Chapter VI

INTER-SECTORAL WAGE DIFFERENTIALS IN THE DISTRICTS OF GUJARAT

Introduction:

Inter-Sectoral wage differentials refer to manufacturing / agricultural wage differentials. The discussion on wage differentials rarely goes beyond the inter-industry wage relationship. However the inter-sectoral wage differential assumes special significance as it is expected to play a functional role in allocating labour between industry and agriculture in the process of industrialisation. Under the conditions of full employment of resources an increase in demand for labour by industry can be met on the payment of attractive remuneration of wages. In other words larger the inter-sectoral wage differential, more workers will be induced to move from agriculture to industry. However it has been shown that inter-sectoral wage differences may not perform the allocative function.[1] On the other hand in a developing economy like that of India, inter-sectoral wage differential has to be looked at from a special angle. In such an economy, industry

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[1] Parsons H.L. Impact of Fluctuations of National Income on Agricultural Wages and Employment, Cambridge, Massacheuts, Harward University Press, 1952, pp.42-43. The study shows the inverse relationship between inter-sectoral wage differential and labour mobility. Migration to city increases with narrowing of wage differential and it falls with widening of wage differential. However this inverse correlation was insignificant.

is not likely to face any shortage of labour (labour in its basic form as drawn from agriculture) due to the population pressure on land and hence industry should be faced with unlimited labour supply.[2] This should mean that there would exist only 'equalising differential' between industrial wage and average wage in agriculture. On the other hand it has been shown by the studies of individual countries and regions that despite the labour surplus, the real industrial wage has risen[3] in manycountries. The Japanese[4] experience is that the inter-sectoral wage differential tends to widen or narrow as aggregate demand decreases or increases and/or as net migration from agriculture decreases or increases. In other words a fall in the aggregate demand for labour was associated with a rise in inter-sectoral wage differential. It would show a decrease in the net migration of labour from agriculture etc.

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[2]Lewis W.A. Economic Development with Unlimited Supplies of Labour. Reprinted in A.N. Agarwal and S.P. Sing, The Economics of Under Development, Oxford University Press, 1963, p.409.

[3]Turner H.A. Wage Trends, Wage Policies and Collective Bargaining: the problem of under developed countries, Cambridge University Press, 1965, p.12. Also the author's article on "The Determination of General Wage Level - A World Analysis or Unlimited Labour for ever" The Economic Journal, December, 1970.

[4]Taira Koji. "The Inter-Sectoral Wage Differential in Japan 1881-1959". Journal of Farm Economics, May 1962. The coefficient of correlation between per capita real national income and inter-sectoral wage differential (ratio of industrial wage to agricultural wage) for 1883-1914 was $r = -0.810$. However in the post war period no clear relationship was observed between the inter-sectoral wage differential and real per capita national income.

In India practically no attempt has been made to make a systematic study of the state of inter-sectoral wage differentials. Such an effort particularly at lower regional level will encounter many limitations in respect of the availability and comparability of data and hence the search for economic rationale for the prevalence of particular levels of inter-sectoral wage differentials and for their behaviour pattern overtime will not be complete. However the examination of the available data from various angles and aspects will definitely enable to indicate a broad but firm pattern both in the level and trend of inter-sectoral wage differentials. This itself would become guide to the understanding of wider implications of inter-sectoral wage differentials. The present chapter aims at this objective.

Inter-sectoral wage differential is measured by taking industrial wage as ratio of agricultural wage. Higher the industrial wage relative to agricultural wage, greater will be the inter-sectoral wage differential and vice-a-versa. The industrial wage rates are for calander years from January to December (1960, 1961 etc.) The agricultural wage rates are for agricultural year from July to June (1960-61, 1961-62 ect.)

Size of Inter-Sectoral Wage differential:

The industrial wage will have to be higher than agricultural wage. Because in the first place the manufacturing activity is normally concentrated in urban areas and the cost

of living in urban areas is higher than in rural areas. Moreover a rural migrant will have to make psychological[5] adjustment in the new urban environment. There will be greater disutility of working more intensively and also greater discipline of factories as compared to easy going life in villages. So the industrial wage has to be high enough to compensate the rural migrant worker for all such factors. According to W.A. Lewis[6] the gap between the industrial wage and average wage in agriculture has to be 30 per cent to 50 per cent. Turner[7] also wants this wage differential to be high enough to compensate the worker for all the factors which Lewis mentions though he does not quantify the gap. However an international survey[8] has shown that "agricultural wage rates seldom attain much more than one half, are often only one half and occasssionally even only one third of an average industrial wage rate." In other words the industrial wage is normally twice or sometime three times of agriculture wage and it is rare that the differential is reduced to one third. Due to the prevalence

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[5]For the discussion of the various factors, See: Lewis, W.A. Op.Cit., p.410. See also: his Development Planning, Unwin University Books, 1966. p.92.

[6]Ibid., p.410.

[7]Turner H.A. Prices, Wages and Income Policies for Industrially Developed Countries. International Labour Organization.

[8]Howard Louise E. Labour in Agriculture - An International Survey, 1935, p.204.

of such a wide gap, often it is felt that, the workers employed in manufacturing industry constitute a privileged class. These workers get much higher wage while their counterpart in agriculture get much lower wage and there exists sizable unemployment and under-employment. In other words the industrial wage does not seem to depend either on wage paid to labourer in agriculture or on the abundant labour supply available for work.

In the present chapter we have examined inter-sectoral wage differentials in different districts within the state of Gujarat. The levels of development in industry and agriculture in the districts, as already shown, differ widely and hence the wage relationship between industry and agriculture assumes special significance.

To begin with it will be appropriate to examine how agricultural wage rates among the districts are related to their corresponding industrial wages. (These are average daily gross industrial wage rates of districts). Because, if the agricultural wage functions as reserve price of labour supplied to industry the districts which have high agricultural wage rates will also have high industrial wage rates. In other words the inter-sectoral wage differentials would be low and would not differ much in such cases. With a view to ascertain this relationship coefficients of rank correlation were calculated between district industrial and agricultural wage rates for 16 districts for the period 1960-61 to 1967-68. These are shown in table VI-1.

Table VI-1

Coefficients of Rank Correlation Between District Industrial and Agricultural Wage Rates for 16 districts: 1960-61 to 1967-68

Year	Coefficient of Rank Correlation
1	2
1960-61	+ 0.0030
1961-62	+ 0.1618
1962-63	+ 0.1324
1963-64	+ 0.1295
1964-65	+ 0.1427
1965-66	+ 0.0398
1966-67	+ 0.1530
1967-68	+ 0.0692

Source: Table II-2 and Table IV-3.

Note: Industrial wage rates are for calander year i.e. 1960, 1961 etc. upto 1967. These are for workers earning less than Rs.400/- per month.

Table VI-1 reveals that for each year during the period 1960-61 to 1967-68, there is no relationship between agricultural wage and industrial wage in the 16 districts of Gujarat. It is very interesting to note from table II-2 that generally most of the districts of the Saurashtra region i.e. Rajkot, Jamnagar, Junagadh, Surendranagar and Amreli occupy low ranks in industrial wages but are in the forefront so far as the levels of agricultural wages are concerned. In the same way

the districts like Ahmedabad, Surat and Baroda are industrialised and have high ranks for industrial wages but they occupy very low ranks so far the agricultural wages are concerned. This divergent trends would have an impact on the inter-sectoral wage differentials in the districts. In order to know the nature and magnitude of inter-sectoral wage differentials we have presented in table VI-2 the ratio of average daily district industrial wage (total wages paid ÷ mandays worked in all industries taken together in a district) to district agricultural wage of adult male casual agricultural labourer in 16 districts for the year 1960-61.

Table VI-2

Ratio of Average daily district Industrial Wage (gross) to Daily Agricultural Wage in 16 districts in 1960-61

District	Ratio of Average daily industrial wage to Daily agriculture wage
1	2
1. Ahmedabad	3.28
2. Surat	3.03
3. Baroda	3.49
4. Kaira	2.29
5. Mehsana	2.45
6. Broach	3.11
7. Panchmahals	2.20
8. Sabarkantha	1.30

contd...

Table VI-2 (contd.)

District	Ratio of Average daily industrial wage to Daily agriculture wage
1	2
9. Banaskantha	1.93
10. Amreli	1.15
11. Jamnagar	1.34
12. Junagadh	1.33
13. Rajkot	1.37
14. Bhavnagar	1.47
15. Surendranagar	1.83
16. Kutch	0.80

Source: Table II-2 and Table IV-3.

Note: The industrial wage rates are in respect of the workers earning less than Rs.400/- per month.

It can be seen that on the one hand in districts like Ahmedabad, Baroda, Surat, Broach, factory worker on an average earned three times the wage of casual agricultural labourer. While in the districts like Kutch or Amreli almost there is no gap between industrial and agricultural wage rates. This necessiates further probing into the various facets of level and trend in inter-sectoral wage differentials. The need for such comprehensive study becomes all the more revelant as the industrial development has received special emphasis since the formation of the separate state of Gujarat in 1960. This can

be easily judged from the programmes and policy pronouncements from time to time. On the other hand many modern industries in chemicals, including fertilizers, petroleum refinery etc. have been developing rapidly after the discovery of oil in the state. The oil has given a new dimension to the industrial growth in the state. It would therefore be very interesting to study the impact which these developments have made on the inter-sectoral wage differentials. In specific terms the present chapter examines the level and trend in inter-sectoral wage differentials during 1955-56 to 1964-65 and during 1960-61 to 1967-68.

Approach and Limitations:

To analyse inter-sectoral[9] wage differentials we have used aggregative weighted average industrial wage. This daily wage is computed as,

$$\text{Average Daily Industrial Wage} = \frac{\text{Total wages}}{\text{Total mandays worked}} .$$

These are for all the industries taken together in a district. Figures of total wage bill and total mandays are arrived at by totalling up the mandays worked and wages paid in each unit in

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[9]For the general approach used to analyse inter-sectoral wage differentials, See: Reynolds L.G. and Taft C.H. "The Evolution of Wage Structure. New Haven, Yale University Press, 1956, pp.327-331.

each industry in the district. Thus the district average industrial wage rate is the weighted wage rate, weights being the mandays and total wages in each unit in each industry in the district.

In any economy, between industry and agriculture and even within industry there will have marked differences in terms of capital per worker, labour productivity, skill composition of labour force, elasticity of demand for the production and also the institutional factors like trade unions, wage Boards etc. All these factors will have their varying influences on the wages paid in industry. Thus we can say that the aggregative average industrial wage rate is a hotch potch of many factors. On the other hand agriculture is a relatively homogeneous occupation from the view point of labour employed in it. The labour employed in agriculture is mainly unskilled. Due to these reasons a question might arise as to whether it is appropriate to compare industrial workers' aggregate average wage with the wage paid in agriculture? The data on wages of workers which we propose to use for the purpose of comparison with agricultural labourers' wage have specific advantage in this respect. These data are collected under the Payment of Wages Act of 1936 and relate to the workers belonging to a particular range of wages i.e. those earning less than Rs.200/- per month or less than Rs.400/- per month only. Secondly all big and small factories are covered under the Act and hence a particular bias which might

enter in considering only large or only small factories is also eliminated. We have used the average industrial wage rate of workers earning less than Rs.200/- per month. However the separate data on wages of workers earning less than Rs.200 per month were available only upto 1964. Hence we have considered the period 1955 to 1964 to analyse the level and trend in inter-sectoral wage differentials. To obtain the idea of the trend, we have used the data on wages of workers earning less than Rs.400/- per month for the period 1960-61 to 1967-68 also.

We have then examined the level and trend in inter-sectoral wage differentials by taking particular industries at "Three or Four digit" levels. The objective being to compare the agricultural wage with the wages paid in industries, which employ by and large only unskilled labour. Hence we have taken industries such as Manufacture of Edible oils except hydrogenated oils (industry code 209a), Manufacture of grain mill products (industry code 205) and Stone dressing, crushing etc. (industry code 339a). Industry like Manufacture of tobacco (industry code 220) could not be considered because it is only in a few districts.

We have presented in table VI-3 the inter-sectoral wage differentials in different districts in the state of Gujarat for the period 1955-56 to 1964-65. The period is chosen on the consideration of the availability of data on industrial wages of workers earning less than Rs.200/- per month.

Table VI-3

Average Daily Industrial Wage Rate to Daily Agricultural Wage (inter-sectoral wage differential) in 16 districts of Gujarat: 1955-56 to 1967-68

District	Year												
	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Ahmedabad	2.32	2.69	3.33	3.00	2.97	3.28	2.92	2.91	2.71	2.62	-	-	3.09
2. Surat	2.82	3.12	2.96	2.95	2.25	3.03	3.25	3.03	2.81	2.84	-	-	3.07
3. Baroda	2.67	2.73	2.82	2.93	3.36	3.49	2.89	2.61	2.64	2.99	-	-	2.89
4. Kaira	2.06	2.23	2.08	2.01	2.11	2.29	2.24	2.81	2.16	2.42	-		2.38
5. Mehsana	2.14	2.52	2.31	2.56	2.45	2.45	2.19	2.18	2.14	2.32	-	-	2.57
6. Broach	2.74	1.53	2.29	1.44	2.94	3.11	2.63	2.49	2.24	2.51	-	-	2.85
7. Panchmahals	2.23	2.06	2.39	2.17	2.06	2.20	2.14	1.88	1.90	1.72	-	-	1.63
8. Sabarkantha	1.47	1.23	1.51	1.60	1.35	1.30	1.27	1.19	0.98	1.12	-	-	1.74
9. Banaskantha	1.33	2.02	2.35	2.05	1.97	1.93	1.83	1.93	1.86	2.09	-	-	1.24
10. Amreli	1.54	1.54	1.54	1.25	1.53	1.15	1.58	1.10	1.16	1.40	-	-	1.66
11. Jamnagar	-	-	-	-	-	1.34	1.28	1.18	1.46	1.48	-	-	1.24
12. Junagadh	-	-	-	-	-	1.33	1.38	1.39	1.40	1.27	-	-	1.72
13. Rajkot	-	-	-	-	-	1.37	1.30	1.50	1.34	1.38	-	-	1.46
14. Bhavnagar	-	-	-	-	-	1.47	1.70	2.11	1.79	2.06	-	-	2.09
15. Surendranagar	-	-	-	-	-	1.83	2.08	1.80	1.62	1.49	-	-	1.77
16. Kutch	-	-	-	-	-	0.80	1.37	1.17	1.42	1.33	-	-	1.39

Source: Table II-2 and Appendix IV-4.

Note: i) District industrial wage rates are of workers earning less than Rs.200/- per month.

ii) District industrial wage rates are of calander years i.e. 1955, 1956 etc. Agricultural wage rates are for agricultural years i.e. 1955-56, 1956-57 etc.

iii) Ratios for the year 1967-68 are estimated ratios.

It will be seen from Table VI-3 that in three districts i.e. Ahmedabad, Baroda and Surat there is a wide gap between the average wage of a factory earner and the daily agricultural wage. In these districts, for the period as a whole an industrial worker got about 2.75 times or more of the average wage in agriculture. In Kaira, Mehsana, Broach and Panchmahals districts the average daily industrial wage was 2 to 2.5 times that of agricultural wage while on the other hand there were six districts i.e. Sabarkantha, Amreli, Jamnagar, Junagadh, Rajkot and Kutch in which the industrial wage rate does not exceed agricultural wage rate by more than 50 per cent. The trend in inter-sectoral wage differentials is not consistently in one direction. This is true for most of the districts. For example it will be seen that in majority of the districts the inter-sectoral wage differentials have a widening tendency upto 1960-61, and then have narrowed down to some extent by 1964-65. Again they have widened by 1967-68. Only in Panchmahals, Sabarkantha and Banaskantha districts, there was a more or less continuous fall in inter-sectoral wage differentials.

Since the wages data of workers earning less than Rs.200 per month were not separately available from 1965, it was not possible to know the inter-sectoral wage differential (with respect of industrial workers earning less than Rs.200/- per month) after 1964. However it was possible to obtain an idea

about its likely level. We have estimated its level for 1967-68. This was attempted on the basis of the trend of inter-sectoral wage differentials between 1960-64 (the years for which separate data were available). They are calculated by taking the industrial wage rates of workers earning less than Rs.200 per month and also wage rates of workers earning less than Rs.400/- per month. It was assumed that these two series of inter-sectoral wage differentials would have the same trend between 1965-1967 as that observed during 1960-1964. The details of the procedure of estimating the level of inter-sectoral wage differential (with industrial wage rates of workers earning less than Rs.200/- per month) in 1967-68 are given in Appendix VI-1. It will be observed that the estimated levels of inter-sectoral wage differentials with respect of wages of workers earning less than Rs.200/- per month for the year 1967-68 (shown in column 14 in table VI-3) are higher than in 1960-61 or 1964-65 for most of the districts. This shows that inter-sectoral wage differentials have widened during the period 1964-65 to 1967-68. Considering the levels of inter-sectoral wage differentials between 1960-61 and 1967-68 we also find that they are higher in 1967-68. In order to obtain the proper focus we have presented in Table VI-4 the three year averages of inter-sectoral wage differentials for 1955-56 to 1957-58 and 1962-63 to 1964-65 along with the estimated level of inter-sectoral wage differentials in 1967-68.

Table VI-4

Average Inter-Sectoral Wage Differentials in 16 districts: 1955-56 to 1957-58, 1962-63 to 1964-65 and 1967-68

District	1955-56 to 1957-58	1962-63 to 1964-65	1967-68*
1	2	3	4
1. Ahmedabad	2.78	2.74	3.09
2. Surat	2.99	2.89	3.07
3. Baroda	2.74	2.75	2.89
4. Kaira	2.12	2.46	2.38
5. Mehsana	2.32	2.21	2.57
6. Broach	2.19	2.08	2.85
7. Panchmahals	2.23	1.83	1.63
8. Banaskantha	1.90	1.96	1.24
9. Amreli	1.54	1.22	1.66
10. Sabarkantha	1.40	1.10	1.74
11. Jamnagar	-	1.37	1.24
12. Junagadh	-	1.35	1.72
13. Rajkot	-	1.41	1.46
14. Bhavnagar	-	1.99	2.09
15. Surendranagar	-	1.63	1.77
16. Kutch	-	1.31	1.39

Source: Derived from Table VI-3.

*Estimated levels.

Table VI-4 highlights the trends in inter-sectoral wage differentials in the districts. Between 1955-56 to 1964-65 the inter-sectoral wage differentials have narrowed down and from 1964-65 it has widened. Considering the entire period 1955-56 to 1967-68, the inter-sectoral wage differentials show widening for most of the districts.

Alternatively the direction of the trend in inter-sectoral wage differentials in the districts can be analysed in respect of wage of less than Rs.400/- per month for the period 1960-61 to 1967-68. The level of wage differentials will be obviously higher as compared to the wage differentials computed by using the industrial wage rates of workers earning less than Rs.200/- per month. The differences in levels between them would depend on the proportion of mandays and wages of workers earning Rs.200/- per month and more but less than Rs.400/- per month in the total of mandays and wages. In other words if the proportion of workers earning Rs.200/- or more but less than Rs.400/- in the total is very small, the industrial wage rates of workers earning less than Rs.200/- and less than Rs.400/- per month will not be significantly different from each other and hence the inter-sectoral wage differentials calculated on the basis of these two categories of industrial wage rates will not differ much from each other. The way in which these proportions have changed, would have the impact on the trend also. In Appendix VI-2 we have shown these proportions in different

districts during 1960 to 1964. It will be noted from Appendix VI-2, that the proportions of wages and mandays worked by workers earning Rs.200/- per month and more but less than Rs.400/- per month in the total of wages and mandays worked by all workers constitute small part of their respective totals in 1960. Even in 1964, they accounted for small proportions. However in relative terms these proportions were higher in 1964 than those in 1960. This would exercise some downward effect on the estimated inter-sectoral wage differentials (of 1967-68). Table VI-5 shows the ratio of industrial wage of workers earning less than Rs.400/- per month to agriculture wage during the period 1960-61 to 1967-68.

Table VI-5

Ratio of Average daily Industrial Wage (of workers earning less than Rs.400/- per month) to Daily Agricultural Wage in 16 districts: 1960-61 to 1967-68

District	Year							
	1960-61	1961 62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
1	2	3	4	5	6	7	8	9
1. Ahmedabad	3.40	3.05	3.06	2.86	2.80	3.37	2.98	3.30
2. Surat	3.10	3.38	3.21	2.99	3.10	3.27	3.42	3.38
3. Baroda	3.70	3.09	2.83	2.86	3.28	3.42	3.98	3.20
4. Kaira	2.35	2.31	2.33	2.27	2.61	2.75	2.77	2.61
5. Mehsana	2.53	2.27	2.27	2.23	2.44	2.58	2.59	2.71
6. Broach	3.15	2.68	2.52	2.28	2.56	2.67	2.87	2.90
7. Panchmahals	2.32	2.23	1.96	2.02	1.85	1.85	1.89	1.78
8. Banaskantha	1.98	1.87	1.95	1.94	2.17	1.89	1.95	1.85
9. Sabarkantha	1.53	1.28	1.22	1.00	1.13	1.03	1.21	1.26
10. Amreli	1.39	1.58	1.14	1.27	1.42	1.70	1.79	1.68
11. Jamnagar	1.50	1.50	1.50	1.81	1.63	1.46	1.57	1.55
12. Junagadh	1.38	1.46	1.45	1.47	1.36	1.49	1.75	1.81
13. Rajkot	1.42	1.38	1.57	1.41	1.43	1.35	1.57	1.51
14. Bhavnagar	1.51	1.94	2.14	1.84	2.15	2.21	2.23	2.09
15. Surendranagar	1.93	2.12	1.85	1.57	1.52	1.55	1.91	1.83
16. Kutch	0.88	1.48	1.27	1.58	1.48	1.62	1.56	1.61

Source: Table II-2 and Table IV-3.

Note: i) District industrial wage rates are for calander years i.e. 1960, 1961 etc.

ii) Agricultural wage rates are for agricultural years i.e. 1960-61, 1961-62 etc.

It will be seen from table VI-5 that the levels of inter-sectoral wage differentials are somewhat higher due to the inclusion of workers earning Rs.200/- per month and more but less than Rs.400/- per month. However, this is an overall impact on the districts. Moreover the inter-sectoral wage differentials have narrowed in almost all the districts upto 1964-65 (similar trend can be observed with respect to the wages of less than Rs.200/- per month upto 1964-65 Table VI-3). These have widened thereafter by 1967-68. In Panchmahals, Banaskantha and Sabarkantha we find more or less continuous tendency to narrow down. (For these districts similar tendency was noted for wages less than Rs.200/- per month Table VI-3). Thus the inter-sectoral wage differentials between industry and agriculture calculated either with respect to wages of workers earning less than Rs.200/- per month or earning less than Rs.400/- per month, have shown similar trend i.e. have widened upto 1960-61 narrowed between 1960-61 to 1964-65 and once again widened between 1964-65 and 1967-68. Considering the entire period 1960-61 to 1967-68 inter-sectoral wage differentials have somewhat widened.

In order to highlight the overall conclusion the above findings of trend and level of inter-sectoral wage differentials in districts during 1955-56 to 1967-68 in respect of workers in industry earning less than Rs.200/- per month and during 1960-61 to 1967-68 in respect of wages of workers earning less than Rs.400/- per month are classified into broad groups according to the level of inter-sectoral wage differentials prevailing in them in different periods. This classification is shown in Table VI-6.

Table VI-6

Classification of 16 districts According to the most Frequently Prevailing Level of Inter-Sectoral Wage Differentials During 1955-56 to 1967-68

Ratio of Industrial wage to agricultural wage	Districts				
	1955-56 to 1959-60	1960-61 to 1964-65	1967-68	1960-61 to 1964-65	1965-66 to 1967-68
1	2	3	4	5	6
1. Less than 1.50	Sabarkantha, Amreli.	Sabarkantha, Amreli, Jamnagar Junagadh, Rajkot, Kutch.	Sabarkantha, Jamnagar, Rajkot, Kutch.	Sabarkantha, Amreli, Jamnagar Junagadh, Rajkot, Kutch	Sabarkantha, Jamnagar, Rajkot.
2. 1.50 to 1.74 3. 1.74 to 1.99		Panchmahals, Surendranagar, Banaskantha, Bhavnagar.	Panchmahals, Amreli, Junagadh, Surendranagar, Banaskantha	Banaskantha, Bhavnagar, Surendranagar.	Panchmahals, Banaskantha, Amreli, Junagadh, Surendranagar, Kutch
4. 2.0 to 2.24 5. 2.25 to 2.49	Banaskantha, Kaira, Mehsana Broach, Panchmahals.	Broach, Kaira, Mehsana.	Bhavnagar, Kaira.	Kaira, Mehsana, Panchmahals.	Bhavnagar.
6. 2.50 to 2.99	Surat, Baroda.	Ahmedabad, Baroda, Surat.	Baroda, Mehsana, Broach.	Baroda.	Kaira, Mehsana, Broach.
7. 3.00 and above	Ahmedabad	-	Ahmedabad, Surat.	Ahmedabad, Baroda, Surat.	Ahmedabad, Baroda, Surat.

Source: Derived from Table VI-3 and Table VI-5.

The level as well as trend of inter-sectoral wage differentials are brought into sharp focus by table VI-6. The information given in the first four columns relates to the inter-sectoral wage differentials computed by using the industrial wages of workers earning less than Rs.200/- per month. It relates to the period of 1955-56 to 1959-60 (Col.2) and 1960-61 to 1964-65 (Col.3). In Column 4 classification is based on the estimated levels of inter-sectoral wage differentials. In Column 5 and Column 6 the inter-sectoral wage differentials are computed by using the industrial wage of workers earning less than Rs.400/- per month which relates to the period 1960-61 to 1964-65 and 1965-66 to 1967-68.

It would be seen that during 1960-61 to 1964-65, in the districts of Ahmedabad, Baroda and Surat the inter-sectoral wage differentials were confined to the group 2.50 and above during 1960-61 to 1964-65. Six districts, most of them belonging to the Western region (Saurashtra), have shown low wage differentials. Same holds true even with respect to wages of workers earning less than Rs.400/- per month for the period 1960-61 to 1964-65 and 1965-66 to 1967-68.

Widening tendency can be seen in both the sets. For example the districts like Kaira, Broach, Mehsana and Surat have shifted into the next higher wage differential groups in 1967-68 as compared to in 1955-56 to 1960-61 or 1960-61 to 1964-65. Similarly many districts which had the inter-sectoral

wage differentials of less than 1.50 have now entered the next higher group.

It would therefore be of interest to know whether these differences in the inter-sectoral wage differentials are caused by low agricultural wage rates as compared to industrial wage rates or inter-sectoral wage differentials are low because both industrial and agricultural wages are high or both are low. In order to ascertain this relationship we have examined below, the ranks of districts as per the levels of industrial and agricultural wages. In order to highlight the issue we have taken (out of 16 districts) 6 districts which had shown highest inter-sectoral wage differentials and the other 6 districts which had the lowest inter-sectoral wage differentials in 1964-65. If the rank is between I to VIII we have called it "High" and if it is between IX to XVI it is called "Low". Table VI-7 shows the district industrial and agricultural wage rates and their ranks (among the 16 districts).

Table VI-7

Average Daily Gross Industrial Wage Rates of Workers earning less than Rs.200/- per month and Agricultural Wage Rates and their Ranks in the districts showing High and Low Inter-sectoral Wage differentials: 1964-65

District	Six Districts with 'High' inter-sectoral wage differentials				District	Six Districts with 'Low' inter-sectoral wage differentials			
	Industrial wage	Rank	Agricultural wage	Rank		Industrial wage	Rank	Agricultural wage	Rank
1	2	3	4	5	6	7	8	9	10
Ahmedabad	6.34	I	2.42	VI	Rajkot	3.94	X	2.86	III
Baroda	4.73	III	1.58	XIII.5	Surendranagar	3.91	XI	2.63	V
Surat	4.49	V	1.58	XIII.5	Junagadh	4.28	VIII	3.37	I
Kaira	4.45	VI	1.84	XII	Amreli	3.74	XIII	2.67	IV
Broach	3.82	XII	1.52	XV	Kutch	3.06	XIV	2.30	VII
Mehsana	5.08	II	2.19	VIII	Sabarkantha	2.29	XVI	2.04	X

Source: Table VI-3 and Table II-2, Appendix IV-4

Note: "High" inter-sectoral wage differential is when the ratio of industrial wage to agricultural wage is 2.25 and above, "Low" is when the ratio is less than 1.50.

It will be seen from table VI-7 that the districts which have shown "High" inter-sectoral wage differentials have very high industrial wage rates. Except Broach, they occupy ranks I to VI (Col.3). On the other hand these same districts have very low positions (among the 16 districts) so far as agricultural wage rates are concerned i.e. XII to XV. Ahmedabad and Mehsana have shown relatively high ranks of agricultural wage rates. However the industrial wage rates in these two districts are much higher. These two districts are respectively first and second so far the levels of district industrial wages are concerned. Thus it can be argued that the excessively high inter-sectoral wage differentials in the districts in Gujarat are caused by very high industrial wage rates on the one hand and very low agricultural wage rates on the other in the same districts.

In respect of districts with low inter-sectoral wage differentials we notice a peculiar pattern. The low inter-sectoral wage differentials are caused neither by low industrial and low agricultural wage rates nor by high industrial and high agricultural wage rates. This is seen clearly from Column 8 and Column 10 of table VI-7. It will be noted that almost all the 6 districts with low inter-sectoral wage differentials, have very low ranks on the basis of ranks according to industrial wage rates in 16 districts in the state in that year. At the same time these districts except

Sabarkantha (showing low inter-sectoral wage differentials) occupy high ranks so far the levels of agricultural wage rates are concerned. Thus the low inter-sectoral wage differentials are the result of high agricultural wage rates and low industrial wage rates in these districts.

Relation Between Inter-Sectoral Wage differential and Extent of Industrialisation:

On the one hand we have the districts of Ahmedabad, Baroda, Surat, Broach, Kaira and Mehsana which have more or less continuously high inter-sectoral wage differentials. (Ratio of average district gross industrial wage to daily agricultural wage in the district being 2.25 and above). While on the other hand we have districts of Rajkot, Surendranagar, Junagadh, Amreli, Kutch and Sabarkantha which have low inter-sectoral wage differentials almost throughout the period. This is true whether we calculate inter-sectoral wage differentials on the basis of industrial wage rates of workers earning less than Rs.200/- per month or less than Rs.400/- per month. Considering the average daily factory employment as index of industrialisation, rank correlation coefficient was calculated between the average daily factory employment and levels of inter-sectoral wage differentials in 16 districts for 1960-61 and 1967-68. For the year 1960-61, the rank correlation coefficient was $r = + 0.6530$ and for 1967-68, $r = + 0.6276$. These are significant at 5 per cent level of significance with 14 d.f. This

shows that the inter-sectoral wage differentials have remained large among the more industrialised districts. Moreover no change seems to have taken place in this relationship during the period 1960-61 to 1967-68.

Proportions of Industrial and Agricultural Labourers covered Under Different Levels of Inter-Sectoral wage Differentials:

The above analysis has revealed that the inter-sectoral wage differentials in six out of 16 districts are very low and in the other 6 they are very high. These districts with high inter-sectoral wage differentials are Surat, Ahmedabad, Baroda, Kaira, Mehsana and Broach. However it is pertinent to examine the question as to what are the proportions of industrial and agricultural labourers involved in high and low inter-sectoral wage differentials. It is revealing to note that the large part of the industrial and agricultural labourers happens to be concentrated in the districts which have shown high inter-sectoral wage differentials all along the period. Of the total number of agricultural labourers in the state, the census of 1961 shows that 69.83 per cent are in 6 districts of Ahmedabad, Baroda, Surat, Broach, Kaira and Mehsana. These same districts accounted for 83.1 per cent of the total employment in factories in the state in 1960. Thus the fact that 6 districts have low inter-sectoral wage differentials is not significant. Because they together do not account for more

than 17 per cent of industrial labourers and not more than 30 per cent of agricultural labourers in the state. Thus the districts which have high inter-sectoral wage differentials are also the districts which accounted for most of the industrial and agricultural labourers in the state. The implications are clear. Most of the industrial labourers in the state earn on an average two and a half times or more of the average wage paid to casual agricultural labourers in the state. In other words most of the industrial workers are concentrated in high wage districts while a majority of agricultural labourers are to be found in low agricultural wage paying districts.

Do these high inter-sectoral wage differentials show lack of proper functioning of labour markets between industry and agriculture in these districts? This question can be answered only if we have examined the inter-sectoral wage differentials between agriculture and industries which are comparable to agriculture in terms of labour employed. Inter-sectoral wage differentials, calculated by using district average gross industrial wage, show only the gross inter-sectoral wage differentials because the district average gross industrial wage is influenced by factors like the composition of industries, skill-mix of the labour force, institutional factors, like trade unions, productivity etc. The labour employed in agricultural sector is not only unskilled but also unorganised. Hence it is necessary to compare the wages paid to a labourer employed in

an industry which mainly employs unskilled labourers and the payment of dearness allowance and trade unions are also almost non-existent. Reynolds and Taft[11] have compared the earnings of farm labour with the earnings of labour employed in road building industry and found that high rural urban wage differentials still existed. In India the All India Second Agricultural Labour Inquiry Report[12] gives the comparison between the wage of an adult male casual labourer employed in agriculture and wages paid (minimum fixed, highest, and lowest) in industries such as manufacture of grain mill products (industry code 205), stone dressing and crushing etc. (industry code 339a), labour employed in mining etc.

In the present study we have taken the following three industries for comparing wages between industry and agriculture in the districts:

(1) Manufacture of grain mill products (industry code 205).

(2) Manufacture of Edible oils except hydrogenated oils (industry code 209a)

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[11] Reynolds and Taft. Op.Cit., pp.326-329. Reynolds and Taft have given series of average hourly earnings of farm labourers and common labour employed in road building industry. It covers the period 1929 to 1954. Barring a few years (1944-1948) after the Second World War, the wage differentials of the magnitude of 100 per cent have persisted.

[12] Second Agricultural Labour Enquiry Report (1956-57), Ministry of Labour and Employment, Government of India, 1960. pp.127-131.

(3) Stone dressing and crushing etc. (industry code 339a).

These industries, it is plausible to assume, employ mainly unskilled labour force. Moreover they are spread in majority of the districts, though in terms of the employment provided they are not of equal importance in different districts. We have shown in table VI-8 the inter-sectoral wage differentials by using the wages earned by workers earning less than Rs.200/- per month in these industries. These wage rates are given in Appendix VI-3. The inter-sectoral wage differentials are computed by using three year moving averages of industrial and agricultural wage rates. Three year moving averages are used in order to smoothen out the random variations. The average of 1966 is of two years 1966 and 1967. While the wage of 1967 is the single year wage rate.

Table VI-8

Industrial Wage Rates in Three Industries expressed as Ratios of Agricultural Wage Rates in districts of Gujarat: 1955-56 to 1967-68

District	Industry code	Year												
		1955-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Ahmedabad	205	1.48	1.44	1.41	1.44	1.41	1.41	1.37	1.35	1.40	1.40	1.43	1.30	1.32
	209a	2.10	2.23	2.03	1.60	1.28	1.22	1.23	1.19	1.33	1.57	1.58	1.49	1.18
	339a	1.62	1.69	1.48	1.15	0.85	0.76	1.00	1.05	1.14	1.12	1.12	1.02	0.97
2. Baroda	205	2.02	2.10	2.02	1.98	1.94	1.68	1.61	1.66	1.93	2.07	2.10	1.93	2.01
	209a	2.09	1.91	1.56	1.48	1.53	1.71	1.69	1.60	1.78	1.95	1.99	1.91	1.75
	339a	1.62	1.45	1.35	1.39	1.37	1.19	1.22	1.20	1.24	1.15	1.17	1.16	1.19
3. Surat	205	-	1.44	1.32	1.37	1.44	1.59	1.54	1.49	1.89	1.50	1.43	1.47	1.31
	209a	1.83	1.66	1.55	1.46	1.54	1.69	1.69	1.80	1.80	1.89	1.81	1.86	1.76
	339a	-	-	1.36	0.97	1.29	1.24	1.70	1.31	1.30	1.23	1.45	1.45	1.74
4. Kaira	205	0.98	0.89	0.90	0.99	1.04	1.06	1.09	1.11	1.16	1.13	1.09	1.02	1.00
	209a	1.52	1.46	1.38	1.28	1.27	1.27	1.22	1.16	1.13	1.36	1.43	1.54	1.40
	339a	1.14	1.12	0.91	0.99	1.02	1.15	1.15	1.13	0.98	1.16	1.12	1.07	0.98
5. Mehsana	205	-	-	1.30	1.28	1.20	1.09	1.03	1.00	1.08	1.14	1.00	1.17	1.17
	209a	-	-	2.52	2.01	1.64	1.49	1.56	1.41	1.55	1.57	1.49	1.36	1.17
	339a	-	-	-	-	-	-	-	-	-	-	-	-	-

Contd...

Table VI-8 (contd.)

District	Industry code	Year												
		1955-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6. Panchmahals	205	2.13	2.10	2.19	2.20	2.11	2.06	1.96	1.85	1.76	1.79	1.79	1.87	-
	209a	1.94	1.83	1.84	1.80	1.91	1.87	1.93	1.67	1.58	1.78	2.03	1.97	1.93
	339a	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Sabarkantha	209a	1.74	1.75	1.72	1.47	1.33	1.22	1.19	1.21	1.24	1.21	1.17	1.16	1.29
8. Jamnagar	209a	-	-	-	-	-	-	-	1.23	1.32	1.32	1.26	1.29	1.30
	339a	-	-	-	-	-	-	-	0.98	1.06	0.95	0.95	0.92	0.97
9. Rajkot	209a	-	-	-	-	-	-	-	1.23	1.19	1.24	1.24	1.29	1.23
	339a	-	-	-	-	-	-	-	0.80	0.70	0.68	0.79	0.88	1.02
10. Junagadh	209a	-	-	-	-	-	-	-	0.98	1.06	1.07	1.17	1.17	1.20
	339a	-	-	-	-	-	-	-	0.88	0.84	0.89	0.90	0.99	-
11. Bhavnagar	209a	-	-	-	-	-	-	-	1.42	1.64	1.70	1.65	1.55	1.52
	339a	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Appendix VI-3 and Table II-2 for agricultural wage rates.

Note: i) Wage rates are taken as three year moving averages.

ii) Industry wage rates are for calander year 1955, 1956 etc. Agricultural wage rates are for agricultural year i.e. 1955-56 etc.

iii) Wage rates are of workers earning less than Rs.200/- per month upto 1964. From 1965 they are of the workers earning less than Rs.400/- per month.

It will be noted from table VI-8 that except in the districts of Baroda, Surat and Panchmahals, the inter-sectoral wage differentials (industrial wage rates expressed as ratio of agricultural wage rates) in the districts of Gujarat do not generally exceed 50 per cent. In other words if the differentials are computed on the basis of the average wage paid in comparable industries, they are only equalising in nature. However the relatively high wage differentials, even with respect to comparable industries like manufacture of edible oil and manufacture of grain mill products in the districts of Baroda, Surat and Panchmahals, highlight a specific point. Factors operating within the agricultural economy of the region also have an important bearing on the level of inter-sectoral wage differentials. The inter-sectoral wage differentials are high not because the wage rates in the industry like Manufacture of Edible oils in these districts are higher than those in other districts but, because of the fact that agricultural wage is much lower as compared to that in other districts. It is largely the existing pressure[13] of population on land that explains the wide gap. While the agricultural wage has remained at very low level, the industrial wage is not driven to such low level. We find that a relatively high proportion of

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[13] Schultz T.W. Agriculture in an Unstable Economy, New York, McGraw Hill, 1945. p. For the detailed discussion on the socio-economic and demographic factors causing inter-sectoral wage differentials. See: Reynolds L.G. and Taft C.H. Op.Cit., pp.330 and 331.

agricultural workers in the state is concentrated in the districts of Surat, Baroda and Panchmahals.

Relationship Between Inter-district Inter-sectoral wage differentials and Inter-district differentials in Industrial and Agricultural wages:

In the foregoing analysis it has been shown that if the wages of adult male casual labourers in agriculture are compared with the wages paid to unskilled labour employed in comparable industries like Manufacture of grain mill products (industry code 205), Manufacture of Edible oils except hydrogenated oils (industry code 209a) and Stone dressing and crushing (industry code 339a), inter-sectoral wage differentials are quite low (i.e. Industrial wage as a ratio of agricultural wage generally does not exceed 50 per cent in most of the districts). Following Lewis hypothesis, it can be said that 50 per cent wage differential between industry and agriculture will be only "Equalising wage differential". This is shown by the fact that ratio of industrial wage to agricultural wage (for the above mentioned three industries) has been around 1.5 or less in most of the districts and for majority of the years during the period 1955-56 to 1967-68.

Under given conditions, the movement of labour from agriculture to industry, will be easier within the same district than across the districts. The demographic and socio-economic

conditions prevailing in each district will affect in a similar way the wage rates both in agriculture and in industries employing similar labour such as Manufacture of Edible oils except hydrogenated oils (industry code 209a). Hence the wage differentials between agriculture and such comparable industries within a district would be expected to be lower than the regional wage differentials in the same industry among the districts. In other words the inter-district inter-sectoral wage differentials would be expected to be lower than the regional wage differential in particular industry such as Manufacture of Edible oils except hydrogenated oils etc. In order to obtain the empirical verification of the above mentioned theoretical reasoning, we have presented in table VI-9 the variations of regional and inter-district inter-sectoral wage differentials. Variations are measured by coefficients of variations. These are analysed on the basis of inter-sectoral and inter-district wage differentials in the same three industries i.e. Manufacture of Edible oils except the hydrogenated oils (industry code 209a), Manufacture of grain mill products (industry code 205) and Stone dressing, crushing etc. (industry code 339a).

Table VI-9

Inter-district Variations in Inter-sectoral wage differentials and in Industrial and Agricultural Wage Rates: 1962-67

Year	Manufacture of edible oils except hydro-genated oils (industry code 209a)		Manufacture of grain mill products (industry code 205)		Stone dressing, crushing etc. (industry code 339a)		Inter-district variations in agricultural wages	
	Inter-district variation (c.vs.)*	Inter-district inter-sectoral variation (c.vs.)	Inter-district variation (c.vs.)	Inter-district inter-sectoral variation (c.vs.)	Inter-district variation (c.vs.)	Inter-district inter-sectoral variation (c.vs.)	16 districts (c.vs.)	11 districts (c.vs.)
1	2	3	4	5	6	7	8	9
1962	15.89	18.55	13.70	22.95	15.44	17.05	24.80	19.21
1963	18.74	18.38	14.65	24.25	19.96	22.63	20.63	20.59
1964	17.57	19.52	16.89	24.52	19.71	18.89	25.69	21.07
1965	15.37	20.50	20.97	28.33	14.97	20.23	26.25	17.14
1966	15.52	19.35	17.00	25.48	16.22	19.59	24.44	20.95
1967	14.11	18.88	23.17	28.29	17.54	26.60	22.54	19.27

Source: Table VI-8 and Table II-6.

*c.vs. - are coefficients of variations.

Note: i) The inter-district and inter-sectoral wage differentials are calculated by using the Three year moving averages of Industrial and Agricultural wage rates. Since Three years moving averages are used, the average for 1966 will be the average of two years and of 1967 it will be the wage rate of 1967 only.

ii) The variations in Agricultural wages relate to two sets i.e. 16 and 11 districts.

iii) The Industrial wage rates used to calculate inter-sectoral wage differentials are of the workers earning less than Rs.200/- per month upto 1964. The wage rates of 1965 and 1966 and 1967 are of workers earning less than Rs.400/- per month.

It will be seen that the inter-district (regional) variations in wages in Manufacture of Edible oils except hydrogenated oils (industry code 209a), Manufacture of grain mill products (industry code 205) and in Stone dressing, crushing etc. (industry code 339a) are very low. The variations in agricultural wage rates are low if we take 11 districts most of which are from the Gujarat region of the state. However, if all the 16 districts are considered it would be found that the inter-district variations in agricultural wages are substantially higher than those in comparable industries.

Moreover the variations in inter-sectoral wage differentials among the districts are relatively higher than regional differentials. In other words the wage rates in agriculture and industries like Manufacture of Edible oils except hydrogenated oils (industry code 209a) etc. in different districts are not necessarily closer than the wage rates in different districts in the industries mentioned above. The wage rates in these industries are more similar across the districts than the wage rates in these industries and in agriculture in the same districts. It will be also seen that across the districts, these industrial wage rates are more similar than agricultural wage rates.

Inter-sectoral wage differentials in the districts and wage rate in Textile industry (Industry code 23):

A very large part of the textile industry in the state is

highly organised, modern and is on large-scale. Moreover it is concentrated in a few districts such as in Ahmedabad. It is also well-known that the textile industry (particularly modernl large scale sector of the industry) is one of the highest wage paying industries in the state and in terms of factory employment provided continues to be the most important even now. It is also conceded that the wage rates in the textile industry are governed by institutional factors of wage boards, trade unions to a great extent. On the other hand the economic factors like the total productive capital employed per worker and productivity per worker are also very high. Hence it would be of interest to see how the inter-sectoral wage differentials between agriculture and industry get affected, once the wage rate paid in textile industry in the districts is taken out. This will enable us to isolate the extent of inter-sectoral wage differentials which are attributed to the textile industry in the industrial structure in the districts.

For this purpose we have adopted the following procedure. We have first computed inter-sectoral wage differentials (ratio of industrial wage to agricultural wage) by taking district aggregative average industrial wage (by taking all the industries in a district together). We have then calculated the average industrial wage in a district by excluding textile industry (industry code 23). This new average industrial wage is used to compute inter-sectoral wage differential. The

difference between the two inter-sectoral wage differentials in a district for a given year is considered as inter-sectoral wage differential attributed to the existence of textile industry.

We have presented in table VI-10 the district average industrial wage rates for workers earning less than Rs.400/- per month with and without textile industry, two corresponding inter-sectoral wage differentials in each district, district daily agricultural wages and the inter-sectoral wage differentials attributable to the existence of textile industry. The explanation is attempted for 11 districts for 1960-61 and 1967-68. Because in the districts of Kutch, Amreli, Panchmahals, Sabarkantha and Banaskantha, the inter-sectoral wage differentials are low and/or the volume of industrial activity is very limited. Moreover the 11 districts chosen above do not belong to any specific region in the state but in different regions and hence the representative of the conditions in different regions within the state.

Table VI-10

District Average Gross Industrial Wage Rates with and without Textile Industry and Changes in Inter-sectoral wage differentials: 1960-61 and 1967-68

District	1960-61						1967-68					
	Average wage rates		Average daily agricultural wage	Industrial wage as ratio of agricultural wage		Difference between the two ratios (Col.5-Col.6)	Average wage rates		Average daily agricultural wage	Industrial wage as ratio of agricultural wage		Difference between the two ratios (Col.11-Col.12)
	All industries taken together	All industries excluding textiles		With all industries wage rates	With all industries except textiles wage rate		All industries taken together	All industries excluding textiles		With all industries wage rate	With all industries except textiles wage rate	
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Ahmedabad	6.01	4.07	1.77	3.40	2.30	1.10	9.53	6.08	2.89	3.30	2.10	1.20
2. Baroda	4.59	3.94	1.24	3.70	3.18	0.52	6.76	6.09	2.11	3.20	2.89	0.31
3. Surat	3.98	2.96	1.26	3.16	2.35	0.81	6.49	5.32	1.92	3.38	2.77	0.61
4. Kaira	4.25	2.71	1.81	2.35	1.50	0.85	6.71	5.04	2.57	2.61	1.96	0.65
5. Mehsana	4.63	2.74	1.83	2.53	1.50	1.13	7.50	4.32	2.77	2.71	1.56	1.15
6. Broach	3.75	2.24	1.19	3.15	1.88	1.27	5.86	3.62	2.02	2.90	1.79	1.11
7. Bhavnagar*	4.17	3.31	1.95	2.14	1.70	0.44	5.69	4.69	2.72	2.09	1.72	0.37
8. Junagadh*	3.82	3.28	2.72	1.38	1.21	0.17	6.68	5.70	3.70	1.81	1.54	0.27
9. Rajkot*	3.91	3.34	2.49	1.42	1.34	0.08	5.36	4.80	3.54	1.51	1.36	0.15
10. Jamnagar*	3.82	3.61	3.02	1.50	1.20	0.30	5.92	5.64	3.81	1.55	1.48	0.07
11. Surendranagar*	4.19	4.15	2.27	1.93	1.83	0.10	5.34	4.76	2.92	1.83	1.63	0.20

Source: The wage rates given in Col.3 and Col.9 are calculated from the data on Mandays worked and wages from the relevant District Registers, under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.
For Col.2 and Col.8 See Table IV-3. Agricultural wage rates are taken from Table II-2.

*The wage rates are for the year 1962-63.

Note: Industrial wage rates are in respect of workers earning less than Rs.400/- per month.

Table VI-10 reveals that in 1960-61, in 7 districts i.e. Ahmedabad, Baroda, Surat, Kaira, Mehsana, Broach and Bhavnagar, the ratio of industrial wage to agricultural wage has fallen sizably ranging from 0.44 to 1.10 (Col.7). However only in the districts of Kaira and Mehsana the ratio of industrial wage to agricultural wage has become 1.50 (Col.6). In Junagadh, Rajkot and Jamnagar the ratios of industrial wage (even with textiles) to agricultural wage are just around 1.50 both in 1960-61 and 1967-68. From Col.7 and Col.13 it will be seen that the percentage inter-sectoral wage differential explained by the existence of textile industry (industry code 23) in the district industrial structures has fallen in majority of the districts. In other words in the districts showing high inter-sectoral wage differentials, even if textile wage is taken out inter-sectoral differentials have remained high. This is perhaps due to the fact that many high wage modern industries have progressed in these districts.

Conclusion:

1. The average daily gross industrial wage rates and wage rate paid to adult male casual labourer in agriculture in the districts of Gujarat do not show any relationship with each other.

2. Inter-sectoral wage differentials (expressed as ratio of industrial wage to agricultural wage) between industry and agricultue, calculated on the basis of the district average gross industrial

wage rates show wide variations among the districts. This is true in respect of the industrial wage rates of workers earning less than Rs.200/- per month as well as for those earning less than Rs.400/- per month.

3. In a more precise form it can be stated that there are 6 districts i.e. Ahmedabad, Baroda, Surat, Kaira, Mehsana and Broach (Panchmahals district closely follows these districts) in which there are very high inter-sectoral wage differentials. The ratio of industrial wage to agricultural wage is 2.25 and above in these districts. On the other hand in the other six districts i.e. Rajkot, Jamnagar, Junagadh, Amreli, Kutch and Sabarkantha the ratio of industrial wage to agricultural wage is generally less than 1.50.

4. These inter-sectoral wage differentials do not show any sustained trend or tendency in a particular direction. They have widened during 1955-56 to 1960-61, again narrowed down during 1960-61 to 1964-65 and once again show widening during the period 1964-65 to 1967-68.

5. The wide inter-sectoral wage differentials are related with the extent of industrialisation in the district i.e. more industrialised districts show wider inter-sectoral wage differentials than the less industrialised districts. Another aspect is that the more industrialised districts which also happened to be the high industrial wage rate districts have relatively low agricultural wage rates. This fact of very low agricultural wage rates has also contributed to the unduly high inter-sectoral wage differentials in these districts. The districts (most of which are from Saurashtra region of the state) which have low

inter-sectoral wage differentials have (among the 16 districts) very high agricultural wage rates (only Sabarkantha district is the exception which has low industrial and low agricultural wage rates and hence inter-sectoral wage differential is low).

6. The geographical wage structures in industry and agriculture in Gujarat show opposite characteristics. Most of the factory workers in the state are concentrated in the districts which have high industrial wage rates (which are also industrially relatively developed districts) while a vast majority of agricultural labourers in the state is to be found in the districts, which on an average, have low agricultural wages. However all these districts are not necessarily backward in agricultural development.

7. The inter-sectoral wage differentials between agriculture and industries comparable with agriculture, like Manufacture of Edible oils except hydrogenated oils (Industry code 209a), Manufacture of grain mill products (Industry code (205) and Stone dressing, crushing etc. (Industry code 339a) are low in most of the districts except in the districts of Baroda, Surat and Panchmahals. Perhaps in these three districts this is because of the excessive pressure of population on land. While the agricultural wage rates have been kept at almost subsistence level, the population pressure has not exerted equally strong pressure on industrial wage rates. However the ratios of wage rates (for workers earning less than Rs.200/- per month) paid in these industries and daily agricultural wage rates in the majority of the

districts are 1.50 or less. This is true whether we consider the wage rates in these industries of workers earning less than Rs.200/- per month or less than Rs.400/- per month.

8. The variations in inter-sectoral wage differentials (between agriculture and comparable industries) are somewhat higher than the regional (inter-district) wage differentials in these same industries. The regional differentials in agricultural wages have also remained high.

9. The levels of inter-sectoral wage differentials are reduced sizablly if they are calculated by the district average gross industrial wage without the wage paid in textile industry. However, except in the district of Mehsana (in 1960 and 1967), the inter-sectoral wage differentials continue to be high enough (ratio of industrial wage rate to agricultural wage exceeds 1.50 in the high inter-sectoral wage differentials districts).

Appendix VI-1

Since the separate data on wages of workers earning less than Rs.200/- per month were not available after 1964, the precise levels of inter-sectoral wage differentials (in respect of the industrial workers earning less than Rs.200/- per month) could not be known. However an estimate is made for the year 1967-68. The method used for estimation is as under:

It can be seen from Appendix VI-1.1 that the inter-sectoral wage differentials calculated by using the wages of less than Rs.200/- per month and those calculated by using the wages of less than Rs.400/- per month show similar trends during 1960-61 to 1964-65 in all the districts. It will be also seen that in the district of Ahmedabad, the ratio of industrial wage (of workers earning less than Rs.400/- per month) to daily agricultural wage is 3.40 and that with respect to the wage of workers earning less than Rs.200/- per month is 3.28 in 1960-61. In other words in 1960-61, a worker earning less than Rs.400/- per month got 12 per cent more of the daily agricultural wage than what a worker earning less than Rs.200/- per month received. In 1964-65, he got 18 per cent more of the agricultural wage than what a worker earning less than Rs.200/- per month received. In other words in four years (1960-61 to 1964-65), he got net 6 per cent more of agricultural wage as compared to a factory worker who earned less than Rs.200/- per month. We have assumed

that in the subsequent three years (1965-66 to 1967-68) a worker earning less than Rs.400/- per month would gain to the same extent (in terms of percentage of agricultural wage rate) over a worker earning less than Rs.200/- per month. On the basis of this assumption the inter-sectoral wage differentials in respect of industrial workers earning less than Rs.200/- per month in 1967-68 were computed as under:

The inter-sectoral wage differential (with respect to wage rate of workers earning less than Rs.200/- per month) in 1967

= Inter-sectoral wage differential with respect to wages of less than Rs.400/- per month in 1967 — {Difference in two inter-sectoral wage differentials in 1964 — Net change in the two inter-sectoral wage differentials between 1960-1964}

Symbolically it can be written as under:

$$\frac{Iw(200)}{AgW}\ 1967 = \frac{Iw(400)}{AgW}\ 1967 - \left[\left(\frac{Iw(400)}{AgW}\ 1964 - \frac{Iw(200)}{AgW}\ 1964\right) + \left\{\left(\frac{Iw(400)}{AgW}\ 1964 - \frac{Iw(200)}{AgW}\ 1964\right) - \left(\frac{Iw(400)}{AgW}\ 1960 - \frac{Iw(200)}{AgW}\ 1960\right)\right\}\right]$$

Where,

Iw(200) = District industrial wage of workers earning less than Rs.200/- per month.

Iw(400) = District industrial wage of workers earning less than Rs.400/- per month.

AgW = Average daily agricultural wage in district.

Illustration:

In Ahmedabad district the inter-sectoral wage differential (calculated with wage rates of workers getting less than Rs.400/- per month) is 3.30 (Table VI-5). In 1967-68 the inter-sectoral wage differential (estimated for industrial wage of workers getting less than Rs.200/- per month) will be 3.09. This is estimated by using formula as under:

$$3.09 = 3.30 - (0.17^{*} + 0.04^{*})$$

---

* These are obtained as averages of two years each.

i.e. $0.17 = \frac{\frac{1963}{0.13} + \frac{1964}{0.18}}{2}$

and $0.04 = 0.17 - 0.13$ i.e. $\frac{\frac{1960}{0.12} + \frac{1961}{0.13}}{2}$ etc.

Appendix VI-1.1

Ratio of Average Industrial Wage Rates to Daily Agriculture Wage Rates in Respect of Workers Earning (1) less than Rs.200/- per month (2) less than Rs.400/- per month in 16 districts: 1960-61 to 1964-65

District	Wages of less than Rs.	Year				
		1960-61	1961-62	1962-63	1963-64	1964-65
1	2	3	4	5	6	7
Ahmedabad	400/-	3.40	3.05	3.06	2.86	2.80
	200/-	3.28	2.92	2.91	2.71	2.62
Surat	400/-	3.16	3.38	3.21	2.99	3.10
	200/-	3.03	3.25	3.03	2.81	2.84
Baroda	400/-	3.70	3.09	2.83	2.86	3.28
	200/-	3.49	2.89	2.61	2.64	2.99
Kaira	400/-	2.35	2.31	2.33	2.27	2.61
	200/-	2.29	2.24	2.81	2.16	2.42
Mehsana	400/-	2.53	2.27	2.27	2.23	2.44
	200/-	2.45	2.19	2.18	2.14	2.32
Broach	400/-	3.15	2.68	2.52	2.28	2.56
	200/-	3.11	2.63	2.49	2.24	2.51
Panchmahals	400/-	2.32	2.23	1.96	2.02	1.85
	200/-	2.20	2.14	1.88	1.90	1.72
Banaskantha	400/-	1.98	1.87	1.95	1.94	2.17
	200/-	1.93	1.83	1.93	1.86	2.09

contd...

Appendix VI-1.1 (contd.)

District	Wages of less than Rs.	Year				
		1960-61	1961-62	1962-63	1963-64	1964-65
1	2	3	4	5	6	7
Sabarkantha	400/-	1.33	1.28	1.22	1.00	1.13
	200/-	1.30	1.27	1.19	0.98	1.12
Amreli	400/-	1.39	1.58	1.14	1.27	1.42
	200/-	1.15	1.58	1.10	1.16	1.40
Jamnagar	400/-	1.50	1.50	1.50	1.81	1.63
	200/-	1.34	1.28	1.18	1.46	1.48
Junagadh	400/-	1.38	1.46	1.45	1.47	1.36
	200/-	1.33	1.38	1.39	1.40	1.27
Rajkot	400/-	1.42	1.38	1.57	1.41	1.43
	200/-	1.37	1.30	1.50	1.34	1.38
Bhavnagar	400/-	1.51	1.94	2.14	1.84	2.15
	200/-	1.47	1.70	2.11	1.79	2.06
Surendranagar	400/-	1.93	2.12	1.85	1.57	1.52
	200/-	1.83	2.08	1.80	1.62	1.49
Kutch	400/-	0.88	1.48	1.27	1.58	1.48
	200/-	0.80	1.37	1.17	1.42	1.33

Source: Table VI-3 and Table VI-5.

Appendix VI-2

The Proportion of Mandays and Total Wages of Workers Earning Rs.200/- or more per month but less than Rs.400/- per month in the Total of Mandays and Wages of the Factory Workers in 10 districts during 1960-1964

District		Year 1960	1961	1962	1963	1964
1		2	3	4	5	6
1. Ahmedabad	MD	4.0	5.0	6.0	7.0	10.0
	TW	8.0	10.0	11.0	12.0	16.0
2. Kaira	MD	-	2.0	3.0	4.0	6.0
	TW	-	5.0	5.0	8.0	13.0
3. Sabarkantha	MD	0.5	0.3	0.6	0.3	0.4
	TW	3.0	1.4	3.0	1.0	1.3
4. Banaskantha	MD	0.6	1.2	0.5	2.4	3.3
	TW	2.7	3.6	1.5	6.0	7.0
5. Amreli	MD	-	0.3	1.7	2.8	0.8
	TW	-	0.5	5.0	11.0	2.3
6. Mehsana	MD	3.0	3.0	3.4	3.6	2.3
	TW	6.0	6.0	7.5	8.0	11.0
7. Baroda	MD	5.0	4.0	6.6	5.7	8.0
	TW	10.0	10.5	14.0	13.0	16.0
8. Panchmahals	MD	2.0	1.0	1.6	2.0	1.3
	TW	6.0	5.0	5.8	7.0	8.0
9. Broach	MD	1.0	1.0	1.0	1.0	1.4
	TW	2.0	3.0	2.4	2.7	3.3
10. Surat	MD	2.0	3.0	3.3	3.7	2.7
	TW	6.0	7.0	8.6	9.4	10.7

Source: Same as of Appendix VI-3

Note: MD - Percentage of Mandyas.

TW - Percentage of Total wages.

Appendix VI-3

Average Daily Industrial Wage Rates of Workers earning less than Rs.200/- per month in Three Industries in the Districts of Gujarat: 1955 to 1964

District	Year												
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965*	1966*	1967*
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Manufacture of grain mills products (industry code 205)													
1. Ahmedabad	2.54	2.44	2.13	2.48	2.66	2.58	2.78	2.81	2.93	2.86	3.42	3.53	3.82
2. Baroda	1.97	3.05	2.67	2.31	2.59	2.40	2.68	2.24	2.62	3.00	3.73	3.67	4.24
3. Surat	-	1.54	1.81	1.78	1.85	2.15	2.06	1.85	2.18	2.36	2.26	2.80	2.51
4. Mehsana	2.8.	-	1.96	1.85	2.46	2.05	2.04	2.34	2.05	2.01	3.06	2.92	3.25
5. Kaira	1.83	1.84	1.32	1.62	2.02	1.88	1.83	2.05	2.16	1.99	2.45	2.24	2.57
6. Panchmahals	2.16	2.05	2.17	2.31	2.42	2.52	2.21	2.61	2.34	2.33	2.77	3.28	-
7. Sabarkantha	1.66	-	-	-	-	-	-	3.57	-	..	-	-	-
8. Jamnagar	-	-	-	-	-	-	-	-	-	-	-	-	-
9. Rajkot	-	-	-	-	-	-	-	-	-	3.33	-	-	4.31
10. Bhavnagar	-	-	-	-	-	-	-	2.06	2.19	2.23	4.18	3.63	4.35
11. Junagadh	-	-	-	-	-	-	-	-	-	-	-	-	2.83
Manufacture of Edible oils except the hydrogenated oils (industry code 209a)													
1. Ahmedabad	3.05	2.95	4.07	3.88	2.39	2.32	2.51	2.26	2.87	2.48	3.45	5.04	3.40
2. Baroda	2.84	2.61	2.51	2.12	1.22	2.12	2.73	2.60	2.52	2.48	3.69	3.68	3.69
3. Surat	2.17	1.73	2.42	1.80	2.17	2.16	2.13	2.17	2.38	3.18	2.82	3.36	3.38
4. Mehsana	2.41	-	4.61	4.58	2.99	2.36	3.57	2.89	3.20	2.95	4.09	3.94	3.25
5. Kaira	2.61	2.55	2.61	2.64	2.33	2.17	2.46	2.25	2.08	2.13	2.25	3.70	3.60
6. Panchmahals	2.11	1.82	1.89	1.98	1.91	2.06	2.53	2.10	2.42	2.04	2.73	3.42	3.47
7. Sabarkantha	2.52	1.81	2.50	2.63	2.09	1.95	2.57	2.08	2.19	2.93	2.46	2.14	3.02
8. Jamnagar	-	-	-	-	-	-	-	3.46	3.36	3.75	4.68	4.94	4.59
9. Rajkot	-	-	-	-	-	-	-	3.13	3.21	3.44	3.80	4.39	4.35
10. Bhavnagar	-	-	-	-	-	-	-	2.61	2.65	3.46	4.42	4.01	4.13
11. Junagadh	-	-	-	-	-	-	-	2.54	2.88	3.16	3.72	3.82	4.43

Contd....

Appendix VI-3 (contd.)

District	Year												
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965*	1966*	1967*
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Stone dressing, crushin - etc. (industry code 239a)													
1. Ahmedabad	2.60	2.50	2.69	3.05	1.80	1.29	1.71	1.77	2.69	2.22	2.62	3.00	2.79
2. Baroda	2.25	2.34	1.58	1.56	1.94	1.64	1.83	1.71	2.15	1.83	2.06	1.94	2.51
3. Surat	-	-	2.39	1.52	1.71	0.85	2.87	2.00	1.89	1.76	2.42	1.90	3.35
4. Mehsana	-	-	-	-	-	-	-	2.25	2.28	3.33	1.68	-	2.69
5. Kaira	1.76	2.59	1.44	1.93	1.67	1.93	1.97	2.38	2.04	1.88	2.42	2.60	2.46
6. Panchmahals	-	-	-	-	1.60	1.60	-	1.88	1.70	2.13	-	-	2.54
7. Sabarkantha	1.09	1.10	-	2.40	2.56	2.02	-	1.82	1.82	2.49	-	1.74	-
8. Jamnagar	-	-	-	-	-	-	-	2.37	3.06	2.99	3.44	3.18	3.68
9. Rajkot	-	-	-	-	-	-	-	2.24	2.07	2.06	1.98	2.35	3.62
10. Banaskantha	-	-	-	-	-	-	-	2.39	2.38	3.69	2.89	-	2.11
11. Junagadh	-	-	-	-	-	-	-	2.59	2.40	2.73	2.60	3.51	-

Source: Computed from the Data on Mandays and wages given in the District-wise Registers under the Payment of Wages Act, 1936, Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

*Wage rates are of workers earning less than Rs.400/- per month.

Summary and Conclusions:

The examination of the inter-district differentials of agricultural wage rates in the state of Gujarat has revealed that the inter-district structure has expanded between 1956-57 to 1960-61 and has narrowed down thereafter. However for the period 1956-57 to 1967-68 as a whole, one does not find any significant compression in the inter-district structure of 16 districts. This pattern is shown by the changes in the coefficients of variation in Col.2 of table II-2. The coefficients of variation have been in the range of 20.63 per cent (in 1963-64) to 28.27 per cent (in 1960-61). For majority of the years it is around 24 per cent. The coefficients of variation are lower in the set of 11 districts i.e. 20 per cent and less between 1956-57 to 1967-68 but are substantially higher during 1950-51 to 1955-56.

The absolute differentials as measured by standard deviation among the 16 districts wage rates (Col.4, table II-6) have however expanded steadily more or less all along the period.

In the set of 11 districts for the same period as considered for 16 districts above (i.e. 1956-57 to 1967-68), the relative changes in the inter-district structure (measured by coefficients of variation Col.3, table II-6) also indicate the same result i.e. expansion of the structure between

1956-57 to 1960-61 and narrowing down thereafter. However for the period 1950-51 to 1967-68 there is a peculiar pattern of relative changes. The coefficients of variation between 1950-51 to 1955-56 are much higher than in the end of the period. This would mean contraction of the structure. In the intervening period the structure has expanded between 1956-57 to 1960-61 and has compressed during 1960-61 to 1967-68. (table II-2).

The absolute differentials among 11 districts have on the whole shown expansion between 1956-57 to 1967-68, though during 1950-51 to 1967-68 there is hardly any noticeable increase in them. Most of the districts in the set of 11 districts are from the Gujarat region of the state of Gujarat and both relative and absolute differentials are lower among them than among all the 16 districts of the state.

The positions of districts in terms the levels of wage rates have remained almost unchanged. This has been revealed by the analysis of the rank structure.

The analysis of the wage rates of districts falling into the upper quartile and the lower quartile of the inter-district wage structure has shown that, the bottom of the wage structure is highly stable. In other words the wage rates in the four districts, which constituted the bottom of the wage structure (16 districts), have remained in the bottom group throughout the period 1956-57 to 1967-68. In fact in some of them the agricultural wage rates have drifted further downward. On the

other hand the upper group of four districts constituting the top of the inter-district structure, was less stable. Because there are frequent replacements by other districts. These changes are highlighted in graph-2.

The analysis of "High-low" differentials has revealed that in respect of 16 districts there were substantial differences in percentage terms i.e. The wage rate (average of two median districts wage rates) of the median districts of the upper quartile expressed as percentage of wage rate of median districts of the lower quartile was 192.72 in 1956-57, 209.01 in 1960-61 and 183.75 in 1967-68. Thus these "High-low" percentage differentials among the 16 districts are very substantial throughout. They have widened upto 1960-61 and have shown narrowing afterwards.

The absolute "High-low" wage differentials among the 16 districts have widened by and large all along the period (1956-57 to 1967-68).

In the set of 11 districts the percentage and absolute "High-low" wage differentials have been lower than those among the 16 districts. Moreover the percentage differentials have on the whole fallen during 1956-57 to 1967-68 as well as during 1950-51 to 1967-68. The absolute "High-low" differentials among the 11 districts have not shown any consistent trend. They have declined upto 1955-56, risen between 1955-56 to 1961-62 and fallen once again upto 1965-66.

The "High-low" percentage wage differentials between the same pairs (constant pairs) of median districts of upper and lower quartiles of 1956-57 have also shown widening upto 1960-61 or 1961-62 and have a tendency to narrow down thereafter. The absolute differentials between these constant pairs of districts have on the whole widened during 1956-57 to 1967-68.

In the set of 11 districts Kaira and Panchmahals occupied ranks (in descending order of wage rates levels) II and X respectively in 1956-57. During the period 1950-51 to 1967-68 both percentage and absolute "High-low" wage differentials between these two districts have shown narrowing tendency.

The differences in the cost of living of agricultural labourers among the districts in Gujarat are negligible. Hence the variations in money agricultural wage rates among the districts also indicate the variations in real wage rates among the districts.

Regression analysis of Cross-section data in respect of 16 districts has shown that pressure of population on land (measured in terms of number of agricultural workers per 100 acres of net sown area) is the most important factor explaining the levels of agricultural wage rates in different districts.

The partial correlation analysis has also revealed significant positive correlation between wage rate and factors such as employment in cottage and small scale industries, agricul-

tural income per cultivator and labour productivity. However the land productivity and wage rate have shown negative and insignificant correlation. Employment in factories has no relation whatsoever with wage rate in agriculture.

The real agricultural wage rates have fallen during the period 1960-61 to 1967-68. Considering the entire period 1956-57 to 1967-68 also, we find that the real agricultural wage rates in most of the districts have by and large fallen. However between 1956-57 to 1960-61 the real agricultural wage rates have increased in most of the districts in the state.

The districts which had relatively high levels of real wage rates, have experienced larger decline in real wages than the districts which had low real wage rates. In fact in some of the districts such as Surat, Broach and Panchmahals the real wage rates were almost at subsistence level and hence real wage rates in these districts had practically no scope for further decline.

The narrowing tendency of inter-district agricultural wage structure during 1960-61 to 1967-68 is explained by the behaviour of real wage rates i.e. relatively greater fall in wage rates in districts with high real wage rates and marginal or no fall in districts with low real wage rates. Similarly the expansion of the inter-district structure during 1956-57 to 1960-61 is due to relatively larger increases in real wage rates in high wage districts and low increases in districts with

low real wage rates.

The dynamic analysis in terms of "Shifts" in factors influencing the demand for and supply of labour to agriculture and percentage changes in agricultural wage rates have revealed interesting results. For instance the supply of labour to agriculture (measured by percentage change in rural population) has increased very significantly in those districts which had high agricultural wages, whereas in the low wage districts there is much small increase in rural population.

The demand for labour in agriculture, measured in terms of the growth of agricultural production, has increased in majority of the districts in the state between 1960-61 to 1967-68.

The percentage changes in the real wage rates during 1960-61 to 1967-68 are explained by the percentage changes in the supply of labour, already existing pressure of population on land and existing levels of real wage rates. Generally in the districts of Saurashtra region, relatively larger growth of supply of labour together with high levels of real wages have led to significant decline in real wage rates. On the other hand in the districts of South Gujarat, the initial low wage levels on the one hand and already existing high population pressure (so that even small percentage change brings about substantial addition in absolute terms) do not allow any positive impact of demand generating factors on wage rates.

And hence real wage rates in these districts tend to rotate around existing very low levels.

The inter-district structure of district gross industrial wage rates has on the whole expanded during 1960 to 1967. In the last two years i.e. 1968 and 1969 however it has shown narrowing. This is true in respect of the wage structure of the 16 districts for the period 1960-1969 (Col.2, table IV-5) as well as of 10 districts wage structure for 1958-1969 (Col.3, table IV-5).

The inter-district structure of industrial wage rates of workers earning less than Rs.200/- per month (Col.4, table IV-5) also does not show any narrowing tendency during 1954-1964.

Considering all the 16 districts and wage rates of workers earning less than Rs.400/- per month, we find that the relative differentials, measured by coefficients of variation, have varied between 21.40 per cent to 27.80 per cent. The inter-district variations have been generally around 24 per cent. These relative differentials are still higher among the 10 districts, whether we consider the wage rates of workers earning less than Rs.200/- per month or less than Rs.400/- per month (Table IV-5).

The relative differentials in the gross industrial wage rates in 16 districts and those in agricultural wage rates among 16 districts are at similar level. However, for the corresponding periods, the agricultural wage differentials among the 11 districts

are lower (Table II-6) than the gross industrial wage differentials in 10 districts (table IV-5). Moreover while the inter-district agricultural wage differentials have widened during 1956-57 to 1960-61 and narrowed down to some extent, during 1960-61 to 1967-68, the inter-district gross industrial wage differentials have on the whole widened for the corresponding period 1960-61 to 1967-68.

The absolute differentials (Standard deviations) in all the three sets i.e. 16 districts with wage rates of workers earning less than Rs.400/- per month (1960-1969); 10 districts with wage rates of workers earning less than Rs.400/- per month (1958-1969); and 10 districts with the wage rates of workers earning less than Rs.200/- per month (1954-1964) have more or less expanded steadily. The absolute wage differentials are also higher among the 10 districts than among the 16 districts (with respect to wages of less than Rs.400/- per month).

In the inter-district gross industrial wage structure Ahmedabad, Mehsana, Baroda and Kaira had ranks respectively I, II, III and IV in 1960. Of these only Kaira district had fallen out of the top group in 1961, 1962, 1964, 1965 and 1969. The other three districts have remained within the upper quartile group all along the period 1960-1969. Similarly Banaskantha, Panchmahals, Sabarkantha and Kutch had ranks respectively XIII, XIV, XV and XVI in 1960. The district of Banaskantha has moved up in 1962, 1963, 1964, 1968 and 1969 and the district of Kutch

moved up in 1961, 1963 and 1967. Thus both the upper quartile and the lower quartile of inter-district gross industrial wage structure are unstable. However in the lower quartile the wage rates in two districts i.e. Panchmahals and Sabarkantha and in the upper quartile the wage rates in Ahmedabad and Mehsana have remained in same positions or ranks. As compared to this, the bottom of the inter-district agricultural wage structure was highly stable.

The "High-low" relative differentials (coefficients of variation) in gross industrial wage rates in 16 districts have expanded during 1960-1967 while "High-low" differentials in district agricultural wages have shown narrowing for the corresponding period. Moreover the "High-low" percentage wage differentials in district agricultural wages were higher than those in gross industrial wages (Table II-7 and Table IV-8). However the "High-low" absolute differentials in district agricultural wages were lower than those in industrial wages.

The "High-low" absolute wage differentials in industry and agriculture have expanded steadily.

The "High-low" percentage and absolute differentials in gross industrial wages between the same pairs of districts (median districts of upper and lower quartiles in 1960, Table IV-8) have expanded. The "High-low" percentage differentials in agricultural wages between the constant pair of districts have narrowed down during the corresponding period of 1960-1967 and have widened

during 1956-57 to 1967-68. The absolute differentials of agricultural wages between the constant pairs of districts have widened.

There are wide differences in the nature and extent of industrialisation of districts in Gujarat state. The differentials in the gross industrial wages correspond to the pattern and levels of industrialisation of the districts.

The textile industry is still a dominant industry and is on the whole one of the highest wage paying industries in the state. The districts in which textile industry is prominant in their industrial structures have generally high average industrial wage rates.

The differences in the average gross industrial wage rates of districts (as compared to the state) are mainly explained by unfavourable wage rates, though the industrial structures in most of the districts have also been unfavourable as compared to the state industrial structure.

Among the more industrialised districts (excepting Surat district) wage differences are due to the differences in industrial structure rather than those in wage rates.

On the whole, the real gross industrial wage rates in relatively more industrialised districts have remained unchanged, while they have actually fallen in the industrially backward districts which also happened to be low wage districts.

The expansion of the inter-district industrial wage structure has occurred because the low industrial wage districts have experienced sizable fall in their real wages while practically there was no fall in real wage rates in hggh wage districts.

In the relatively industrialised districts the factory employment has increased without there being any change in real industrial wage rates; whereas in the industrially backward districts, while real wages have fallen, there is hardly any change in factory employment.

The levels and trends in regional differentials in industrial wages (industry by industry) fall into two parts. On the one hand there are industries such as Gins and presses, Manufacture of grain mill products, Manufacture of Edible oils except hydrogenated oils, etc., or the industries which generally draw upon the unskilled local supply of labour and also use locally available raw materials. In these industries the relative wage differentials across the districts are high and they have persisted. On the other hand in the well organised, large scale and industries such as Spinning, Weaving and finishing of textiles and in industries such as Basic metal (ferrous), Manufacture of machinery etc., the regional differentials are low and narrowing. The inter-industry wage differentials both relative as measured by coefficients of variation and absolute differentials measured by Standard deviations among the 30 "Three digit" industries are larger than inter-district industrial

or agricultural wage differentials.

The inter-industry wage differentials - both relative and absolute, have widened clearly and significantly during the period 1960-1969. The highest industry wage as ratio of the lowest industry wage was 3.917 in 1960 and 4.941 in 1969.

The rank structure of 30 industries has shown no change between 1960 and 1969.

The high wage paying industries accounted for most of most of the employment in 1960 and even in 1969 substantial employment was in high wage industries. However it is to be noted that in 1969 the high wage industries accounted for lower proportion of the total factory employment than in 1960.

There is no significant relationship between percentage changes in employment in industries and percentage changes in wage rates in industries.

The initial wage levels and percentage changes in wage rates are positively related but the relationship is not significant.

The industries which had high initial levels of employment have experienced lower percentage increases in employment during 1960-1969. In other words the levels of employment in industries in 1960 and percentage changes in them by 1969 have been negatively related, though the relationship has not been a significant one.

The inter-industry wage structure has expanded due to the fact that high wage industries have generally experienced larger percentage increases in wage rates than the low and medium wage paying industries during 1960-1969. In terms of relative wage rates, the high real wage industries have shown relatively larger increases in real wage rates whereas, among the medium and low real wage paying industries, the real wage rates have on the whole remained unchanged or have fallen.

Industries with high levels of productivity have high average wage rates. However, on the basis of the data we have, it is uncertain and difficult to say whether percentage changes in wage rates and employment are related.

The inter-industry wage differentials in the districts have also expanded. In the relatively more industrialised districts, the inter-industry wage differentials have tended to be narrower than those in the less industrialised districts.

The average daily gross industrial wage rates and daily wage rates in agriculture have not shown any relationship with each other.

There are wide variations in inter-sectoral differentials in the districts of Gujarat.

The inter-sectoral wage differentials have not shown any consistent trend in particular direction. They have widened during 1955-56 to 1960-61, narrowed down between 1960-61 and 1964-65 and once again widened. Considering three year averages

of inter-sectoral wage differentials it is found that they have on the whole narrowed down during 1955-56 - 1957-58 to 1962-63 - 1964-65 and widened by 1967-68. Taking the period as a whole, the inter-sectoral wage differentials (whether we take the wage rates of workers earning less than Rs.200/- per month or those earning less than Rs.400/- per month) have widened.

In the relatively more industrialised districts, the inter-sectoral wage differentials are substantially higher than those in the less industrialised districts.

The more industrialised districts have relatively low agricultural wage rates. This has also caused inter-sectoral wage differentials to be wider.

Generally the districts which have low inter-sectoral wage differentials have high agricultural wage rates.

The geographical (inter-district) wage structures in industry and agriculture have shown opposite characteristics. For instance most of the factory workers in the state are concentrated in those districts which are industrialised and are also high wage districts; while most of the agricultural labourers in the state are found concentrated in the districts having low agricultural wage rates.

The districts having low agricultural wage rates are not backward in agricultural development.

The inter-sectoral wage differentials between the wage rates in industries, which by and large employ unskilled labour and hence comparable to the labour employed in agriculture (i.e. Manufacture of grain mill products, Stone dressing, crushing etc., and Manufacture of Edible Oils except the hydrogenated oils) and agricultural wage rates, are low in most of the districts except in Baroda, Surat and Panchmahals. This is perhaps because while the agricultural wage rates, due to population pressure on land, have struck up to almost subsistence level, industrial wage rates in those industries in these districts have not been driven so low by the population pressure.

The variations in inter-sectoral wage differentials (between agriculture and comparable industries are to some extent higher than the regional or inter-district wage differentials in these same industries (table VI-9). The regional differentials in agricultural wages (considering 16 districts) have been higher than those in comparable industries.

The inter-sectoral wage differentials between district gross industrial wage rates and agricultural wages continued to be high even when the wage rate paid in Textile industry is excluded. (Ratio of gross industrial wage excluding textile wage to daily agricultural wage exceeded 1.50). Only in the district of Mehsana the inter-sectoral differential was reduced to equalising differential.

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