.25 per cent. Compared to this, employment in household industry declined from 1.8 m. to 1.0 m. during the same period, - a decline of more <sup>than</sup> 44 per cent. One cannot, certainly, attribute this great decline only to a change in the definition of work. The point is that the trend of a decline in employment in traditional industry, larger than the growth of modern industry, is noticeable. This has pushed a section of the rural working force to seek employment as agricultural labourers, and led to further pauperisation in the eastern part of the State.

Another factor accounting for the high proportion of agricultural labourers in eastern Uttar Pradesh and contributing <sup>to</sup> its pauperisation is the high density of population and the consequent pressure on land. The following table reveals this fact. (The table is presented on the next page).

This table reveals that in eastern Uttar Pradesh, except Mirzapur which is hilly and afforested,

T A B L E IV.3

Density of Population in some Districts  
of Eastern U.P., 1961 and 1971.

	1961		1971	
	<u>Density</u> <u>(Sq.m.)</u>	<u>Rank in</u> <u>State</u>	<u>Density</u> <u>(Sq.Km.)</u>	<u>Rank in</u> <u>State</u>
Varanasi	1160	3	556	3
Deoria	1134	4	521	4
Jaunpur	1111	5	496	7
Azamgarh	1085	6	499	5
Billia	1074	7	498	6
Ghazipur	1015	9	459	11
Mirzapur	293	45	136	46
U.P.	648		300	

Source : Censuses of India, 1961 and 1971

the pressure of population on land is very great. The pressure on available cultivable land is revealed by the small average size of holdings. In 1961, the average size of household holding was 3.4 acres in Deoria, 3.5 in Jaunpur, 3.6 in Azamgarh, 4.6 in Varanasi, 4.9 in Ghazipur and 5.1 in Ballia, compared to 14 acres in Hamirpur. The average size for the State was 5 acres.<sup>9</sup>

Pauperisation in the eastern Uttar Pradesh is also revealed by the high incidence of indebtedness among agricultural labour households. A study conducted by R.S. Shrivastava<sup>10</sup> reveals the following picture of this region:

T A B L E - IV.4

Extent of Indebtedness Among Agricultural Labour Households in some Districts of Eastern U.P., 1955-56

<u>Distt.</u>	<u>Percentage of households in debt</u>
Varanasi	98.0
Mirzapur	98.2
Jaunpur	98.3
Ghazipur	98.3
Ballia	98.8
Deoria	96.5
Azamgarh	<u>98.9</u>
Eastrn U. P.	<u>98.0</u>

This indebtedness is often indissoluble and compels a person to work as an 'attached' labourer. Thus pauperisation and high proportion of agricultural labourers go together in eastern Uttar Pradesh.

It has been pointed out that the proportion of agricultural labourers is much higher among the scheduled castes than among the rest of the agricultural workers.<sup>11</sup> For example, in Varanasi the proportion of agricultural labourers was more than 71 per cent among the scheduled castes and only 16 per cent for the rest of the agricultural workers in 1961. The proportion of scheduled caste population being very high in this part of the State, it is only natural to expect a high proportion of agricultural labourers.

Besides, the chief crop of this area is paddy, which is labour intensive. Sometimes, as many as three harvests of it (aus, aman and boro) are taken.<sup>12</sup> This necessitates the use of hired labour during peak period, even when the average size of landholdings is quite small in this region. It may also be pointed out that male selective outmigration is very high in this region.<sup>13</sup> This also calls for the employment of wage labour for carrying on agricultural operations for the household.

This part of the State, in contrast with western Uttar Pradesh, has not witnessed the introduction of new technology to any significant extent. Thus, the growth of agricultural labourers has taken place in the background of an extremely slow and uneven development of modern industry and the modernisation of agriculture. The high proportion of agricultural labourers in eastern Uttar Pradesh is thus an indication of pauperisation of the farm population.

## II

The proportion of agricultural labourers is extremely low in the Himalayan hill districts of Uttar Pradesh owing to various economic, social and geographical factors.

There is a predominance of small holdings below 5 acres and family farming without the employment of wage-labour is the common practice. The distribution of cultivating households by size of land and the average size of holdings in this region are shown in the following table (the table is presented on the next page).

The Agricultural Census of U.P. 1970-71 reveals that there are no operational holdings above 10 hectares in Chamoli and Tehri Garhwal, and none above 20 hectares in Uttar Kashi and Garhwal. Even in Almora and Pithoragarh there are only a few



T A B L E IV.5

Percentage Distribution of Cultivating Households  
by size of Land Cultivated ( rural areas ) and  
Average size of Holdings, 1961 ( in acres )

1	2	3	4	5	6 ✓
Distt.	Below 5	5-10	10-30	30 and above	Average size
Uttar Kashi	85.6	12.0	1.7	0.09	3.5
Chamoli	93.1	6.0	0.4	0.03	2.3
Pithoragarh	97.8	1.8	0.25	0.02	1.4
Tehri Garhwal	94.2	5.0	0.5	0.01	2.1
Garhwal(*)	76.0	9.0	1.78	0.06	2.5
Almora	95.0	3.9	0.55	0.07	1.9
U. P.	65.7	21.8	10.85	1.05	5.0

( (\*) In Gashwal, there was a very large  
'unspecified' category which contained  
13.2 per cent of the cultivating  
households. )

[ Source : Columns 2 to 5 - CI, 1961, U.P.  
Part I-C (ii), Subsidiary Tables. Table  
B X 11.1 ( Compiled ) Column 6 - Census  
Atlas of U.P., 1961. ]

operational holdings above 20 hectares. Besides, as many as 88 per cent of the operational holdings are below 2 hectares (5 acres approximately)<sup>14</sup>, and land is more equally distributed. Thus, the holdings in this part of the State, both ownership and operational, are too small to require much employment of hired labour. Besides, in parts of this region a customary form of cooperation in agricultural activities is prevalent. This is locally known as "padiyal". On a given day when a household is to undertake ploughing, sowing, weeding or harvesting, relatives and neighbours are requested to assist the household. This household provides morning and afternoon food for the workmen. Payment (and acceptance) of wages in any form is not considered desirable. This is partly due to the fact that most of them, in terms of landed assets, have the same social status. This system of mutual co-operation greatly reduces the need for the employment of agricultural labourers on wage basis, even though every farm does employ some outside labour during peak periods.

The proportion of agricultural labourers in this region is low also because of massive outmigration of the males from this region.<sup>15</sup> Male workers, particularly the landless belonging to the scheduled castes, migrate to nearby districts in search of employment. Further, the density of population is the lowest in this region, as can be seen from the following table.

T A B L E - IV.6

Density of Population in the Himalayan Hill Districts of U.P., 1961 and 1971.

District	1961		1971	
	Density (sq. m.)	Rank	Density (sq.km.)	Rank
Almora	233	49	106	49
Garhwal	229	50	99	50
Tehri Garhwal	199	51	90	51
Pithoragarh	95	52	43	52
Chamoli	72	53	33	53
Uttar Kashi	41	54	19	54
U.P.	648		300	

[Source : Censuses of India 1961 & 1971]

As a result of the extremely low density of population, the number of persons seeking employment as labourers in agriculture is very low indeed.

The difficulties of cultivation in this part of the State are well-known. The percentage of cultivated area is very small, the highest being 24 in Chamoli and Garhwal (taken together) and the lowest, about 3.5, in Uttar Kashi and Tehri Garhwal (taken together)<sup>16</sup>. 'Guls' cut from small streams are the only source of irrigation. In 1964-65, the proportion of total irrigated area to total cultivated area ranged from as low as 2.2 per cent in Uttar Kashi and Tehri Garhwal to about 13 in Chamoli and Garhwal<sup>17</sup>.

The methods of cultivation vary from scratching of hills (known as 'katil' in Kumaon and 'katla' in Garhwal areas) to valley cultivation (known as 'talaon' in Kumaon and 'sera' in Garhwal).<sup>18</sup>

These explain why the proportion of agricultural labourers is extremely low in this region inspite of the fact that this is industrially the most backward region in the State.<sup>19</sup> The chief explanation for the low employment of labourers on wage basis, however, is to be found in family farming on small pieces of land.

#### IV

During the decade 1961-71, there has been a relatively rapid growth of agricultural labourers in western Uttar Pradesh and has resulted in the proletarianisation of the agricultural workers. This part of the State is fairly well developed industrially and, therefore, the non-availability of employment outside agriculture cannot serve as an important explanation for the transformation of rural workers into agricultural labourers. The explanation for this rapid transformation of the rural economy must be sought in the changes within agriculture that have been taken place during this period.

The green revolution has made a considerable headway in almost all districts of western Uttar Pradesh. This area, as well as Punjab, is sometimes

referred to as the heart centre of India's green revolution. The increasing use of high-yielding variety (HYV) seeds, fertilisers, pumpsets and tubewells and other farm machinery, including tractors, have greatly increased cropping intensity and production per unit of time and area. These have, in general, increased the demand for hired labour.

The proportion of irrigated area is quite high in western Uttar Pradesh and most of the irrigation is done by canals and tubewells. During the period under review there has been a considerable increase in irrigated area and, as a result, the intensity of cropping has increased. The following table shows the extent of increase in irrigation in Meerut Division during the period 1961-65 to 1969-70.

T A B L E - IV.7

Percentage Net Area Irrigated by Different Sources and the Percentage of Irrigated Area to Net Cultivated Area in Meerut Division ( 1964 - 65 to 1969 - 70 )

Year	Total Irrigated Area		% of Net Irrigated Area to Net Cultivated Area
	Canals and Tubewells	Other Sources	
64 - 65	75.14	24.86	57.00
69 - 70	81.00	19.00	68.52

( Source : Bulletin of Agricultural Statistics for U.P.)<sup>20</sup>

The increase in irrigated area is significant considering the fact that during the same period the percentage of net irrigated area to net cultivated area declined slightly in Varanasi Division.<sup>21</sup>

Western Uttar Pradesh has witnessed a great increase in investments in electrically powered pumps and tubewells, particularly since 1965. This can be evidenced from the following table :

T A B L E - IV.8

Investment in Electrically Powered (EP) Pumps and Tubewells

<u>Distt.</u>	<u>Value of EP units in 1970 (Rs./acre)</u>	<u>Increase since 1965 (Rs./acre)</u>
Aligarh	89	84
Saharanpur	78	72
Muzaffarnagar	128	76

√Source: Brian Lockwood, 'Patterns of Investment in Farm Machinery and Equipment, p. A-117.7

Compared to the large per acre investment in EP units and the increase over 1965 in these districts, the corresponding values for Allahabad are as low as 19 and 14.<sup>22</sup>

There has also been a considerable increase in the use of fertilisers and HYV seeds not only in Aligarh, the IADP district of the State, but also in most other districts in this region. In Meerut Division, for example, the use of nitrogenous, phosphatic and potash (N+P+K) fertilisers increased from 3.24 kg.

per acre in 1964-65 to 13.4 kg. per acre in 1969-70.<sup>23</sup>  
 The area under HYV wheat, as percentage of total area under wheat, increased from 5.6 to 38.5 during 1966-67 to 1969-70.<sup>24</sup>

In terms of tractorisation also, significant advance has been made in western Uttar Pradesh. A study by Brian Lockwood <sup>reveals</sup> that in terms of tractorisation, Saharanpur and Muzaffarnagar of Western Uttar Pradesh can be favourably compared with Ludhiana in Punjab.<sup>25</sup>

It is sometimes argued that the introduction of farm machinery, particularly tractors, reduces the employment of hired labour. Such apprehensions are not based on facts. Studies by Martin H. Billings and Arjan Singh for Punjab (1970)<sup>26</sup> and by N.C.A.E.R. for Muzaffarnagar (1973)<sup>27</sup> do not lend support to this argument.

The study of Brian Lockwood for Western Uttar Pradesh (1972) indicates that in fact the use of tractors is associated with an increase in the use of hired labour. In farms over 10 acres, employment of hired labour per annum was 13.6 days in tractorised ones and 12.2 days in others.<sup>28</sup> A study of Punjab by M.S. Randhawa and associates<sup>29</sup> also supports this view. In fact the use of mechanised appliances increases the intensity of cropping and also the production per unit of time and area. As a result, the demand

for hired labour also increases. This is true at least in the initial stages of mechanisation. It may be pointed out that the average size of household holding is relatively large in western Uttar Pradesh<sup>30</sup> which facilitates the use of farm machinery for agricultural operations.

The heavy investments in agriculture in western Uttar Pradesh, in terms of farm machinery and appliances, irrigation, fertilisers and HYV seeds, have greatly transformed the rural economy. On the one hand, there has been an increase in the concentration of the value of capital in the form of land.<sup>31</sup> On the other, the demand for wage labour has steadily increased. These have resulted in an increase in the wages of agricultural labourers.

During the period 1965-66 to 1971-72 the compound rate of growth of money wages of agricultural labourers in U.P. was 6.56 per cent. The increase in real wages was, however, only 1.42 per cent.<sup>32</sup> The increase in money and real wages is expected to be much greater in the western part of the State because of the fact that the demand for hired labour has increased considerably in this region. Besides, a study by Pranab Bardhan (1973)<sup>33</sup> points out that in 1970-71 pure wage earners in Uttar Pradesh got higher wages compared to those



small farmers who accepted agricultural wage employment besides cultivation. This might have induced a portion of the small and marginal farmers to accept employment as agricultural labourers.

All these factors substantiate the argument that a vigorous capitalist development is going on in this part of the State with increased proletarianisation of the agricultural workers. Indeed, big farms using tractors and tubewells and employing a considerable amount of hired labour are not an uncommon sight in this region.

It can be observed that during the period under review, there has been a considerable decline in the number of workers in household industry in western Uttar Pradesh, though it is not as large as that in the eastern part of the State.<sup>34</sup> The displaced artisans have joined the growing army of agricultural labourers, and, as a result, the number of agricultural labourers has considerably increased. The growing demand for hired labour has helped in their absorption in agriculture and brought about a discernible transformation in the rural economy.

#### V

Various factors are, therefore, responsible for variations in the proportions of agricultural labourers in Uttar Pradesh. The expropriation of the

peasantry, the rapid decline of household industry without a parallel rise of modern industry, excessive pressure of population on land and high degree of indebtedness are some of the factors that explain the high proportion of agricultural labourers and pauperisation of the rural masses in the eastern part of Uttar Pradesh. The high rate of growth of agricultural labourers in the western part of the State is the result of a growing demand for hired labour generated by the green revolution, investments in farm machinery and implements, fertilisers, etc. The heavy investments in agriculture indicate the rapid growth of capitalism and the proletarianisation of the farm workers. The extremely low employment of hired labour in the Himalayan hill districts is explained mainly by the predominance of small farms and family farming. The regional diversities are, therefore, so great that no generalised statement can be made for the State as a whole.

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19. In this region only Garhwal district  
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A P P E N D I C E S

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T A B L E - IProportion of Agricultural Labourers in Uttar Pradesh-1961(Districts arranged in descending order)

S.NO	NAME OF DISTRICT	PROPORTION
1.	Mirzapur	34.57
2.	Varanasi	29.46
3.	Sultanpur	27.69
4.	Ballia	25.63
5.	Allahabad	23.51
6.	Faizabad	23.25
7.	Banda	23.18
8.	Gorakhpur	23.05
9.	Muzaffarnagar	20.95
10.	Ghazipur	20.62
11.	Azamgarh	20.61
12.	Pratapgarh	20.53
13.	Saharanpur	19.89
14.	Hamirpur	19.14
15.	Deoria	18.87
16.	Naini Tal	18.75
17.	Rae Bareli	17.47
18.	Bijnor	17.17
19.	Aligarh	16.72
20.	Jaunpur	16.14
21.	Basti	15.51

Table I .... Contd.....

S.NO.	NAME OF DISTRICT	PROPORTION
22.	Fatehpur	15.00
23.	Gonda	13.44
24.	Bulandshahr	13.02
25.	Jalaun	12.76
26.	Kanpur	12.30
27.	Dehra Dun	12.04
28.	Mathura	11.73
29.	Pilibhit	11.11
30.	Bahraich	11.05
31.	Bara Banki	10.84
32.	Meerut	10.74
33.	Jhansi	10.71
34.	Rampur	10.10
35.	Agra	10.09
36.	Kheri	9.35
37.	Lucknow	8.32
38.	Unnao	8.31
39.	Shahjahanpur	7.97
40.	Moradabad	7.88
41.	Farrukhabad	7.49
42.	Bareilly	7.41
43.	Etah	6.76
44.	Sitapur	6.59
45.	Hardoi	6.18

Table I - continued.....



S.NO.	NAME OF DISTRICT	PROPORTION
46.	Budaun	6.06
47.	Etawah	6.02
48.	Mainpuri	4.96
49.	Uttar Kashi	1.02
50.	Pithoragarh	0.88
51.	Almora	0.69
52.	Garhwal	0.54
53.	Tehri Garhwal	0.32
54.	Chamoli	0.25
UTTAR PRADESH		15.03

Table I .... concluded.

T A B L E - II

Proportion of Agricultural Labourers Among the Males  
in the Age Group 15-59 in U.P. 1961.

(Districts arranged in descending order)

S.NO	NAME OF DISTRICT	PROPORTION
1.	Mirzapur	28.91
2.	Naini Tal	25.33
3.	Varanasi	24.40
4.	Muzaffar Nagar	21.46
5.	Sultanpur	21.27
6.	Allahabad	19.72
7.	Banda	19.71
8.	Hamirpur	17.95
9.	Ballia	17.63
10.	Gorakhpur	17.56
11.	Aligarh	17.56
12.	Ghazipur	17.14
13.	Bijnor	17.01
14.	Faizabad	16.65
15.	Pratapgarh	16.36
16.	Bulandshahr	16.32
17.	Rae Bareli	14.14
18.	Azamgarh	14.14
19.	Dehra Dun	13.49
20.	Fatehpur	13.17

Table II .... Cont.....

S.NO.	NAME OF DISTRICT	PROPORTION
21.	Deoria	13.15
22.	Jaunpur	13.03
23.	Jalaun	12.33
24.	Mathura	12.20
25.	Basti	12.12
26.	Meerut	11.67
27.	Kanpur	11.47
28.	Gonda	11.35
29.	Pilibhit	11.29
30.	Saharanpur	10.70
31.	Rampur	10.52
32.	Agra	10.41
33.	Bahraich	9.13
34.	Jhansi	9.03
35.	Kheri	8.88
36.	Bara Banki	8.88
37.	Moradabad	8.38
38.	Shahjahanpur	8.19
39.	Farrukhabad	7.93
40.	Unao	7.74
41.	Lucknow	7.72
42.	Bareilly	7.66
43.	Etah	7.02
44.	Sitapur	6.73
45.	Hardoi	6.39

Table II.... Contd....

S.NO.	NAME OF DISTRICT	PROPORTION
46.	Budaun	6.38
47.	Etawah	6.08
48.	Mainpuri	5.23
49.	Uttar Kashi	1.32
50.	Pithoragarh	1.24
51.	Garhwal	1.06
52.	Almora	0.99
53.	Tehri Garhwal	0.51
54.	Chamoli	0.32
	UTTAR PRADESH	12.60

Table II Concluded.

T A B L E - IIIProportion of Agricultural Labourers in Uttar Pradesh - 1971

S.NO.	NAME OF DISTRICT	PROPORTION
1.	Uttar Kashi	1.15
2.	Chamoli	0.83
3.	Tehri Garhwal	0.79
4.	Garhwal	1.63
5.	Pithoragarh	1.58
6.	Almora	2.02
7.	Naini Tal	28.81
8.	Bijnor	33.71
9.	Moradabad	13.88
10.	Budaun	9.49
11.	Rampur	12.13
12.	Bareilly	14.36
13.	Pilibhit	16.36
14.	Shahjahanpur	16.51
15.	Dehra Dun	22.38
16.	Saharanpur	42.71
17.	Muzaffarnagar	39.28
18.	Meerut	28.69
19.	Bulandshahr	23.54
20.	Aligarh	27.91
21.	Mathura	22.08
22.	Agra	19.96

Table III... contd....

S.NO.	NAME OF DISTRICT	PROPORTION
23.	Etah	15.05
24.	Mainpuri	13.99
25.	Farrukhabad	14.53
26.	Etawah	16.12
27.	Kanpur	25.63
28.	Fatehpur	31.41
29.	Allahabad	38.92
30.	Jhansi	22.95
31.	Jalaun	25.62
32.	Hamirpur	38.98
33.	Banda	35.79
34.	Kheri	13.84
35.	Sitapur	11.14
36.	Hardoi	12.74
37.	Unnao	16.38
38.	Lucknow	16.74
39.	Rae Bareli	25.48
40.	Bahraich	15.51
41.	Gonda	21.03
42.	Bara Banki	22.12
43.	Faizabad	31.96
44.	Sultanpur	35.91
45.	Pratapgarh	29.64
46.	Basti	28.64

Table III.....contd.....

S.NO.	NAME OF DISTRICT	PROPORTION
47.	Gorakhpur	44.79
48.	Deoria	35.36
49.	Azamgarh	33.93
50.	Jaunpur	28.47
51.	Ballia	47.10
52.	Ghazipur	37.20
53.	Varamasi	43.04
54.	Mirzapur	51.20
	UTTAR PRADESH	25.78

T A B L E - IVProportion of Agricultural Labourers Among  
the Males in U.P. - 1971

(Districts arranged in descending order)

S.NO.	NAME OF DISTRICT	PROPORTION
1.	Saharanpur	42.37
2.	Mirzapur	41.26
3.	Ballia	39.25
4.	Muzaffarnagar	38.73
5.	Gorakhpur	37.34
6.	Varanasi	35.90
7.	Bijnor	33.58
8.	Hamirpur	31.68
9.	Allahabad	31.14
10.	Ghazipur	30.56
11.	Sultanpur	29.67
12.	Banda	29.40
13.	Naini Tal	29.18
14.	Deoria	28.99
15.	Meerut	28.21
16.	Aligarh	27.81
17.	Azamgarh	26.38
18.	Fatehpur	26.11
19.	Faizabad	25.64
20.	Dehra Dun	23.87
21.	Kanpur	23.55



S.NO.	NAME OF DISTRICT	PROPORTION
22.	Bulandshahr	23.22
23.	Jalaun	23.16
24.	Pratapgarh	22.85
25.	Jaunpur	22.78
26.	Basti	22.35
27.	Mathura	21.58
28.	Rae Bareli	19.81
29.	Agra	19.66
30.	Jhansi	18.20
31.	Gonda	17.57
32.	Pilibhit	16.38
33.	Shahjahanpur	16.10
34.	Etawah	15.46
35.	Bara Banki	15.18
36.	Lucknow	15.16
37.	Etah	15.03
38.	Farrukhabad	14.44
39.	Bareilly	14.32
40.	Unmao	14.21
41.	Bahraich	13.98
42.	Mainpuri	13.89
43.	Moradabad	13.77
44.	Kheri	13.33
45.	Hardoi	12.37

Table ... IV .. contd ...

S.NO.	NAME OF DISTRICT	PROPORTION
46.	Rampur	12.01
47.	Sitapur	10.79
48.	Budaun	9.42
49.	Almora	2.55
50.	Garhwal	2.49
51.	Pithoragarh	2.13
52.	Uttar Kashi	1.83
53.	Tehri Garhwal	0.82
54.	Chamoli	0.64
	UTTAR PRADESH	22.52

Table .. IV ... concluded.

T A B L E - V

Growth of Agricultural Labourers Among The Males in  
U. P. - 1961 - 71.

( Method I, Districts arranged in descending order )

S.NO.	Name of District	Growth Rate
1.	Saharanpur	295.98
2.	Mainpuri	165.58
3.	Almora	157.58
4.	Etawah	154.28
5.	Meerut	141.71
6.	Garhwal	134.91
7.	Ballia	122.63
8.	Beoria	120.46
9.	Etah	113.80
10.	Gorakhpur	112.64
11.	Kanpur	105.28
12.	Jhansi	101.55
13.	Chamoli	100.00
14.	Fatehpur	98.25
15.	Bijnor	97.41
16.	Shahjahanpur	96.58
17.	Lucknow	96.37
18.	Hardoi	93.58
19.	Agra	88.86

Table V.... Contd. ....

S.NO.	Name of District	Growth Rate
20.	Jalaun	87.83
21.	Bareilly	86.95
22.	Azamgarh	86.56
23.	Basti	84.41
24.	Unnao	83.59
25.	Farrukhabad	82.09
26.	Muzaffar Nagar	80.48
27.	Ghazipur	78.30
28.	Dehra Dun	76.95
29.	Mathura	76.89
30.	Hamirpur	76.49
31.	Jaunpur	74.16
32.	Pithoragarh	71.77
33.	Bara Banki	71.72
34.	Moradabad	64.32
35.	Tehri Garhwal	60.78
36.	Sitapur	60.33
37.	Aligarh	58.37
38.	Allahabad	57.91
39.	Gonda	54.80
40.	Faizabad	53.99
41.	Bahraich	53.42
42.	Kheri	50.11
43.	Banda	49.16

Table V... Contd. ...

S.NO.	Name of Distirct	Growth Rate
44.	Budaun	47.65
45.	Varanasi	47.13
46.	Pilibhit	45.08
47.	Bulandshahr	42.28
48.	Mirzapur	42.72
49.	Rae Bareli	40.10
50.	Pratapgarh	39.67
51.	Sultanpur	39.49
52.	Uttar Kashi	38.64
53.	Naini Tal	15.20
54.	Rampur	14.16
	UTTAR PRADESH	78.73

Table V .... Concluded.

T A B L E - V IGrowth of Agricultural Labourers in Uttar Pradesh - 1961-71.( Method II, Districts arranged in descending order )

S.S. NO.	Name of District	Growth Rate
1.	Saharanpur	233.50
2.	Chamoli	225.72
3.	Meerut	222.49
4.	Mairpur	220.10
5.	Etawah	187.15
6.	Bijnor	166.20
7.	Muzaffar Nagar	158.80
8.	Etah	155.70
9.	Garhwal	145.30
10.	Kanpur	131.76
11.	Agra	128.90
12.	Shahjahanpur	128.41
13.	Bareilly	127.68
14.	Tehri Garhwal	120.95
15.	Hardoi	119.75
16.	Farrukhabad	114.96
17.	Almora	112.38
18.	Fatehpur	103.00
19.	Moradabad	101.65

Table VI.... Contd. ....

S.NO.	NAME OF DISTRICT	GROWTH RATE
20.	Hamirpur	99.73
21.	Dehra Dun	99.42
22.	Jhansi	98.56
23.	Aligarh	98.53
24.	Bulandshahr	95.87
25.	Mathura	95.22
26.	Jalaun	93.65
27.	Pilibhit	90.05
28.	Lucknow	89.48
29.	Unnao	88.94
30.	Ballia	85.12
31.	Sitapur	80.09
32.	Budaun	74.84
33.	Gorakhpur	68.16
34.	Kheri	66.12
35.	Ghazipur	62.66
36.	Deoria	61.59
37.	Bara Banki	53.94
38.	Naini Tal	53.57
39.	Banda	48.97
40.	Mirzapur	47.97
41.	Basti	47.03
42.	Rampur	46.86
43.	Azamgarh	45.69
44.	Allahabad	40.18
45.	Varanasi	36.50

S.NO.	Name of District	Growth Rate
46.	Gonda	35.58
47.	Jaunpur	35.13
48.	Pithoragarh	31.54
49.	Bahraich	31.01
50.	Faizabad	24.32
51.	Rae Bareli	23.27
52.	Uttar Kashi	22.75
53.	Sultanpur	16.73
54.	Pratapgarh	9.49
	UTTAR PRADESH	67.23

Table .. VI... concluded.



TABLE - VIIGROWTH OF AGRICULTURAL LABOURERS IN UTTAR PRADESH - 1961-71

(Method III, Districts arranged in descending order)

S.NO.	NAME OF DISTRICT	RATE OF GROWTH
1.	Chamoli	222.00 (*)
2.	Garhwal	201.85 (*)
3.	Almora	192.75 (*)
4.	Mainpuri	182.06
5.	Etawah	167.77
6.	Meerut	167.13
7.	Tehri Garhwal	146.88 (*)
8.	Etah	122.63
9.	Saharnpur	114.73
10.	Jhansi	114.29
11.	Bara Banki	111.07
12.	Fatehpur	109.40
13.	Kanpur	108.37
14.	Shahjahanpur	107.15
15.	Hardoi	106.15
16.	Hamirpur	103.66
17.	Lucknow	101.20
18.	Jalaun	100.78
19.	Agra	97.82
20.	Unnao	97.11
21.	Bijnor	96.33
22.	Gorakhpur	94.32
23.	Farrukhabad	93.99

Table ... VII ...contd...

S.NO.	NAME OF DISTRICT	RATE OF GROWTH
24.	Bareilly	93.79
25.	Mathura	88.24
26.	Muzaffarnagar	87.49
27.	Deoria	87.39
28.	Dehra Dun	85.88
29.	Basti	84.66
30.	Ballia	83.77
31.	Bulandshahr	80.80
32.	Ghazipur	80.41
33.	Pithoragarh	79.55
34.	Jaunpur	76.39
35.	Moradabad	76.14
36.	Sitapur	69.04
37.	Aligarh	66.93
38.	Allahabad	65.55
39.	Azamgarh	64.63
40.	Budaun	56.60
41.	Gonda	56.47
42.	Banda	54.40
43.	Naini Tal	53.65
44.	Pilibhit	49.68
45.	Mirzapur	48.28
46.	Kheri	48.02

Table ... VII ..contd...

S.NO.	NAME OF DISTRICT	RATE OF GROWTH
47.	Varamasi	46.10
48.	Rae Bareili	45.85
49.	Pratapgarh	44.37
50.	Bahraich	40.36
51.	Faizabad	37.46
52.	Sultanpur	29.69
53.	Rampur	20.10
54.	Uttar Kashi	12.75
	UTTAR PRADESH	71.52

(\* ) Growth rates not comparable

T A B L E - VIIIGROWTH OF AGRICULTURAL LABOURERS IN U.P. - 1961-71

(Method IV - Ratio of Location Quotients)

S.NO.	NAME OF DISTRICT	GROWTH INDEX
1.	Uttar Kashi	0.762
2.	Chamoli (*)	1.120
3.	Tehri Garhwal	0.900
4.	Garhwal (*)	1.375
5.	Pithoragarh	0.918
6.	Almora (*)	1.685
7.	Naini Tal	0.644
8.	Bijnor	1.104
9.	Moradabad	0.917
10.	Budaun	0.826
11.	Rampur	0.639
12.	Bareilly	1.046
13.	Pilibhit	0.811
14.	Shahjahanpur	1.100
15.	Dehra Dun	0.991
16.	Saharanpur	2.212
17.	Muzaffarnagar	0.423
18.	Meerut	1.347
19.	Bulandshahr	0.795
20.	Aligarh	0.888
21.	Mathura	0.988
22.	Agra	1.057

Table ... VIII...contd..

S.NO.	NAME OF DISTRICT	GROWTH INDEX
23.	Etah	1.191
24.	Mainpuri	1.494
25.	Farrukhabad	1.016
26.	Etawah	1.429
27.	Kanpur	1.149
28.	Fatehpur	1.110
29.	Allahabad	0.884
30.	Jhansi	1.131
31.	Jalaun	1.051
32.	Hamirpur	0.991
33.	Banda	0.834
34.	Kheri	0.846
35.	Sitapur	0.906
36.	Hardoi	1.083
37.	Unnao	1.026
38.	Lucknow	1.098
39.	Rae Bareli	0.721
40.	Bahraich	0.862
41.	Gonda	0.867
42.	Bara Banki	0.963
43.	Faizabad	0.864
44.	Sultanpur	0.781
45.	Pratapgarh	0.781

S.NO.	NAME OF DISTRICT	GROWTH INDEX
46.	Basti	1.031
47.	Gorakhpur	1.194
48.	Deoria	1.233
49.	Azamgarh	0.959
50.	Jaunpur	0.971
51.	Ballia	1.245
52.	Ghazipur	0.998
53.	Varanasi	0.822
54.	Mirzapur	1.076

\* Growth co-efficients not comparable.

Table VIII....concluded.

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