# Chapter IV

## INTER-DISTRICT DIFFERENTIALS IN INDUSTRIAL WAGES — LEVEL AND STRUCTURE

The present chapter deals with the level of Industrial wages and changes in the structure of wage differentials among the districts in the state of Gujarat. Specifically it is proposed to examine (i) the level and changes in gross (all industries taken together) differentials in industrial wages among the districts (ii) level and changes in pure regional wage differentials - the differentials in particular industry across the districts and the changes therein over time.

Concept of Industrial Wage:

The data on wages are collected under the Payment of Wages Act of 1936. The Act is applicable to the factories defined in Section 2(m) under the Factories Act of 1948. The factories covered under the Act are those (i) employing 10 and more workers and using power (ii) employing 20 and more workers if they are not using power. The data on wages collected under the said Act include the following components.

(1) Basic wages.
(2) Dearness Allowance.
(3) Arrears.
(4) Total wages (1 + 2 + 3)
(5) Bonus.

(6) Money value of concessions.

(7) Gross wages (4 + 5 + 6)

The data on Mandays worked are calculated by dividing total attendance with the number of working days in each factory in every industry. They are then summed up to arrive at Mandays worked for a particular industry or a district. Thus the Mandays worked in an industry or a district are weighted figures - weights being Mandays worked in each unit.

Under the above Act, the data on Mandays worked and wages were collected for the workers earning less than Rs.200 p.m. till 1957. Between 1958 and 1964 the data were separately available for those earning less than Rs.200 p.m. and those earning Rs.200 and more but less than Rs.400 p.m. Since 1965 the data are not collected separately for the above mentioned two groups. They relate to all the workers earning less than Rs.400 p.m. It is necessary to remember that as the earnings of workers rise above Rs.400 p.m., they are automatically excluded from consideration. This process tends to underestimate the real change. Moreover a worker under the Factories Act, 1948 is not identical with a worker defined under the Payment of Wages Act, 1936. Under the Factories Act, 1948 worker is defined as "a person employed directly or through any agency whether for wages or not, in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or in any other kind

of work incidental or connected with the manufacturing process. Whereas the Payment of Wages Act of 1936 is applicable to employees in a particular pay range i.e. those earning less than Rs.400 p.m. since 1965.

In the present study we have used the concept of Total wages (i.e. 1+2+3) in order to compute the average wage per manday i.e.

$$\text{Average daily wage} = \frac{\text{Total wages}}{\text{Mandays worked}}$$

Our average daily wage thus represents the price of labour. The use of gross wages on the other hand would show the earnings of a worker. We have considered the average wage concept to reflect the price of labour, because the benefits i.e. bonus and money value of concessions do not constitute the part of wage or market price of labour. It is essential to note this distinction because in the present study we are examining the wages of labour both in industry and in agriculture and in agriculture, it is wellknown that there are no benefits in the form of bonus or other forms of concessions. Whatever kind payments are made to agricultural labourer, they are included as a part of his wage itself. Further the methods of imputation of the value of concessions to industrial workers are likely to vary and this can introduce a bias if we use grosswage or earnings. However we have made an attempt to find out the extent to which the wage rates would differ if the two concepts i.e. average earnings and average wage are used alternatively.

We have calculated gross wage rate per Manday or earnings per Manday i.e. Gross wages/Mandays and also average daily wage = Total wages/ Mandays in each of the 15 districts for the period 1960-1968. The percentage differences between the wage rate and earnings in each of the 15 districts during the period 1960-1968 are shown in the Table IV-1.

Table IV-1

Percentage Differences Between the Earnings per Manday and Average Wage of Industrial Workers in 15 Districts of Gujarat - 1960-1968

| District | Year | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1. Banaskantha | 3.31 | 0.92 | - | 0.27 | 0.00 | 0.00 | 3.04 | 0.20 | 0.50 |
| 2. Panchmahals | 0.75 | 1.53 | 1.60 | 1.20 | 1.52 | 2.75 | 3.75 | 5.31 | 4.53 |
| 3. Broach | 0.26 | 0.84 | 0.79 | 0.00 | 0.51 | 0.44 | 1.35 | 1.53 | 1.81 |
| 4. Surat | 2.76 | 2.86 | 3.33 | 2.86 | 1.42 | 1.28 | 3.78 | 4.31 | 3.80 |
| 5. Rajkot | 2.30 | 3.06 | 2.55 | 2.41 | 2.19 | 2.47 | 2.75 | 4.10 | 4.48 |
| 6. Kutch | 1.89 | 2.71 | - | 4.33 | 0.20 | 1.15 | 2.37 | 2.22 | 2.42 |
| 7. Junagadh | 1.09 | 1.12 | 1.01 | 1.00 | 0.65 | - | 1.87 | - | 2.74 |
| 8. Amreli | 0.00 | 0.00 | 0.00 | 0.00 | 3.43 | 0.00 | 0.00 | 11.60 | 9.55 |
| 9. Bhavnagar | 1.16 | - | 2.15 | 2.89 | 1.51 | 2.35 | 2.30 | 4.74 | 5.70 |
| 10. Surendranagar | 1.79 | 4.49 | 1.43 | - | 0.99 | 0.70 | 2.70 | 5.24 | 3.43 |
| 11. Ahmedabad | 1.83 | 2.78 | 3.55 | 2.28 | 4.87 | 0.38 | 3.79 | 5.45 | 3.64 |
| 12. Baroda | 2.83 | 3.86 | 6.19 | 8.04 | 2.12 | 2.05 | 5.48 | 4.14 | 6.15 |
| 13. Mehsana | 1.51 | 1.53 | 3.17 | 7.98 | 0.74 | 1.35 | 3.37 | 5.73 | 4.35 |
| 14. Kaira | 0.94 | 0.96 | 8.66 | 3.21 | 1.45 | 1.12 | 6.65 | 2.98 | 7.50 |
| 15. Sabarkantha | 0.87 | 0.42 | 0.87 | 1.00 | 0.86 | 1.40 | 5.44 | 3.38 | 4.40 |

Source: Calculated from the data given in the District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat.

It will be seen from table IV-1 that the differences between the wage rate and earning per day do not generally exceed 4 per cent. Actually in most of the districts differences are much narrower. To be more precise on this point, coefficients of variation were calculated separately for average daily earning and average wage in the districts for 1960, 1965 and 1968 which are shown below.

Table IV-2

Coefficients of Variation of Average Earning and Average Wage Per Manday in 15 Districts of Gujarat for 1960,1965 and 1968

| Year | Coefficients of variation | |
|---|---|---|
| | Average daily earnings | Average wage rate |
| 1 | 2 | 3 |
| 1960 | 25.64 | 25.63 |
| 1965 | 27.80 | 27.73 |
| 1968 | 23.90 | 24.01 |

Source: Calculated on the basis of the data from District Registers under the Payment of Wages Act, 1936, Chief Inspector of Factories, Government of Gujarat.

It will be noted that the inter-district variation in average daily earning and average daily wage are almost the same. Therefore it can be said that the results obtained on

the basis of the wage rates would be applicable to earnings of workers as well.

Geographical Wage Differentials in Industry:

For the purpose of analysis the geographical wage differentials in industry have been divided into (1) Gross wage differentials[1] (2) Pure wage differentials i.e. pure regional differentials in industrial wages.

The gross wage differentials show the differences in the gross industrial wage rates among the districts. These are gross in the sense that they are computed as: Total wages paid to all the workers in all industries taken together in a district divided by the Mandays worked in all the industries taken together in that district. Hence the differences or variations in the industrial wage rates among the districts are not pure geographical or pure regional wage differentials but these are partly[2] inter-industry wage differentials. This is all the more relevant for the districts of Gujarat as the industrial structure is dominated by the textile industry and a large part

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[1]The concepts are discussed and used by L.G. Reynolds and C.H. Taft. See: The Evolution of Wage Structure, New Haven, Yale University Press, 1956. pp. 9 and 84.

[2]Kerr, Clark. "Wage Relationship - The Comparative Impact of Market and Power Forces" in, The Theory of Wage Determination edited by John T. Dunlop. (London: McMillan and Co.,1957), pp.176-177.

of industrial development is concentrated in some of the districts only. Hence it is pertinent to know whether with the passage of time these differentials have narrowed or widened. It would throw light on the trend in regional balanced development and its impact on variations in industrial wages.

The pure geographical wage differentials or pure regional differentials in industrial wages in the present study, are taken as the differences in the average daily wage rates of workers employed in a particular "Three digit" industry across the districts in the state. It will be useful to keep in mind two limitations here. It is possible that to some extent, within each "Three digit" industry there may not be exactly similar plants, scale of organisation etc., in different districts. To the extent the plants within an industry across the regions are not similar, our pure geographical wage differentials would incorporate inter-plant wage differentials also. It will also include wage differentials existing at "Four digit" industry level. For example in district 'A' there is one "Four digit" industry and hence at "Three digit" level it is the same industry while in district 'B' there are two separate industries at "Four digit" level and they are summed up as one industry at "Three digit" level. Thus we are actually comparing one "Four digit" industry wage with the two separate "Four digit" industries which are summed up together at "Three digit" level. However at "Four digit" level we do

not get enough industries which are spread in at least 8 to 9 districts and hence we have mainly confined to "Three digit" industry wage differences. Wherever possible we have taken "Four digit" industry wage differences. We have assumed that the workers earning less than Rs.400 p.m. in these "Three digit" industries represent a fairly homogeneous group and have taken this group of workers earning less than Rs.400 p.m. in a particular "Three digit" industry as a whole and not the workers working in any particular occupation in "Three digit" industry across the districts. It is true that if we take the inter-regional differences in wages of workers engaged in a particular occupation only i.e. spinners in cotton spinning in different regions for example, then the inter-regional variation would be lower[3] than the variation which would be obtained by taking the average wage of all workers in the pay range of less than Rs.400 p.m. However we are primarily concerned with the differences in industrial wages and not in occupational wage differentials among the districts. Moreover such details of occupation-wise wage rates in industries in different districts are not available. Particularly changes in them over time cannot be known.

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[3]Papola T.S. "Regional Differentials in Industrial Wages in India 1950-1964". Anvesak, June 1971, Journal of the Sardar Patel Institute of Economic and Social Research, Ahmedabad. For spinners in cotton textile industry the inter-state variation in wages as measured by coefficient of variation was 10 per cent.

Expected levels and trend in geographical wage differentials:

Geographical gross wage differentials will be partly inter-industry wage differentials as the composition and number of industries are likely to differ from region to region. Moreover certain determinants[4] of industrial wages such as skillmix, productivity, capital intensity, degree of unionism, scale of organisation etc., differ from industry to industry. Hence geographical gross wage differentials are likely to be larger than the pure regional wage differentials. In a situation of underdevelopment, industrial development might be concentrated in a few pockets or to put it in other words there could be enclaved industrial areas. There would be neither regional dispersion of industries nor the diversification of industrial structure. Under these circumstances the geographical gross wage differentials in particular, are likely to be very wide. However when the economy begins to experience the spurts of industrialisation, these geographical gross wage differentials are likely to narrow down, both because of diversification of industrial structure and regional spread of industries. In other words if industrially backward districts begin to grow industrially faster - both overall and in the variety, than the already advanced districts, gross differentials would show narrowing tendency over time. Similarly

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[4] Ibid.,

with the progress of planned industrial development inter-regional mobility will increase. This will be all the more so when we are considering the small regions like the districts within a state. The economic and non-economic obstacles to mobility will be few as compared to those faced in inter-state migration. It can be said that industrialisation expands market for job opportunities geographically. An industrial worker can move from one area to the another in search of a better job or a higher wage etc. Moreover socio-economic effects arising from increasing contacts in the course of industrialisation process will also encourage mobility. Hence pure geographical wage differentials will also narrow down.

Empirical Situation:

In a developed country like U.S.A. many studies[5] are available which have examined the course of inter-area wage differentials. These inter-regional differentials have been narrowing gradually both overall and industry by industry. Reynolds[6] notes that this has probably been due to the increased dispersion of manufacturing industry and reduced

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[5]Bloch J.W. "Trends in Wage Differentials: 1907-1947", Monthly Labour Review, April 1948. Lester R.A. "Southern Wage Differentials", Southern Economic Journal, April 1947. Ober H and Glasser C. "Regional Wage Differentials", Monthly Labour Review, October 1946 etc.

[6]Reynolds L.G. Labour Economics and Labour Relations, 1949. p.332.

importance in some areas of a large localised supply of agricultural workers. Trade unions particularly in the industries with nationwide market have also become successful to some extent in narrowing the differentials. Martin Segal[7] in his study of industry by industry geographical differentials in 192 industries in U.S.A. for 1947 to 1954, has concluded that there was narrowing of regional differentials in majority of the industries. But such narrowing is attributed mainly to the working of the market forces. According to him therefore the ultimate remedy to narrow down the geographical differentials is a relatively high rate of expansion of industrial activity in the depressed wage areas or in the less developed regions in general.

In India some attempts have been made to examine the regional-inter-state wage differentials. A study[8] undertaken

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[7]Segal Martin. "Regional Wage Differentials in Manufacturing in the Post War Period". Review of Economics and Statistics, May 1961. During the period which he has examined, there was redistribution of workers—out migration from low wage regions and relatively rapid expansion of manufacturing in less developed regions.

[8]Wage Differentials in Indian Industry, National Council of Applied Economic Research, New Delhi, 1967, pp.6-12. It has examined gross differentials in industry. Differentials are shown as Index of Average Annual Earning during 1956-63. Taking Maharashtra's Average Annual Earning = 100, Index number is computed for the other states in India. For Andhra Pradesh it is 54 and Rajasthan 57.6 etc. But the relative dispersion of the structure over time is not computed. Only rank changes are examined. The study has used the data collected under the Payment of Wage Act, 1936, for the workers earning less than Rs.200/- p.m.

by National Council of Applied Economic Research shows that during 1956-63 inter-state differentials in average annual earnings of industrialworkers have been substantial. But it has not given any precise measure indicating the course of such differentials over time. It has argued that per capital value added in different states explained large part of the wage differentials among the states and hence has recommended a policy to bring about greater regional balance in economic development as a method to narrow down the inter-state wage differentials. Similarly Bharadwaj[9] and Papola in their aggregative excercise at all industry level have shown significant inter-state gross wage differentials and an increasing trend therein. Papola[10] in his separate article has shown that the gross regional differentials in industrial wages in India

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[9]Bharadwaj V.P. and Papola T.S. "Inter-state Wage Differentials and the Role of a Central Wage Policy", A paper submitted in the Seminar on Union State Relations, Indian Institute of Advanced Study, Simla.

[10]Papola T.S. "Regional Differentials in Industrial Wages in India", Anvesak, Op.Cit., The coefficient of variations for the regional gross differentials for all industries taken together which he has computed (pp.71 and 73) show a narrowing tendency between 1950-64. The coefficient of variation changes as under:

| | Year | | | |
|---|---|---|---|---|
| | 1950 | 1956 | 1960 | 1964 |
| Coefficient of variation | 46.15 | 30.68 | 18.85 | 25.40 |

Since the information pertains to the points of time and not time series, one has to be cautious to conclude about the changes in the structure as such.

have persisted but it has been argued by the author that they are not due to any lack of spatial mobility or disequilibrium in the labour market but mainly due to sustained differences in productivity and capital intensity in individual industries from region to region. Fonseca[11] has shown that inter-state wage differentials have narrowed and argued that the tendency towards narrowing is initiated by economic factors like spatial mobility and spread of industries throughout the country. This tendency is further helped by the institutional factors like wage boards and trade unions.

From these various studies on the inter-state gross as well as pure wage differentials in India it is almost hazardous to arrive at any definite conclusion about the change in the structure of these differentials. Because different studies have analysed wage differentials with reference to different time periods. Some are only point studies. The wages data used in some, are not comparable and often the techniques used lack scientific rigour. However most of them have shown that significant regional differentials in industrial wages exist in India. Despite this it is surprising that perhaps

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[11] Fonseca Jr. Wage Determination And Organised Labour in India. Oxford University Press, 1964. pp.177-178. The relative dispersion i.e. coefficient of variation is very small and declining. He has taken the average earnings of the factory workers during 1939-1957.

no attempt has yet been made to study the extent and behaviour of the differentials in smaller regional units within particular states. Perhaps such a study can throw important clues to the understanding of the changes in wider regional differentials - the inter-state differentials in industrial wages.

Approach in the Present Study:

Due to the limitations of the data on wages collected under the Payment of Wages Act, 1936 (those limitations are already discussed in the beginning) and because of the non-availability of data for certain years and districts in the state, the analysis of the changes in the inter-district wage differentials is carried out on the following lines: We have first examined the levels and changes in gross wage differentials during 1960-1969 i.e. 10 years for which the data on wages of workers earning less than Rs.400 p.m. were available for all the 16 districts in the state. We have then examined the levels and changes in the gross wage differentials in respect of 10 districts for which the same wages data i.e. of workers earning less than Rs.400 p.m. were available for a little longer period i.e. 1958-1969 or 13 years. The third set relates to the period 1954-1964 for the same 10 districts but the workers earning less than Rs.200 p.m. only were covered. Pure geographical wage differentials are examined industry by industry. Industries taken are at "Three digit" level.

We have excluded the district of Dangs from the analysis because the industrial activity in this district is almost absent. Moreover the present Bulsar district was carved out of the old Surat district. We have not taken Bulsar as a separate district but included it in the district of Surat. Similarly Gandhinagar district is included in the district of Ahmedabad.

Measurement of Wage Differentials:

Apart from knowing the size of wage differentials existing at any point of time, the course which such differentials take over time has always been of wider interest. But this raises the question as to how do we know whether a particular differential has widened or narrowed? This can be explained with an illustration,[12]

| Occupation | Period I (Wage Rs.) | Period II (Wage Rs.) |
|---|---|---|
| A | 2 per day | 3 per day |
| B | 1 per day | 2 per day |

It would be seen that in absolute terms the differential between the two occupations is the same i.e. Re.1 in Period I and Period II. But the percentage differential has fallen from 100 per cent in Period I to 50 per cent in Period II.

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[12]Adopted from the illustration given by L.G. Reynolds and C.H. Taft, The Evolution of Wage Structure. Op.Cit., p.11.

Now which should be considered more important from the point of view of the problem on hand?

It can be argued that since most of our basic economic calculations are in terms of percentage, it will be necessary to talk about widening or narrowing of wage structure also on percentage basis. Moreover it shows the relative position of one group over the other, and indicates the relative attractiveness of different occupations. On the other hand workers and unions do think in terms of absolute or rupees per day differentials among the different groups of workers in industries or regions. And they derive satisfaction if such absolute differential is maintained even though it would lead to the narrowing of percentage differentials. It would therefore be necessary to examine both the relative or percentage differentials and absolute differentials. The relative wage differential is measured by coefficient of variation, i.e.

$$\text{c.v.} = \frac{\sigma}{\bar{x}} \times 100,$$

where,

$\sigma$ is the standard deviation

$\bar{x}$ is the mean of the series.

The absolute dispersion of the series is measured by standard deviation.

In conjunction with these two measures of dispersion we have used coefficient of rank correlation. Percentage and absolute high-low differentials in district industrial wages are also computed.

District Industrial Wage Rates:

The daily average industrial wages in 16 districts in the state of Gujarat reveal some remarkable pattern. These district industrial wage rates (per Manday) covering the period 1960-1969 are shown in table IV-3.

Table IV-3

The Average Daily Industrial Wage Rates in the State and in 16 Districts in the State of Gujarat: 1960-1969

(Rupees per day)

| District | Year | | | | | | | | | | Percentage change in 1969 over 1960 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Ahmedabad | 6.01 | 6.10 | 6.18 | 6.13 | 6.77 | 7.91 | 8.22 | 9.53 | 9.61 | 9.63 | 60.23 |
| 2. Surat | 3.98 | 4.19 | 4.20 | 4.19 | 4.90 | 5.46 | 5.81 | 6.49 | 6.83 | 6.99 | 75.62 |
| 3. Baroda | 4.59 | 4.66 | 4.52 | 4.46 | 5.18 | 5.85 | 6.93 | 6.76 | 7.47 | 7.39 | 61.00 |
| 4. Kaira | 4.25 | 4.15 | 4.27 | 4.35 | 4.81 | 5.33 | 6.02 | 6.71 | 6.93 | 6.70 | 57.64 |
| 5. Mehsana | 4.63 | 4.57 | 4.73 | 4.76 | 5.35 | 5.89 | 6.51 | 7.50 | 7.57 | 7.51 | 62.20 |
| 6. Broach | 3.75 | 3.57 | 3.76 | 3.42 | 3.89 | 4.46 | 5.17 | 5.86 | 6.07 | 6.41 | 70.93 |
| 7. Panchmahals | 2.64 | 2.61 | 2.49 | 2.48 | 2.63 | 2.90 | 3.20 | 3.20 | 3.53 | 4.21 | 59.46 |
| 8. Sabarkantha | 2.28 | 2.36 | 2.29 | 2.00 | 2.31 | 2.14 | 2.57 | 2.95 | 3.63 | 3.86 | 69.29 |
| 9. Banaskantha | 3.32 | 3.24 | 3.42 | 3.70 | 4.17 | 3.77 | 4.27 | 4.85 | 5.92 | 5.62 | 69.27 |
| 10. Rajkot | 3.47 | 3.59 | 3.91 | 3.72 | 4.10 | 4.45 | 5.09 | 5.36 | 5.58 | 5.81 | 67.43 |
| 11. Jamnagar | 4.15 | 4.41 | 4.54 | 4.41 | 5.09 | 5.00 | 5.68 | 5.92 | 6.20 | 7.09 | 70.84 |
| 12. Bhavnagar | 3.42 | 4.42 | 4.17 | 3.80 | 4.62 | 5.10 | 5.65 | 5.69 | 5.78 | 6.35 | 85.67 |
| 13. Junagadh | 3.64 | 3.58 | 3.94 | 3.98 | 4.58 | 4.72 | 5.87 | 6.68 | 6.55 | 7.17 | 96.97 |
| 14. Surendranagar | 3.90 | 4.44 | 4.19 | 3.85 | 4.01 | 4.26 | 5.54 | 5.34 | 5.24 | 5.77 | 47.94 |
| 15. Amreli | 3.36 | 3.88 | 2.72 | 3.11 | 3.79 | 4.36 | 4.84 | 5.00 | 5.86 | 5.22 | 55.35 |
| 16. Kutch | 2.11 | 3.69 | 3.23 | 3.46 | 3.40 | 3.98 | 4.64 | 5.40 | 5.37 | 5.29 | 150.71 |
| State | 5.08 | 5.22 | 5.26 | 5.19 | 5.80 | 6.61 | 7.12 | 7.97 | 8.04 | 8.14 | 60.23 |

Source: Calculated from the data on Mandays and Total wages, collected under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

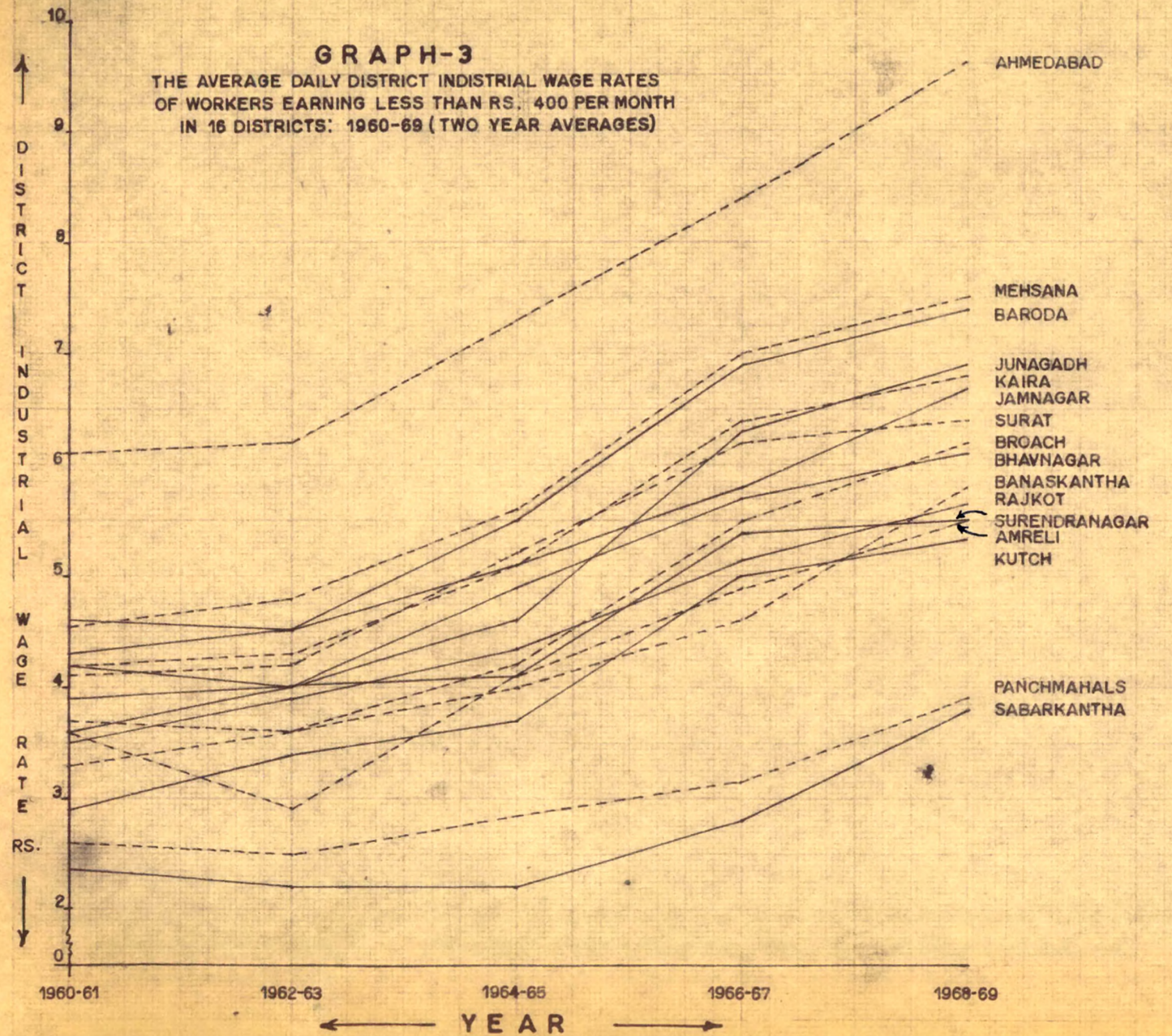
Note: 1) Wage rates are for the workers earning less than Rs.400/- p.m.

2) The data on total Mandays worked in each district are shown in Appendix IV-1.

It can be seen from table IV-3 that the daily industrial wage in the state of Gujarat was Rs.5.08 in 1960 and it increased to Rs.8.14 in 1969 or by 60.2 per cent over ten years. Excepting the district of Ahmedabad, it may be noted that in all districts the daily industrial wage is lower than the state average wage and in the districts like Sabarkantha, Panchmahals and Kutch the wage rates are even less than half of the state average rate. It is also important to note that throughout the period 1960-1969, the industrial wage rates in all the districts excepting Ahmedabad, have remained below the state average daily industrial wage rate. Whereas in the district of Ahmedabad the wage rate has consistently remained above the state average throughout the period. We also find that between 1960 and 1969 the percentage changes in industrial wage rates in the district of Ahmedabad and for the state as a whole are equal i.e. 60 per cent, whereas in 10 out of 16 districts the percentage changes in the wage rates in 1969 over 1960 are greater than for the state as a whole. On the other hand in 4 districts i.e. Panchmahals, Amreli, Surendranagar and Kaira the industrial wage rates have increased at a slower rate than for the state as a whole. Graph-3 brings into sharp focus the differences in the levels of district industrial wage rates and changes in them.

# GRAPH-3

THE AVERAGE DAILY DISTRICT INDISTRIAL WAGE RATES OF WORKERS EARNING LESS THAN RS. 400 PER MONTH IN 16 DISTRICTS: 1960-69 (TWO YEAR AVERAGES)



It will be noted that 16 districts fall into three broad groups. In the top group the position of Ahmedabad district is distinct. On the other hand the wage rates in the districts of Panchmahals and Sabarkantha have remained at the bottom all along the period. The coefficient of rank correlation between the level of wage rates in districts in 1960 and percentage changes in district wage rates in 1969 was -0.3176. This is not significant at 5 per cent level of significance (14 d.f.) and therefore one cannot be certain to conclude that the districts with initially higher wage rates have experienced lower percentage rise over time. Hence one cannot be certain whether in percentage terms the structure of wage differentials has narrowed down or not. A careful look at the differential between the highest and the lowest wage rates among the districts as shown in table IV-4 will show that the highest district industrial wage was between two and a half to three times the lowest district industrial wage rate during the period 1958 to 1969.

Table IV-4

Highest District Industrial Wage of Workers Earning Less Than Rs.400 p.m. as a Ratio of the Lowest District Wage: 1958-1969

| Year | Highest wage as ratio of the lowest |
|---|---|
| 1 | 2 |
| 1958 | 2.47 |
| 1959 | 2.95 |
| 1960 | 2.84 |
| 1961 | 2.58 |
| 1962 | 2.69 |
| 1963 | 3.06 |
| 1964 | 2.93 |
| 1965 | 3.69 |
| 1966 | 3.19 |
| 1967 | 3.23 |
| 1968 | 2.72 |
| 1969 | 2.28 |

Source: Derived from Table IV-3 and Appendix IV-3.

The table IV-4 shows that between 1963 to 1967 this high-low wage differential was much higher i.e. the highest is

about three times of the lowest district wage while between 1958 to 1962 it is in the range of two and a half times to three times. In the last two years of the period this high-low wage differential has shown a decline.

This preliminary investigation brings into sharp focus the significantly wide differences in industrial wages among the districts. However a definite conclusion about the trend in the structure of these wage differentials cannot be reached. Because there are divergent trends i.e. percentage changes in the district wage rates between 1960 to 1969 indicate narrowing (as measured by the negative rank correlation coefficient between the wage levels of 1960 and percentage changes in them by 1969). The high-low wage differentials (as measured in terms of the highest district wage expressed as ratio of the lowest) show widening of the structure with narrowing at the end of the period. These pilot results thus call for a more comprehensive inquiry into various facets of the wage differentials in industry among Gujarat districts.

Level and Trend of Inter-district Gross Differentials of Industrial Wages:

The relative wage differentials measured in terms of the coefficient of variation are shown in table IV-5.

Table IV-5

Level and Trend of Inter-district Gross Differentials in Industrial Wages in Gujarat: 1954-1969

| Year | Coefficients of variation | | |
|---|---|---|---|
| | 16 Districts (wages of less than Rs.400/- per month) 1960-1969 % | 10 Districts (wages of less than Rs.400/- per month) 1958-1969 % | 10 Districts (wages of less than Rs.200/- per month) 1954-1964 % |
| 1 | 2 | 3 | 4 |
| 1954 | - | - | 30.38 |
| 1955 | - | - | 26.71 |
| 1956 | - | - | 32.48 |
| 1957 | - | - | 28.26 |
| 1958 | - | 27.62 | 28.81 |
| 1959 | - | 29.53 | 28.90 |
| 1960 | 25.64 | 27.60 | 28.80 |
| 1961 | 21.40 | 27.60 | 26.60 |
| 1962 | 24.40 | 30.77 | 31.30 |
| 1963 | 24.30 | 30.91 | 30.50 |
| 1964 | 24.80 | 30.10 | 28.90 |
| 1965 | 27.80 | 34.40 | - |
| 1966 | 25.20 | 32.00 | - |
| 1967 | 26.90 | 33.60 | - |
| 1968 | 23.90 | 28.60 | - |
| 1969 | 22.20 | 26.90 | - |

Source: Computed from the data given in Table IV-3 and in Appendix IV-3 and IV-4.

It can be seen from Column 2 of the table that relative dispersion (as measured by c.v.) has varied between 21.40 per cent in 1961 to 27.80 per cent in the year 1965. The relative dispersion has however generally remained around 24 per cent. It is interesting to note that except in the year 1968 and 1969, the structure does not show any narrowing. On the contrary the trend between 1961 to 1967 is one of expansion of the structure. However in 1968 and 1969 the structure shows the tendency to narrow down. Column 3 of the table shows the coefficients of variation of wage differentials for 10 districts of Gujarat for which wage data were available from 1958 to 1969 i.e. 12 years. The conclusion which we have arrived at in the above part, on the basis of Column 2 of the above table, is confirmed by the trend in the structure of wage differentials as shown in Column 3 also. One would find that right from 1958 upto 1967 the structure of gross differentials among the districts has expanded. The coefficient of variation has increased by about 5 per cent. In Column 3 one also notices that the structure has started narrowing from 1968. Column 4 in the same table shows the trend in the structure of these differentials in respect of workers who earned less than Rs.200/- per month. The separate wage data were available for the same 10 districts as above for the period 1954 to 1964. It may be noted that relative dispersion of the structure in this case is higher being around 28 per cent. But the trend

in the relative dispersion in this series is not very clear. Between the first three years i.e. 1954-1956 and last three years i.e. 1962-64 one does not find any significant change in coefficients of variation. If we leave aside the year 1954 and 1956 a slight tendency towards expansion would be noted. It has been hypothesised that relative dispersion of the structure of wage differentials would narrow down over time and absolute dispersion would expand.[13] Because the districts with already high level of wages would be expected to experience relatively smaller percentage wage increases while such percentage wage increases in the districts with low initial wage levels would be greater and this would lead to the narrowing of percentage differentials over time. However the actual trend in the relative dispersion of the inter-district gross wage differentials in Gujarat state does not confirm this hypothesis at least upto 1967 - there is no such contraction in the structure. The narrowing tendency seems to have set in from 1968. However whether it would be a trend towards narrowing or not remains undecided as it would need data for a longer period.

Trend of Absolute Differentials:

The inter-district absolute differentials in industrial wages, have on the whole expanded as shown in table IV-6.

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[13]This is termed as the 'Law of Wage Differentials'. See: Ross, A.M. Trade Union Wage Policy, Op.Cit., pp.113-133.

Table IV-6

Level and Trend of Absolute Differentials in the District Gross Industrial Wages in Gujarat: 1954-1969

| Year | Absolute dispersion of the structure (Standard deviation) | | |
|---|---|---|---|
| | 16 Districts (wages of less than Rs.400/- per month) 1960-1969 (Rs.) | 10 Districts (wages of less than Rs.400/- per month) 1958-1969 (Rs.) | 10 Districts (wages of less than Rs.200/- per month) 1954-1964 (Rs.) |
| 1 | 2 | 3 | 4 |
| 1954 | - | - | 0.948 |
| 1955 | - | - | 0.732 |
| 1956 | - | - | 0.973 |
| 1957 | - | - | 0.923 |
| 1958 | - | 0.931 | 0.948 |
| 1959 | - | 1.075 | 1.026 |
| 1960 | 0.954 | 1.073 | 1.069 |
| 1961 | 0.843 | 1.084 | 1.012 |
| 1962 | 0.942 | 1.188 | 1.190 |
| 1963 | 0.931 | 1.193 | 1.117 |
| 1964 | 1.078 | 1.320 | 1.195 |
| 1965 | 1.313 | 1.657 | - |
| 1966 | 1.356 | 1.717 | - |
| 1967 | 1.566 | 1.982 | - |
| 1968 | 1.465 | 1.818 | - |
| 1969 | 1.410 | 1.726 | - |

Source: Computed from the data given in Table IV-3 and in Appendix IV-3 and IV-4.

It can be easily seen from the table that in respect of wages of workers earning less than Rs.400/- per month either for 16 districts (Column 2) or for 10 districts (Column 3) the absolute differentials have increased more or less steadily upto 1967. In the last two years i.e. 1968 and 1969 there is narrowing. However considering the period as a whole, we find that the absolute wage differentials have widened. In case of workers earning less than Rs.200/- per month also, the absolute differentials as shown in Column 4 of table IV-6 show steady widening during the period 1954-1964.

Thus it is very interesting that both in relative and absolute terms the structure of inter-district wage differentials has widened upto 1967 and has shown the tendency to narrow down again in relative and absolute terms since 1968. These trends (relative and absolute terms) in the structure of inter-district gross differentials in industrial wages are all the more significant as during all these years the rank structure of the districts for these industrial wage rates has practically remained unchanged. Table IV-7 shows the coefficients of rank correlation of the district industrial wage rates.

## Table IV-7

Changes in the Rank Structure of the District Industrial Wages in the State of Gujarat: 1954-1969

| Year | 16 Districts (wages of less than Rs.400/- per month) 1960-1969 | 10 Districts (wages of less than Rs.400/- per month) 1958-1969 | 10 Districts (wages of less than Rs.200/- per month) 1954-1964 |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1954 | - | - | 0.9394 |
| 1955 | - | - | 0.8788 |
| 1956 | - | - | 0.7697 |
| 1957 | - | - | 0.8637 |
| 1958 | - | 0.8304 | 0.8334 |
| 1959 | - | 0.9273 | 0.9576 |
| 1960 | 1.0000 | 1.0000 | 1.0000 |
| 1961 | 0.7979 | 0.9758 | 0.9697 |
| 1962 | 0.9530 | 0.9879 | 0.9637 |
| 1963 | 0.9089 | 0.9637 | 0.9940 |
| 1964 | 0.8853 | 0.9576 | 0.9697 |
| 1965 | 0.8912 | 0.9819 | - |
| 1966 | 0.9236 | 0.9879 | - |
| 1967 | 0.8677 | 1.0000 | - |
| 1968 | 0.8574 | 0.9758 | - |
| 1969 | 0.8971 | 0.9758 | - |

Source: Computed from the data given in Table IV-3 and in Appendix IV-3 and IV-4.

It can be seen that there has been hardly any noticeable change in the rank structure of district wages in any of the three sets of districts covering different time periods.

High-Low Wage Differentials:

The differential between the highest district wage and the lowest district industrial wage rates can be highlighted by calculating high-low wage differentials. These high-low wage differentials are calculated as under:

The median district industrial wage of the upper quartile of the 16 district wage structure is expressed as percentage of the median district industrial wage of the lower quartile. The first four districts ranked in descending order according to the level of industrial wage rates comprise the upper quartile, and the last four districts ranked in the same manner constitute the lower quartile of the wage structure. The districts with ranks II and III will be the median districts of the upper quartile and those with ranks XIV and XV will be the median districts of the lower quartile. Median district wage rates are weighted industrial wage rates, weights being their Mandays and total wages. Thus the upper quartile median district wage in 1960 is calculated for instance by combining the Mandays worked in Mehsana (Rank II) and Baroda (Rank III). Their total wages are similarly combined. The median district industrial wage is obtained by dividing this combined total wages of Mehsana and Baroda with the combined total of Mandays

of Mehsana and Baroda. The same procedure is followed to calculate the lower quartile median district industrial wage rate. The high-low wage differentials are also computed between the median wage districts of 1960 for the entire period i.e. 1960 to 1969. In this, median districts of 1960 remain constant. Their ranks may differ in subsequent years. But the differential is measured with respect to those districts only. These differentials both in percentage and absolute terms for 16 districts are given in table IV-8.

Table IV-8

High-Low Percentage and Absolute Differentials in 16 District Industrial Wages in Gujarat: 1960-1969

| Year | High-low wage differentials | | High-low wage differentials between the median districts of 1960 | |
|---|---|---|---|---|
| | Percentage | Absolute (Rs.) | Percentage | Absolute (Rs.) |
| 1 | 2 | 3 | 4 | 5 |
| 1960 | 185.48 | 2.12 | 185.48 | 2.12 |
| 1961 | 168.36 | 1.88 | 185.20 | 2.13 |
| 1962 | 179.42 | 2.06 | 191.25 | 2.19 |
| 1963 | 171.42 | 1.90 | 200.88 | 2.29 |
| 1964 | 171.47 | 2.18 | 205.90 | 2.69 |
| 1965 | 193.70 | 2.83 | 225.86 | 3.26 |
| 1966 | 202.67 | 3.45 | 230.06 | 3.85 |
| 1967 | 202.31 | 3.53 | 225.16 | 3.88 |
| 1968 | 156.57 | 2.71 | 210.08 | 3.93 |
| 1969 | 157.53 | 2.71 | 182.30 | 3.35 |

Source: Derived from Table IV-3 and Appendix IV-1.

Column 2 of the table shows that high-low percentage wage differentials have not followed any continuous trend or direction. Considering the entire period of 1960 to 1969, one finds that the high-low percentage wage differentials have narrowed down. The highest expressed as percentage of the lowest has been reduced from 185.48 in 1960 to 157.53 in 1969. On the other hand, excepting the last two years i.e. 1968 and 1969, we find the expansion of these wage differentials. In fact during 1965 to 1967 the high-low percentage wage differentials have been found to be substantially higher than in any other year during the period. The high-low percentage wage differentials between the same upper quartile median districts and the lower quartile median districts of 1960 have revealed the trend more clearly (Column 4). It will be noted that the high-low percentage wage differentials between the median district wage rates of 1960 (Column 4) have widened continuously upto 1966. While there is substantial narrowing thereafter. Broadly it can be said that the high-low percentage wage differentials between same pair of median districts have shown widening tendency except in the last year. The upper quartile median districts of 1960 were Mehsana and Baroda while the lower quartile median districts were Panchmahals and Sabarkantha. Thus Column 4 of the above table brings into sharp focus the point that the percentage wage differential between particular high and low wage districts of 1960 has not narrowed down except in the last year. The difference between the high and

the low wages is in the range of 80 per cent to 100 per cent throughout the period. Column 2 on the other hand shows that the districts occuping rank II and III in rank order of district wages have remained the same i.e. Baroda and Mehsana (though between the two, the ranks have inter changed i.e. in some years Baroda district's rank is II while in others Mehsana district bears rank II). Whereas the median districts of the lower quartile have not remained the same throughout the period. For instance in 1960 they were Panchmahals and Sabarkantha while in 1965 they were Banaskantha and Panchmahals and in 1969 Amreli and Panchmahals. Thus Panchmahals district has remained more or less continuously throughout the period, in rank XIV and XV. But Sabarkantha has remained lowest i.e. XVI for most of the years and its place is periodically taken by districts like Amreli, Banaskantha, Kand Kutch. Thus the upper quartile median districts have remained unchanged throughout the period but the lower quartile median districts have not remained the same throughout the period.

Column 3 shows the absolute high-low wage differentials between the median district wage rates of upper and lower quartiles of the inter-district industrial wage structure. While column 5 shows the absolute high-low wage differentials between the median district wage rates of upper quartile and the lower quartile of the year 1960. Absolute high-low wage differentials (column 3) have widened from Rs.2.12 in 1960 to

Rs.2.72 in 1969. The widening is much sharper between 1960 and 1967 as this absolute differential in 1967 is Rs.3.53 as compared to Rs.2.12 in 1960. At the same time the absolute high-low wage differentials between 1965-1967 were much higher than in any year during the period under examination. The absolute high-low wage differential between the median wage districts of 1960 (Column 5) has widened continuously except in the last year i.e. 1969, when it shows a decrease. Even then, the absolute high-low wage differential in the beginning of the period was much lower than at the end.

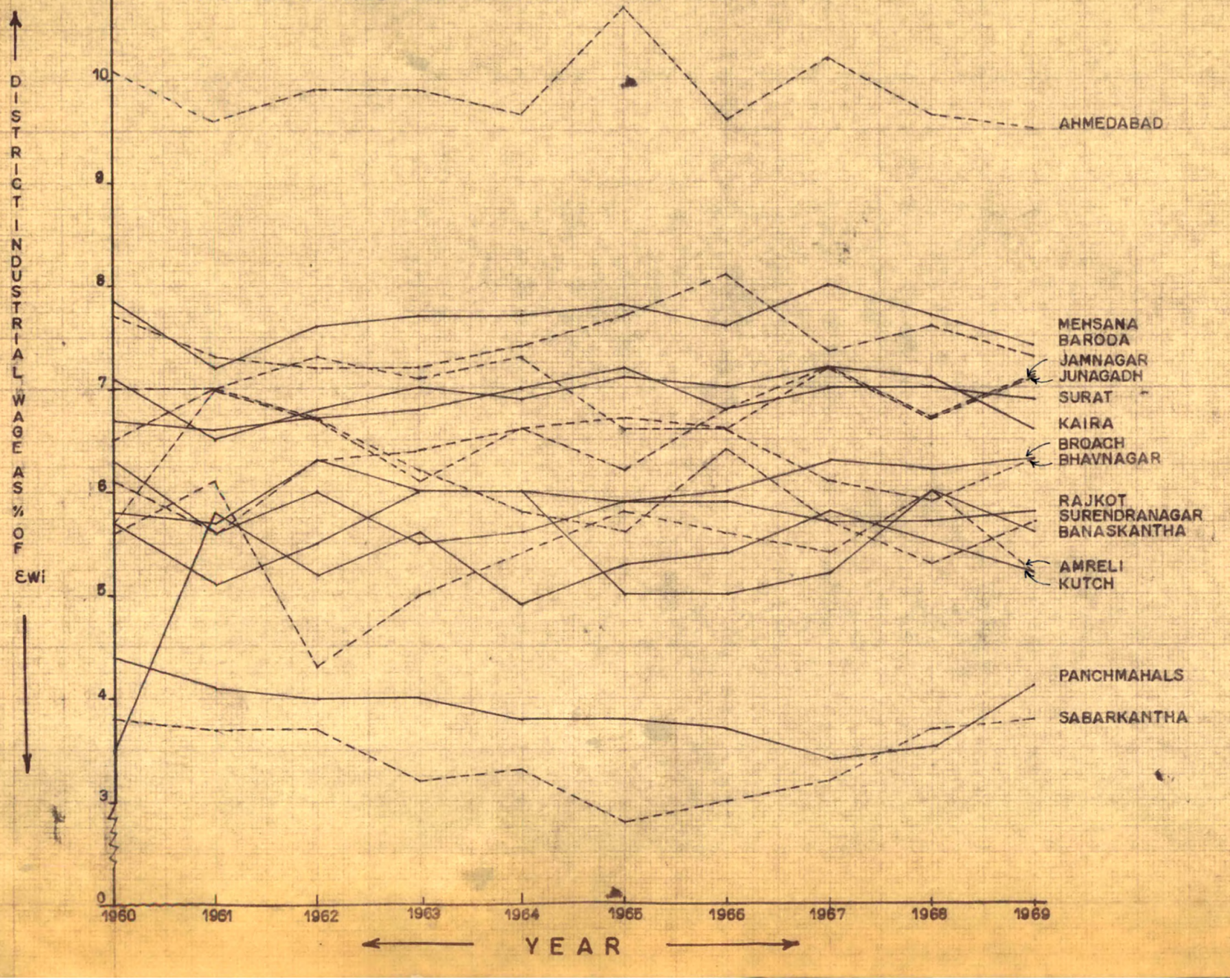
It will be also noted that the levels of both percentage and absolute high-low wage differentials in respect of the median districts of 1960 (Columns 4 and 5) are higher than in case of percentage and absolute high-low wage differentials in each year (Columns 2 and 3) during the period.

We can thus say that both percentage and absolute high-low wage differentials either between the same pair of median districts or between the pair of districts occuping same rank (i.e. II and III and XIV and XV) were high and have widened upto 1967. Only in the last two years of the period 1968 and 1969, there was a narrowing tendency. Moreover the tendency of the last two years is whether a trend or not cannot be said on the basis of the two years tendency.

In order to highlight the overall pattern of changes in the inter-district structure of industrial wages we have shown the changes in the structure in Graph-4 .

# GRAPH-4

AVERAGE DAILY DISTRICT INDUSTRIAL WAGE RATES EXPRESSED AS PERCENTAGE OF ALL DISTRICT WAGE RATES IN EACH YEAR : 1960 – 1969



In the graph each district wage is expressed as percentage of $\sum_{1}^{16} Wi$ for each year, where W is the wage rate and 1 to 16 are sixteen districts. Thus each district wage rate becomes an element occupying a specific position in relative terms, in the series of district wage rates in that particular year. Since each element i.e. each district wage rate is expressed in percentage terms, the effect of the level of wage rate is eliminated. A table showing each district wage as percentage of all the district wage rates in each year during 1960-69 is given in Appendix IV-5. The graph shows in a vivid way the fact of expansion of the wage structure upto 1967 and narrowing thereafter.

Explanation of the Levels of District Wages and Trend of Inter-district Wage Structure:

The foregoing analysis related to the examination of the level of wage differentials - the extent and nature of wage differentials among the districts and trend or the pattern of behaviour of these differentials over time.

We can now attempt two questions: (1) Why the levels of industrial wages are so divergent among the districts or to put it in other words can we explain why such differences exist in district wage rates within the state? and (2) What factors account for the widening of the wage structure upto 1967 and narrowing of the same from 1968?

It has been pointed out earlier that the gross wage rate differences among the districts are partly inter-industry differences because of the differences in the composition of industries and industrial structures in districts. All districts do not have identical industries and moreover predominant industries in different districts are different. For example in 1967 in Ahmedabad district, in Ahmedabad city alone textiles accounted for 84 per cent of the total factory employment. Similarly in Surat 47 per cent of the total factory employment was provided by textile industry alone. On the other hand there were districts like Sabarkantha in which 71 per cent of the total factory employment was in processes allied to agriculture and in Amreli district 84 per cent of the factory employment and in Broach 64 per cent of the factory employment came respectively from food industries and processes allied to agriculture. This has a vital bearing on the level of district industrial wage. For example modern large-scale textile industry is highly concentrated in the district of Ahmedabad. It is also highly unionised industry. Whereas processes allied to agriculture like Cotton Ginning Pressing etc., are significantly different in terms of scale, capital employed, payment of dearness allowance, spread of unionism etc.

In this connection therefore it is necessary to focus attention on the nature and extent of industrialisation of districts in the state. This has been attempted by showing:

(1) Average daily employment in factories.

(2) Industrial density which is defined as the industrial population in a district as percentage of the industrial population in the state. (Districts are grouped in percentage industrial density classes).

(3) Index of industrial diversification.

(4) Location quotients of some major high wage industries in districts.

It is necessary to remember that Diversification Index* is a relative concept as it shows the diversification of the industrial structure of a district by keeping the state's industrial structure as norm. If the Index is near to 100,

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*The formula for the diversification index is expressed as follows: The percentage employment in each industry in the state of the total employment in the state is taken as the norm. The deviations of the corresponding percentages for the districts from this state norm is considered as a measure of diversification. The Index of diversification for the districts is arrived at by calculating the sum of the deviations of the district percentage employment from the state percentage and substracting the result from 100: The formula is

$$Id = 100 - (P_{is} - P_{iD}); \text{ where,}$$

$Id$ = Index of diversification.

$P_{is}$ = Percentage employment in $i^{th}$ industry in the state.

$P_{iD}$ = Percentage employment in the $i^{th}$ industry in the district.

then the industrial structure of that district is similar to the industrial structure of the state. And lower the value of diversification index, greater is the divergence from the state norm and hence lower is the degree of diversification. The location quotient of a particular industry in a district is obtained as follows:

$$L.Q. = \frac{\text{Percentage of workers employed in an industry in a district}}{\text{Percentage of workers employed in that industry in the state}} \times 100$$

If L.Q. $> 1$, then that particular district is specialising in that industry relatively more than the state as a whole that particular district has a relatively higher share in the industry than what the state has in that industry. The location quotients are shown for textiles, chemicals and chemical products, products of petroleum and coal, electrical machinary, electric power, steam and gas. The location quotients are for two digit industry groups. The table IV-9 shows the nature and extent of industrial development in different districts of Gujarat.

Table IV-9

The Average Daily Employment in Factories, Industrial density, Index of Industrial Diversification, Location quotients of some High Wage Industries and Composition of Industries in 16 Districts for the year 1967

| District | Average daily factory employment | Industrial density class (%) | Index of diversification | Location Quotients | | | | | Predominant industry employing 33% & above of the total factory workers in the district | Subsidiary industry employing more tha 10% and above not less than 33% of the total factory workers in the district |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Textiles | Chemical and chemical products | Products of Petroleum and coal | Electric, power, gas and steam | Electrical machinery | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1. Ahmedabad | | | | | | | | | | |
| i) City | 186330 | 5.00 & above | 63.38 | 1.74 | 0.20 | 0.17 | 0.06 | 0.54 | Textiles 84% | Processes allied to agriculture 17% |
| ii) District | | 5.00 & above | 51.74 | 0.22 | 0.62 | 1.48 | 0.32 | - | - | Textiles 10%<br>Machinery 18%<br>Transport 20%<br>Non-metallic products 20% |
| 2. Surat | 50750 | 5.00 & above | 89.92 | 0.98 | 1.28 | 0.39 | 1.78 | - | Textiles 47% | Non-metallic mineral products 14% |
| 3. Baroda | 42597 | 5.00 & above | 60.31 | 0.33 | 3.68 | 4.43 | 0.17 | 5.01 | - | Processes allied to agriculture 14%<br>Textiles 15%<br>Chemicals 18%<br>Machinery 13% |
| 4. Kaira | 25201 | 5.00 & above | 68.76 | 0.65 | 0.30 | 0.45 | 1.71 | 1.56 | Textiles 41% | Tobacco 22% , Non-metallic mineral products 12% |
| 5. Rajkot | 17293 | 3-4 | 60.68 | 0.36 | 0.13 | 0.13 | 1.10 | 0.42 | - | Non-metallic mineral products 10%, Food 19%, Textiles 17%, Machinery 13% |
| 6. Mehsana | 15108 | 4-5 | 73.19 | 1.21 | 0.09 | - | 0.45 | 0.07 | Textiles 58% | Processes allied to agriculture 17% |
| 7. Bhavnagar | 14579 | 3-4 | 76.93 | 0.70 | 0.73 | 18.74 | 0.99 | 0.26 | Textiles 34% | Food 17% |
| 8. Jamnagar | 13350 | 3-4 | 43.67 | 0.16 | 2.26 | 4.52 | 3.13 | 0.76 | Textiles 34% | Food 42%, Chemicals 11%, Non-metallic mineral products 11%. |

Contd....

Table IV-9 (contd.)

| District | Average daily factory employment | Industrial density class (%) | Index of diversification | Location Quotients: Textiles | Chemical and chemical products | Products of petroleum and coal | Electric, power, gas and steam | Electrical machinery | Predominant industry employing 33% & above of the total factory workers in the district | Subsidiary industry employing more than 10% and above not less than 33% of the total factory workers in the district |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 9. Surendranagar | 12617 | 2-3 | 53.43 | 0.30 | 2.03 | - | 0.15 | - | Procee allied to agriculture 34% | Food 19%, Textiles 14%, Chemicals 10%. |
| 10. Junagadh | 12060 | 1-2 | 50.29 | 0.37 | 3.17 | - | 2.72 | - | Food 34% | Textiles 17%, Chemicals 16%, Non-metallic mineral products 15%. |
| 11. Broach | 9735 | 2-3 | 43.77 | 0.41 | 0.34 | 1.35 | 0.53 | - | Process allied to agriculture 64%, Textiles 25%. | - |
| 11. Panchmahals | 5548 | 0-1 | 32.21 | 0.52 | 0.34 | - | 3.14 | - | Transport 46% | Non-metallic mineral products 19%, Food 14%. |
| 12. Sabarkantha | 4598 | 0-1 | 27.37 | 0.10 | - | - | - | - | Processess allied to agriculture 71% | - |
| 13. Kutch | 4038 | 0-1 | 39.08 | 0.14 | 0.41 | - | 4.02 | - | Food 48% | - |
| 14. Amreli | 1750 | 0-1 | 21.11 | 0.12 | - | 0.21 | 1.23 | - | Food 84% | |
| 16. Banaskantha | 452 | 0-1 | 26.09 | - | - | - | 5.95 | - | - | Transport 28%, Miscellaneous 23%, Processes allied to agriculture 15%, Footwear 11%. |

Source: Data used are from "Souvenier" Gujarat Industrial Conference, Ahmedabad, 1969, published by Chamber of Commerce and Industries, Ahmedabad.

Note: i) The table is based on the paper "Changes in the Regional Distribution of Industry in Gujarat 1956-1967" by Shri J.D. Mehta, Senior Research Fellow, University of Bombay. The paper was presented at the First Gujarat Economic Conference, April, 1969.

ii) In Bulsar Textiles accounted for 41% and processes allied to agriculture for 13% and Location Quotients of the industries shown in the table were as under for the district of Bulsar.

| Industry Code No. | 23 | 31 | 51 | 371 |
|---|---|---|---|---|
| Location Quotient | 0.87 | 2.59 | 0.73 | 0.48 |

iii) The Index of diversification for Bulsar district in 1967 was 73.91.

iv) Factory employment in the district of Surat includes factory employment of Bulsar district.

The table highlights the extent and pattern of industrialisation of different districts in the state. It will be noted that five districts i.e. Sabarkantha, Banaskantha, Amreli, Panchmahals and Kutch do not have any notwworthy industrial development. This is shown clearly by the low volume of factory employment (Column 2) and low industrial density (Column 3). In respect of diversification of industrial structure also these 5 districts stand differently from the rest of the districts in the state. The index of diversification for these 5 districts is quite low. It emphasises the divergence of industrial structure in these districts as compared to the state industrial structure. Similarly Columns 5,6,7 and 8 show the location quotients of some important high wage industries for the year 1967. The location quotients are calculated for "Two digit" industries. They are textiles, chemical and chemical products, electric power, steam and gas, products of petroleum and coal and electrical machinary.* Location quotients show which districts specialise in these high wage industries. It will be noted that out of the five high wage industries of 1967 only in one i.e. electric power, gas and steam the districts like Panchmahals, Banaskantha, Kutch and Amreli have more than a proportionate share (more than proportionate to the state's share in the industry) in this industry. In fact in most of these high wage

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*It is the "Three digit" level.

industries the already more industrialised districts specialise more.

From Columns 10 and 11 it will be seen that textiles is still a dominant industry in more industrialised districts except Baroda. Moreover agricultural raw material based industries (except textiles) like processing industries (agriculture and allied industries and food) are also quite significant in the industrial structures of districts. At the same time new modern industries like chemicals and chemical products, products of petroleum and coal, machinery etc., have also began to emerge in the industrial structure of districts like Baroda, Ahmedabad, Rajkot, Surendranagar, Junagadh, etc. Thus most of the indicators of nature and extent of industrialisation i.e. factory employment, industrial density, shares in high wage industries, diversification of structure and predominant and subsidiary industries, show wide differences among the districts and these are important factors causing wide differences in district wage rates.

We may now persue a more specific approach and attempt to decompose the inter-district differences in industrial wages in terms of (i) Industrial structure (ii) Wage rate as such. In other words how much of the differences in the district industrial wages are attributable to the differences in district industrial structures and how much can be attributed to the differences in wage rates as such? This is done by

taking the industrial structure and wage rates of the state as basis. However this is not to suggest that the pattern and composition of state manufacturing employment and wage rates are ideal. But the reason is that such a basis which remains common for all districts enables us to highlight the relative position of districts vis-a-vis the state. And since they are computed with reference to a common basis it is possible to know the relative positions of different districts vis-a-vis to each other.

The method of decomposing the differences between the districts and the state industrial wage rate (average) into the differences due to (i) Industrial structure (ii) Wage rate can be described as under:

To begin with we may assume that the wage rate in a given industry i in a district J is the same as the wage rate in that industry in the state. We, then find the place of industry i in the industrial structure (in terms of Mandays worked) in the state and in district J. In other words it means we find the proportion of Mandays worked in industry i in the state's total Mandays worked in all industries and the proportion of Mandays worked in that industry in the total Mandays worked in all industries in district J.

Now,

The difference in the wage rate of district J and the state wage attributed to industrial structure =

$$\leq \text{State wage in industry i} \left\{ \begin{array}{l} \text{Proportion of mandays worked in industry i in district J} \end{array} - \begin{array}{l} \text{Proportion of mandays worked in industry i in the state} \end{array} \right\}$$

This has tobe summed up for all industries in the state and in district J.

In the same way we assume that the proportion of Mandays worked in industry i in the state and district J are the same i.e. the industrial structure is kept unchanged. We, then find the difference in the wage rate in industry i in district J and in industry i in the state. Thus,

The difference in the wage of district J and the state wage attributed to wage rate as such =

$$\leq \text{Proportion of mandays worked in industry i in the state.} \left\{ \begin{array}{l} \text{Wage rate in industry i in district J} \end{array} - \begin{array}{l} \text{Wage rate in industry i in the state} \end{array} \right\}$$

This again has to be summed up for all industries in district J and the state.

There will be also a jointly explained portion of the wage difference (between district J and the state) or what is called cross effect of industrial structure and wage rate.

Thus,

The difference between the wage rate of district J and the state =

$$\lesssim \text{State wage in industry I} \left\{\begin{matrix}\text{Proportion of Mandays worked in industry i in district J} \\ - \\ \text{Proportion of Mandays worked in industry i in the state}\end{matrix}\right\}$$

$$+ \text{Proportion of Mandays worked in industry i in the state} \left\{\begin{matrix}\text{Wage rate in industry i in district J} \\ - \\ \text{Wage rate in industry i in the state}\end{matrix}\right\}$$

$$+ \left\{\begin{matrix}\text{Proportion of Mandays worked in industry i in district J} \\ - \\ \text{Proportion of Mandays worked in industry i in the state}\end{matrix}\right\} \left\{\begin{matrix}\text{Wage rate in industry i in district J} \\ - \\ \text{Wage rate in industry i in the state}\end{matrix}\right\}$$

Symbolically the formula can be written as under:

$$AW_J - AW_S = \sum_{1}^{i} AW_{iS} \ (MD_{iJ} - MD_{iS}) + \sum_{1}^{i} MD_{iS}$$

$$(AW_{iJ} - AW_{iS}) + (MD_{iJ} - MD_{iS}) \ (AW_{iJ} - AW_{iS})$$

Where,

AW = Average daily industrial wage.

J$^s$ = Districts

S = State.

i = Industries.

In using this methodology it is necessary to remember a few limitations which arise from the nature and extent of industrialisation of different districts. For example the composition of industries as shown in table IV-9 differs sizably from district to district and the number of industries in each district is not the same. For instance on the one hand in the districts like Ahmedabad, Surat and Baroda there are more than 25 "Three digit" industries in each, whereas in the districts of Sabarkantha, Panchmahals, Amreli, etc. there are hardly 8 industries and that too negligible in terms of employment provided.

Due to these reasons the decomposition of wage differences in terms of industrial structure and wage, leaves a large part unexplained or explained jointly i.e. the third component of the formula will be very large. Fewer the number of industries in a district, greater will be such unexplained portion of the wage differential between the district and the state. Nevertheless the fact remains that the large unexplained part of the wage difference is due to the absence of industries. Suppose an industry, which is employing large number of workers and is also a high wage industry in the state, is absent in the industrial structure of a particular district. This absence of such an important industry would show up with negative sign into difference due to industrial structure, into difference due to industrial wage and into joint explana-

tion of industrial structure and wage rate with a positive sign. On the other hand in districts like Ahmedabad, Surat etc., this unexplained or jointly explained portion of the total wage differential will be relatively low because the number and nature of industries in these industrially advanced districts are likely to be more similar to the state industries. Logically therefore it can be said that for the strict consideration of methodology it would be ideal to have the number and composition of industries identical among the districts and the state. In such a situation the wage differences can be clearly attributed to industrial structure and wage rate.

In order to bring into focus the nature of difficulty which crops up when the composition and number of industries among the districts and the state are not identical and also to facilitate the interpretation of the results, we have worked out a hypothetical example and is given in the Appendix IV-6 to the chapter. Following the same procedure results were obtained for each of the 16 districts in the state. These are also shown in the same Appendix IV-6.

In the absence of the ideal situation of having the same composition and number of industries among the districts and the state it would be appropriate to leave out the districts like Panchmahals, Sabarkantha, Banaskantha, Kutch and Amreli for the analysis of the explanation of wage differentials into

industrial structure and wage rate. They have low industrial development. In district like Sabarkantha the main industry is the agriculture processing like cotton, ginning and pressing which is one of the lowest wage paying industry in the state. We have therefore explained the wage differentials in 11 districts. Since there are relatively more industries in these districts the jointly explained portion of wage differential (or unexplained portion of wage differential) will be low and hence we have equally divided it between industrial structure and the wage rate. Such a procedure would introduce equal bias but would not alter the relative importance or power of explaining the wage differential between district and the state. This exercise is carried out for each of the 11 districts in the state for the year 1969. The results are shown in table IV-10.

Table IV-10

Differences in the District Average Industrial Wages Attributed to Industrial Structure and Wage Rate for 11 Districts in Gujarat: 1969

| District | Wage differences attributed to | | | Explained wage differential | Actual wage differential | Wage differences attributed to (after dividing equally Col.4 between industrial structure and wage rate) | |
|---|---|---|---|---|---|---|---|
| | Industrial structure | Wage rate | Jointly to industrial structure and wage rate | | | Industrial structure | Wage rate |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Ahmedabad | + 1.26 | - 0.16 | + 0.38 | + 1.48 | + 1.49 | + 1.45 | + 0.03 |
| 2. Baroda | - 0.87 | - 0.56 | + 0.59 | - 0.83 | - 0.83 | - 0.57 | - 0.26 |
| 3. Surat | - 0.11 | - 1.43 | + 0.36 | - 1.18 | - 1.15 | + 0.07 | - 1.25 |
| 4. Kaira | - 1.22 | - 0.53 | + 0.31 | - 1.44 | - 1.44 | - 1.06 | - 0.38 |
| 5. Mehsana | + 0.40 | - 2.05 | + 1.00 | - 0.65 | - 0.65 | + 0.90 | - 1.55 |
| 6. Rajkot | - 1.91 | - 2.20 | + 1.84 | - 2.27 | - 2.33 | - 0.99 | - 1.28 |
| 7. Jamnagar | - 0.97 | - 1.89 | + 1.82 | - 1.04 | - 1.07 | - 0.06 | - 0.98 |
| 8. Bhavnagar | - 1.15 | - 1.69 | + 1.00 | - 1.84 | - 1.86 | - 0.65 | - 1.19 |
| 9. Surendranagar | - 1.21 | - 2.59 | + 0.89 | - 2.91 | - 2.37 | - 0.76 | - 2.14 |
| 10. Junagadh | - 0.49 | - 1.39 | + 0.94 | - 0.93 | - 0.97 | - 0.02 | - 0.91 |
| 11. Broach | - 0.98 | - 2.44 | + 1.72 | - 1.70 | - 1.73 | - 0.12 | - 1.58 |

Source: (i) For wage rates - table IV-3.

(ii) The data on Mandays worked in each industry in each district were taken from the District Registers, under the Payment of Wages Act, 1936. The Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Column 4 of the above table shows that in industrially advanced districts of Ahmedabad, Baroda, Surat, and also in Kaira the jointly explained (by industrial structure and wage rate) portion of the wage differential is low, as compared to that in other districts. For analysing these wage differentials in terms of industrial structure and wage rate Column 4 is equally divided between industrial structure and wage rate. The resulting explanations are shown in Column 7 (Industrial structure) and Column 8 (Wage rate).

It will be seen from Column 7 that in 8 out of 11 districts industrial structure is unfavourable and in 10 out of 11 wage rate is unfavourable. The districts with favourable industrial structure (favourable as compared to the state industrial structure) are Ahmedabad, Mehsana and Surat. However only in Ahmedabad district the wage differential is almost completely explained by industrial structure. We can say that in the district of Ahmedabad the average daily industrial wage would have been higher than that for the state as a whole, by Rs.1.45 due to favourable industrial structure (favourable as compared to the state industrial structure). On the other hand if the industrial structures of Ahmedabad district and of the state were identical, the Ahmedabad district industrial wage would have been higher only by 3 paise.

Surat and Mehsana are the other two districts in which the industrial structures were favourable as compared to the state industrial structure. In Mehsana district in particular the favourable industrial structure would have lifted the industrial wage by 90 paise. However in both the districts if the industrial structures were identical with the state industrial structure, a much higher wage differential would h have remained due to wage rates alone. In other words in these two districts (particularly in Surat) the difference in the industrial wage between the state and the district is almostly wholly due to wage rate and not due to industrial structure.

In the districts of Baroda and Kaira we find that differences in wages attributed to wage rates are comparatively lower than those attributed to industrial structure. In other words the wage rates in particular industries prevailing in Baroda and Kaira on the one hand and the state on the other may not differ sizably from each other and yet the fact is that the industrial structure of the state is far more biased in terms of textiles than either in Baroda or Kaira. Hence the industrial structure explains more of the wage differences in these districts.

In the districts of Broach, Jamnagar and Junagadh, it will be noted that the difference in the wage due to industrial structure is quite low and the major explanation is provided in terms of wage rates. In this respect Surat, Mehsana,

Jamnagar, Junagadh, and Broach would fall in one category - the districts in which the difference between average industrial wage in each district and the state is mainly explained by wage rate and not industrial structure.

In the remaining three districts - Rajkot, Bhavnagar and Surendranagar, the comparative explanation in terms of wage rate is higher than in terms of industrial structure. It can be said that both industrial structure and wage rates are unfavourable in these three districts. Between the two however wage rates are more unfavourable. The above analysis can be summed as under:

In the district of Ahmedabad the district average industrial wage is higher than that for the state as a whole. This difference is almost wholly accounted by favourable industrial structure in Ahmedabad district. In the districts of Baroda and Kaira also it is the industrial structure which accounts for a larger part of the wage differentials.

In the districts of Surat, Mehsana, Jamnagar, Junagadh and Broach on the other hand the differences in the average industrial wage in each district and the state are mainly explained or attributed to wage rates. This means that the differences are caused because the determinants of industrial wage rates such as capital intensity, productivity, scale of organisation, degree of unionisation etc., are different.

In Rajkot, Bhavnagar and Surendranagar while both industrial structure and wage rates are unfavourable, wage rates are more unfavourable than the structures.

On strict methodological considerations we have carried out the same exercise for three districts i.e. Ahmedabad, Baroda and Surat separately. We have taken 24 industries which are common in the three districts and the state. The proportion of Mandays worked in each industry and district and state wage rates are computed. Then, the same formula to decompose the wage differences between industrial structure and wage rate, is used. The details of computations are shown in the Appendix IV-6. The decomposed wage differences in terms of industrial structure and wage rate for these industrially advanced districts in the state are shown in table IV-11.

Table IV-11

Differences in District Industrial Wages attributed to Industrial Structure and Wage Rate in Three Districts

| District | Industrial structure | Wage rate | Both | Explained wage differences | Actual wage differences |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Ahmedabad | +0.9286 | +0.3947 | +0.1676 | +1.49 | +1.48 |
| Surat | -0.0329 | -1.3904 | +0.080 | -1.34 | -1.33 |
| Baroda | -0.9716 | -0.3082 | +0.4075 | -0.88 | -0.87 |

Source: Appendix IV-6.

Note: These are not comparable with the computation of table IV-10 because only 24 industries common to all the three districts and the state are considered.

It can be seen that the explanation of wage differences is mainly by industrial structure in Ahmedabad and Baroda. While in Surat it is in terms of wage rate. The results for Ahmedabad, Surat and Baroda shown in the above table differ from those shown in the earlier table. This is due to the fact that only24 industries are taken into account in computing the above results. Nevertheless the relative importance of industrial structure and wage rate to explain wage differentials in these districts on the one hand and the state average wage on the other remains unchanged. The conclusion which emerges is that in the relatively more industrialised districts of Ahmedabad, Baroda, and even Kaira the wage rate differences between them and the state are due to the differences in industrial structures of these districts as compared to the state industrial structure. On the other hand in the remaining districts including Surat which is industrially advanced, wage differencials are mainly due to the unfavourable wage rates.

Factory Employment and Changes in the Structure of Industrial Wage Differentials:

Between 1960 and 1967, the inter-district structure of industrial wage differentials has shown a tendency to widen and it has narrowed down thereafter. In what follows we have made an attempt to relate this tendency of wages differentials with the changes in factory employment in these districts. It

can be argued that the relatively rapid increases in wage rates may be due to rapid industrial growth. In other words the districts which have experienced relatively faster increase in industrial wage rates might have also faster industrial growth. In such cases the changes in wage rates would be functional. Faster growth necessiating larger demand for labour and hence need to pay higher wages to draw the necessary supply of labour. Industrial growth is measured in terms of average daily employment in factories. We have presented average daily factory employment in 16 districts in 1960-61 and 1966-67 and percentage changes in them in table IV-12.

Table IV-12

Average Daily Factory Employment and Percentage Change in them in 16 Districts: 1960-61 to 1966-67

| District | Average daily Factory employment 1960-61 | 1966-67 | Percentage change |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Ahmedabad | 1,66,526 | 1,85,835 | 11.50 |
| 2. Surat | 38,288 | 49,743 | 29.90 |
| 3. Baroda | 29,758 | 42,607 | 43.10 |
| 4. Kaira | 18,478 | 25,425 | 37,59 |
| 5. Bhavnagar | 13,043 | 14,568 | 11.60 |
| 6. Mehsana | 14,020 | 14,849 | 5.90 |
| 7. Jamnagar | 8,773 | 12,583 | 43.43 |
| 8. Rajkot | 10,840 | 17,662 | 62.90 |
| 9. Junagadh | 8,128 | 12,060 | 48.30 |
| 10. Surendranagar | 9,832 | 12,909 | 31.20 |
| 11. Panchmahals | 5,043 | 5,498 | 9.02 |
| 12. Amreli | 3,358 | 2,363 | - |
| 13. Broach | 8,160 | 9,549 | 17.02 |
| 14. Kutch | 2,655 | 3,901 | 46.90 |
| 15. Banaskantha | 405 | 423 | 4.44 |
| 16. Sabarkantha | 4,373 | 4,648 | 6.20 |
| State | 3,41,734 | 4,14,467 | 21.30 |

Source: District registers under Factories Act, 1948, Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Includes estimated employment in factories not submitting returns.

It can be noted from the above table that the factory employment in the state between 1960-61 and 1966-67 has increased by 21.30 per cent. In 8 out of these 16 districts the factory employment has risen at a rate faster than for the state as a whole while in the remaining 8 the factory employment has increased at a lower rate than for the state as a whole. It is revealing that in 4 out of 5 industrially backward districts i.e. Panchmahals, Banaskantha, Amreli, and Sabarkantha there was only negligible increase in factory employment. In Amreli there was actually a fall in factory employment during the period.

Let us now examine whether there is any relation between the changes in factory employment in districts and percentage changes in district wage rates. For the purpose we have first calculated the weighted district industrial wage rates for 1960-61 and 1966-67 the same years for which we have calculated percentage changes in factory employment. The weighted industrial wage rates are computed by taking the combined total of Mandays and total wages in the two consecutive years. For example,

$$\text{Average industrial wage in 1960-61} = \frac{\text{Total wages (1960)+Total wages (1961)}}{\text{Mandays (1960) + Mandays (1961)}},$$

for each district. The table IV-13 gives these weighted average daily district industrial wages and percentage changes in them.

Table IV-13

Average Daily District Industrial Wage Rates for the Years 1960-61 and 1966-67 and Percentage Changes in them

| District | Average daily wage rates 1960-61 | 1966-67 | Percentage change |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Ahmedabad | 6.06 | 8.85 | 46.03 |
| 2. Sabarkantha | 2.32 | 2.77 | 19.39 |
| 3. Banaskantha | 3.28 | 4.56 | 39.02 |
| 4. Mehsana | 4.60 | 7.01 | 52.39 |
| 5. Kaira | 4.20 | 6.37 | 51.66 |
| 6. Baroda | 4.63 | 6.86 | 48.16 |
| 7. Panchmahals | 2.63 | 3.20 | 21.67 |
| 8. Broach | 3.69 | 5.53 | 49.86 |
| 9. Surat | 4.08 | 6.15 | 50.73 |
| 10. Rajkot | 3.53 | 5.22 | 47.87 |
| 11. Kamnagar | 4.28 | 5.80 | 35.51 |
| 12. Junagadh | 3.60 | 6.20 | 72.22 |
| 13. Bhavnagar | 3.69 | 5.67 | 53.65 |
| 14. Surendranagar | 4.21 | 5.44 | 29.21 |
| 15. Kutch | 2.78 | 5.02 | 80.57 |
| 16. Amreli | 3.52 | 4.91 | 39.48 |
| State | 5.15 | 7.53 | 46.21 |

Source: Table IV-3, Appendix IV-1.

In 9 out of the 16 districts the wage rates have increased at a faster rate than for the state. There are sizable variations in percentage increases in wage rates among the districts.

For example in the district of Sabarkantha the industrial wage has increased by only 19.39 per cent whereas it has gone up by 80.57 per cent in the district of Kutch. We may now relate these changes in district industrial wages to the changes in factory employment.

Table IV-14

Percentage Increase in District Industrial Wage Rates by Percentage Changes in Factory Employment: 1960-61 to 1966-67

| District | Percentage increase in wage rate | | |
|---|---|---|---|
| | High | Low | |
| With 'High' increase in employment | | | |
| 1. Surat | High | - | |
| 2. Baroda | High | - | |
| 3. Kaira | High | - | |
| 4. Jamnagar | - | Low | |
| 5. Rajkot | High | - | |
| 6. Junagadh | HHigh | - | |
| 7. Surendranagar | - | Low | |
| 8. Kutch | High | - | |
| | 6 | 2 | = 8 |
| With 'Low' increase in employment | | | |
| 9. Ahmedabad | - | Low* | |
| 10. Bhavnagar | High | - | |
| 11. Mehsana | High | - | |
| 12. Panchmahals | - | Low | |
| 13. Amreli | - | Low | |
| 14. Broach | High | - | |
| 15. Banaskantha | - | Low | |
| 16. Sabarkantha | - | Low | |
| | 3 | 5 | = 8 |

Source: Table IV-12 and IV-13.

*It is showing almost equal increase as for the state as a whole.

It is interesting to note that out of the 8 districts which experienced faster growth of employment during 1960-61 to 1966-67, 6 have faster increase in industrial wage rates. Out of the remaining 8 districts with relatively low rise in employment, in 5 there is low increase in wage rate. This raises an interesting question. Can it be said, that, there exists a functional relationship between the changes in industrial wages and changes in employment?

Real Wage rates, Factory Employment and Wage Structure:

For analysing functional relationship between wage rate and employment it will be necessary to take into account changes in the real industrial wage rates. In order to obtain the real industrial wage rates we have used the Consumers' Price Index numbers for industrial workers for Ahmedabad and Bhavnagar centres. These are taken from Socio-economic Review, Gujarat State, 1969-70, published by Bureau of Economics and Statistics, Government of Gujarat, Ahmedabad. The general index for Ahmedabad centre is used for the districts belonging to the Gujarat region of the state i.e. Ahmedabad, Sabarkantha, Baroda, Banaskantha, Mehsana, Kaira, Surat, Panchmahals and Broach. The index number for Bhavnagar centre is used for the districts of Saurashtra region i.e. Rajkot, Jamnagar, Junagadh, Amreli, Surendranagar, Bhavnagar and also for the district of Kutch. Bhavnagar being from Saurashtra region would be more representative of the conditions of industrial workers in the

Saurashtra than Ahmedabad centre. The real wage rates are for two points of time 1960/1961 and 1966/1967, the same years for which we have analysed the changes in the money wage rates. The money wage rates of 1961, 1966 and 1967 were first deflated by the index numbers of corresponding years. These real wage rates (averages of 1960 and 1961; 1966 and 1967) along with the percentage changes in them are in table IV-15.

Table IV-15

Average Daily Real ~~Wage rates~~ Industrial Wage Rates and Percentage Changes in them in 16 Districts of Gujarat: 1960/61 to 1966/67

| District | 1960/61 | 1966/67 | Percentage change |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Ahmedabad | 6.00 | 5.79 | - 3.50 |
| 2. Surat | 4.05 | 4.02 | - 0.75 |
| 3. Baroda | 4.58 | 4.50 | - 1.75 |
| 4. Kaira | 4.16 | 4.16 | 0.00 |
| 5. Mehsana | 4.56 | 4.57 | + 0.21 |
| 6. Broach | 3.63 | 3.60 | - 0.83 |
| 7. Panchmahals | 2.60 | 2.11 | -18.85 |
| 8. Sabarkantha | 2.30 | 1.81 | -21.31 |
| 9. Banaskantha | 3.25 | 2.98 | - 8.31 |
| 10. Rajkot | 3.50 | 3.35 | - 4.29 |
| 11. Jamnagar | 4.24 | 3.72 | -12.27 |
| 12. Bhavnagar | 3.88 | 3.64 | - 6.19 |
| 13. Junagadh | 3.57 | 4.01 | +12.32 |
| 14. Surendranagar | 4.13 | 3.50 | -15.26 |
| 15. Amreli | 3.58 | 3.15 | -12.02 |
| 16. Kutch | 2.87 | 3.20 | +11.49 |
| State | 5.10 | 4.93 | - 3.93 |

Source: Calculated from table IV-3.

Note: The general index for industrial workers for Ahmedabad and Bhavnagar centres were as under:

| Year | Ahmedabad | Bhavnagar |
|---|---|---|
| 1961 | 102 | 102 |
| 1966 | 140 | 143 |
| 1967 | 167 | 171 |

These are given in Socio-economic Review, 1969-70, Gujarat State, Bureau of Economics and Statistics, Ahmedabad.

It will be noted that excepting in a few districts, real industrial wage rates have not shown any significant decline over the period 1960/61 to 1966/67. The changes in the real industrial wage rates are highlighted by table IV-16 which is derived from table IV-15.

Table IV-16

Classification of 16 Districts by Percentage Changes in Real Industrial Wages During 1960/61 to 1966/67

| Percentage change | District |
|---|---|
| 1. Nil or Negligible* | Ahmedabad, Mehsana, Kaira Baroda, Broach, Surat, Rajkot. ... ... ... = 7 |
| 2. Decrease by 5 to 9% | Banaskantha, Bhavnagar = 2 |
| 3. Decrease by 10 to 14% | Amreli, Jamnagar .. .. = 2 |
| 4. Decrease by 15 to 24% | Sabarkantha, Panchmahals, Surendranagar .. .. = 3 |
| 5. Increase by 5 to 9% | - |
| 6. Increase by 10% above | Junagadh, Kutch .. = 2 |

Source: Derived from table IV-15.

*This includes plus or minus percentage changes of less than 5 per cent.

The feature which is highlighted by the table is that in 7 out 16 districts average real industrial wage rates have practically remained unchanged during 1960/61 to 1966/67. These districts are Ahmedabad, Baroda, Surat, Mehsana, Kaira,Broach and Rajkot. (In these districts the variations in real wages on either side have been of less than 5 per cent). Moreover in the districts of Kutch and Junagadh real wages have actually risen substantially. Thus in 9 out of 16 districts the real industrial wage rates during 1960/61 to 1966/67 have either remained unchanged or risen. Out of the remaining 7 districts, 5 districts i.e. Amreli, Jamnagar, Sabarkantha, Panchmahals and Surendranagar have experienced substantial decline in their real industrial wage rates during the period.

It is noteworthy that the above mentioned 7 districts (which have shown no or negligible fall in real wages) are relatively more industrialised (in terms of factory employment) in the state. Moreover if we rank these 7 districts (in descending order of real wages in 1960/61) 5 have ranks from I to VII. Broach would have rank IX and Rajkot district's rank would be XI. Thus even Broach and Rajkot are not among the last 4 districts having the lowest wage rates.

On the other hand the districts of Panchmahals, Sabarkantha, Banaskantha and Amreli are industrially backward. These districts had ranks (in descending order of wage rates of 1960/61) XV, XVI, XIII, X respectively. Thus these

are industrially backward and low wage districts who have experienced substantial decline in their real wages during 1960/61 to 1966/67. It is this pattern of behaviour of real industrial wages i.e. no or negligible fall in high wage districts and larger fall in low wage districts, which explains the expansion of the wage structure or broadly the lack of narrowing of the inter-district structure of industrial wages during 1960 to 1967.

Among the other districts the pattern of changes in real wage rates are not systematic. For example Bhavnagar, Surendranagar, Junagadh and Jamnagar districts are not industrially backward. Their ranks in terms of wage rates (1960/61) were VIII, VI, XI, IV respectively. However while Bhavnagar, Jamnagar and Surendranagar had experienced fall in real wages, Junagadh had significant increase in real wage rate during the period. Similarly Kutch had low wage in 1960/61 and has experienced significant rise in real wage. Perhaps in these districts factors like the prevailing wage level, predominance of agricultural processing industries as in Surendranagar, have led to the decline in wage rates. Moreover in the districts of Jamnagar and Surendranagar even though real wages had fallen by more than 10 per cent, they were still higher than those in other districts of Saurashtra region (except in Junagadh in 1966/67).

If we compare this trend in the real industrial wage rates in the districts with the behaviour of real agricultural wages in 16 districts (the analysis of real agricultural wages is in table III-4 ) one would be struck by the contrast. For example the real agricultural wage rates in most of the districts (11 districts) declined during 1960-61/61-62 to 1966-67/67-68 (considering variations of less than 5 per cent on either side as negligible, See: table III-9, Columns 11, 12, 13, 14, 15). As against this the real industrial wage rates have declined in 7 districts (table IV-16). In other words while the real agricultural wages have fallen in the majority of the district, the real industrial wages have not fallen in majority of the districts in the state.

The districts which had relatively high levels of agricultural wage rates had experienced relatively greater decline in real wage rates. Whereas the relatively more industrialised districts (industrialisation measured in terms of factory employment) who also happened to be generally high industrial wage districts, had very little or no change in their real industrial wages. Moreover in majority of the districts which accounted for most of the factory workers in the state, the real industrial wage rates have remained practically unchanged. In other words relatively high industrial wages which most of the industrial workers received had remained unchanged. Whereas in the districts in which majority of agricultural labourers are concentrated real

agricultural wages have remained at subsistence level and have not fallen further. For example among the agricultural labourers a large percentage is concentrated in the districts such as Surat, Baroda, Broach. In these districts the agricultural wage rates (in real terms) have remained practically at subsistence level. In the districts of Saurashtra region where the real agricultural wage rates were relatively high, (though they together account for a relatively small proportion of agricultural labourers in the state), they have declined significantly over the period 1960-61/61-62 to 1966-67/67-68.

These changes in the real industrial wage rates in 16 districts can be examined in the context of the percentage changes in factory employment in 16 districts.

Table IV-17

Classification of 16 Districts According to the Percentage Changes in Factory Employment and Wage Rates: 1960/61 to 1966/67

| Percentage increase in average daily factory employment. (1960/61 to 1966/67) | District | Percentage change in real industrial wage | | | | | |
|---|---|---|---|---|---|---|---|
| | | N | Decrease | | | Increase | |
| | | | 5 to 9 per cent | 10 to 14 per cent | 15 to 24 per cent | 5 to 9 per cent | 10 per cent and more |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Very high increase (VH) | | | | | | | |
| Ranks (I to IV) | Rajkot<br>Junagadh<br>Kutch<br>Jamnagar | Rajkot | | Jamnagar | | | Junagadh<br>Kutch |
| 2. High increase (H) | | | | | | | |
| Ranks (V to VIII) | Baroda<br>Kaira<br>Surendranagar<br>Surat | Baroda<br>Kaira<br>Surat | | | Surendra-nagar | | |
| 3. Low increase (L) | | | | | | | |
| Ranks (IX to XII) | Broach<br>Bhavnagar<br>Ahmedabad<br>Panchmahals | Broach<br>Ahmedabad | Bhavnagar | | Panchmahals | | |
| 4. Very low increase (VL) | | | | | | | |
| Ranks (XIII to XVI) | Sabarkantha<br>Mehsana<br>Banaskantha | Mehsana | | Banaskantha | Sabarkantha | | |
| 5. Decrease | Amreli | | | Amreli | | | |

Source: Derived from Table IV-12 and IV-15.

Table IV-17 highlights the relation between percentage changes in employment and percentage changes in real wage rates in 16 districts during 1960/61 to 1966/67. There are 8 districts which have experienced high to very high increase in employment. In 6 of them real wage rates have either not fallen or have shown increase as in the districts of Junagadh and Kutch. In the remaining 8 districts which have experienced low to very low increase in employment (and decrease as in Amreli district), in 3 districts real wages have remained practically unchanged and in the other 5 they have fallen. Districts like Ahmedabad and Mehsana which have textiles as the predominant industry are in these groups showing low increase in employment. The real wage rates have not declined perhaps due to the neutralisation effect of dearness allowance particularly in Ahmedabad. In the remaining districts low increase in employment is accompanied by decrease in real wage.

From the analysis of the changes in the money and real industrial wage rates and changes in employment in factories we can arrive at the following conclusion:

In a majority of the districts the increase in factory employment is accompanied by increases in money wage rates. However the real wage rates in these districts have remained unchanged. Perhaps it can be said that the relatively faster growth of factory employment (and thereby the increased demand for labour) has the prevented real industrial wages from

falling. At the same time one has to consider the fact that the payment of dearness allowance also protects the real wage from rising cost of living.

In the relatively less industrialised districts with low industrial wages, there was relatively small increase in employment and real wages which were already low have fallen further.

Pure Regional differentials in Industrial Wages:

The pure regional differentials in industrial wages are studied on the basis of the "Three digit" industries spread across the districts in the state. However, where "Four digit" industries in a particular "Three digit" industry such as in manufacture of miscellaneous food preparations (code 209), were heterogenous and unevenly spread among the districts, for the consideration of strict comparability we have taken them at "Four digit" level. Among the "Four digit" industries in the "Three digit" industry group of manufacture of miscellaneous food preparations (code 209) we have taken Manufacture of edible oils other than hydrogenated oils (209a) which was predominant and spread among most of the districts in the state.

In order to analyse regional wage differentials we have chosen particular industries on the following criteria:

(1) The industry must be spread in at least 7 districts in the state.

(2) Industries should represent broad industrial groups such as traditional and agricultural raw material based industries; modern industries in metals, machinery etc.

The wages in these industries are of the workers earning less than Rs.400/- per month. Table IV-18 shows the wage differentials among the districts in 11 industries. These are measured by coefficients of variation.

Table IV-18

Regional Differentials in Industrial Wages in 11 Industries Among the Districts in Gujarat: 1962-1969

| Industry | Coefficients of variation | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Gins and Presses (010) | 24.99 | 23.37 | 19.50 | 18.17 | 24.28 | 20.83 | 28.29 | 19.68 |
| 2. Manufacture of grain mill products (205) | 15.21 | 17.37 | 15.45 | 21.17 | 14.83 | 10.92 | 9.18 | 21.00 |
| 3. Manufacture of edible oils(other than hydrogenated oils)0209a) | 17.91 | 16.68 | 16.83 | 21.02 | 17.70 | 13.96 | 20.46 | 21.22 |
| 4. Spinning, weaving and finishing of textiles (231) | 11.45 | 12.70 | 11.80 | 15.41 | 9.92 | 10.28 | 10.87 | 12.28 |
| 5. Manufacture of structural clay products (331) | 26.28 | 20.08 | 27.47 | 22.35 | 17.96 | 26.58 | 22.27 | 16.08 |
| 6. Manufacture of non-metallic mineral products (339) | 22.31 | 19.48 | 20.99 | 28.80 | 26.98 | 22.58 | 23.64 | 27.32 |
| 7. Basic (Ferrous) metal industries (341) | 21.11 | 18.13 | 14.08 | 11.96 | 10.78 | 17.16 | 9.85 | 11.58 |
| 8. Manufacture of metal products except machinery (350) | 9.13 | 10.89 | 21.81 | 18.26 | 12.23 | 6.44 | 9.39 | 8.34 |
| 9. Manufacture of machinery (360) | 11.59 | 15.25 | 9.02 | 16.12 | 15.09 | 11.16 | 14.11 | 16.73 |
| 10. Repair of motor vehicles and cycles (384) | 18.04 | 15.38 | 13.69 | 20.51 | 12.26 | 16.76 | 8.53 | 11.84 |
| 11. Manufacturing industries not classified elsewhere (399) | 17.82 | 16.74 | 14.40 | 10.99 | 13.90 | 18.40 | 18.66 | 20.47 |

Source: Calculated from Appendix IV-7.1. to Appendix IV-7.11.

Note: Mandays worked in each of the above industries are shown in Appendix IV-7.1.1 to Appendix IV-7.11.11.

Table IV-18 reveals that these regional wage differentials are lower than gross industrial wage differentials among the districts (Table IV-5). They are also lower than the regional differentials in industry among the states in India.[14] Moreover in spinning, weaving and finishing of textiles (231), Basic (Ferrous) metal industries (341), Manufacture of metal products except machinery (350), Manufacture of machinery (360) and Repair of motor vehicles and cycles (384) differentials are very low and have generally declined during the period 1962-1969. On the other hand in the industries which are agrobased processing industries such as gins and presses (010) and Manufacture of grain mill products (205), Manufacture of edible oils (209a) and in structural clay products (331) in which brick making is an important industry and Non-metallic mineral products (339) in which, industry like stone dressing and crushing is important, have relatively larger differentials among the districts. The regional wage differentials in these industries do not show any trend either ito expand or narrow down except perhaps in case of Non-metallic mineral products (339)

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[14]The level of Regional Differentials in Industrial Wages in some of these industries are computed by T.S. Papola: See: Papola T.S. "Regional Differentials in Industrial Wages in India". Anvesak, Op.Cit. Some of the differentials are shown below:

| | Industry Code | | | | |
|---|---|---|---|---|---|
| | 231-1 | 341-1 | 350-3 | 360-7 | 383+384 |
| C.vs. | 20.00 | 36.36 | 38.71 | 19.72 | 27.54 |

where the differentials have widened. In terms of scale of organisation, nature of workforce employed, investment of capital and productivity, these industries - gins and presses (010), grain mill products (205), manufacture of edible oils except hydrogenated oils (209a), Clay products (331) and Non-metallic mineral products (339) are likely to be more similar among the districts and yet the levels of inter-district wage variations are quite high and they have persisted. It can be argued that these industries are mainly dependent on the local conditions in each districts. The wage variations among these industries resemble to the levels of inter-district variations in agricultural wages. It also shows that in relatively modern industries in different districts factors affecting wage rates are more similar. The market for jobs in such industries are geographically wider and such industries perhaps get more committed workers from across regions and even from outside the state. In other words the mobility of workers employed in such modern industries is likely to be higher.

Conclusions:

(1) The inter-district industrial wage structure as shown by the trend in the gross wage differentials (Both in percentage and absolute terms) in industrial wages among the districts of Gujarat has widened over the period 1960-1967. At the same time in the last two years 1968 and 1969 the inter-district wage structure of industrial wages has shown narrowing.

(2) There are wide differences in the nature and extent of industrialisation of districts. The gross wage differentials in industry among the districts correspond to the levels and pattern of industrialisation of districts. Despite the declining importance of textile industry, it still remains a dominant industry and the districts which have more than a proportionate share (as compared to the state) in this industry as shown by location quotient have higher average wages than the rest. In other words the wage rates among the districts are still governed by the textile industry. The place of textile industry in the district industrial structure decides what the industrial wage rate in that district would be.

(3) The more industrialised districts tend to specialise in high wage industries.

(4) The inter-district gross differentials in industrial wages are mainly explained by the differences in wage rates as such, in majority of the districts. At the same time industrial structure in these districts has also been unfavourable and does account for the differences in wages. Between industrial structure and wage rate, wage rate tend to explain the differentials more in majority of the districts.

(5) Among the relatively more industrialised districts wage differentials (vis-a-vis the state) are small and they are not because of the differences among the district wage rates (the exception being the district of Surat) but due to the differences in the industrial structure as compared to the state's industrial structure.

(6) In 7 out of 16 districts real industrial wage rates have remained more or less unchanged during 1960 to 1967. In other 7 districts they have fallen while in two districts have shown increase during the same period.

(7) Generally in the relatively more industrialised districts the real industrial wages have remained unchanged - real wages have changed by less than 5 per cent on either side. On the other hand in the industrially backward districts which also happened to be low wage districts, wages have fallen.

(8) The expansion of the inter-district industrial wage structure is due to the relatively larger decline in wage rates in low wage districts and practically no fall in the higher wage districts.

(9) The districts in which the real wages have not shown any significant change (either fall or rise) have relatively larger growth in factory employment. On the other hand the industrially backward districts have low increase in factory employment. In these districts real industrial wages have also fallen significantly.

(10) The levels and trend in the regional wage differentials in 11 industries among the districts fall into two categories. On the one hand there are industries which are based on local conditions and use local and agricultural raw materials such as gins and presses (code 010), manufacture of grain mill products (code 205), manufacture of edible oil except hydrogenated oils (code 209a), manufacture of

structural clay products (code 331) amd manufacture of non-metallic mineral products (code 339). In these industries regional wage differentials are relatively high and they have persisted. On the other hand there are well organised and modern industries such as spinning, weaving and finishing of textiles (code 231), manufacture of machinery except electrical machinery (code 360), Basic (Ferrous) metal industries (code 341), manufacture of metal products (code 350), service industry like repair of motor vehicles and cycles (code 384). In these industries the regional wage differentials are only nominal and narrowing.

Appendix IV-1

**Total Number of Mandays worked by Workers earning less than Rs.400/- per month in Industries in 16 Districts of Gujarat: 1960-1969**

| District | Year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1. Ahmedabad | 49173505 | 50071057 | 50810136 | 50819731 | 52707354 | 52090937 | 51409591 | 47564442 | 44305334 | 44795258 |
| 2. Surat | 9943149 | 9934062 | 11103823 | 11218573 | 12005354 | 11757167 | 11699065 | 11759796 | 12111754 | 13617715 |
| 3. Baroda | 6800620 | 7778725 | 8199997 | 8387126 | 9805398 | 9262670 | 8905289 | 8383178 | 8778909 | 11237917 |
| 4 Kaira | 4486159 | 4805481 | 5177424 | 5282524 | 5501634 | 5895087 | 5591007 | 5938839 | 6063481 | 6043639 |
| 5. Mehsana | 3331200 | 3779480 | 3844232 | 3873451 | 4173058 | 3833300 | 3493833 | 3597186 | 2885897 | 3315169 |
| 6. Broach | 986303 | 1170249 | 1164204 | 1473635 | 1322502 | 1327224 | 1259963 | 1339623 | 1382703 | 1279131 |
| 7. Panchmahals | 435663 | 470974 | 560353 | 578358 | 589977 | 586020 | 523596 | 518285 | 565344 | 493182 |
| 8. Sabarkantha | 366699 | 392827 | 437435 | 439582 | 348941 | 406840 | 325693 | 358438 | 380483 | 333488 |
| 9. Banaskantha | 120394 | 126116 | 134009 | 107104 | 123161 | 96483 | 92238 | 93065 | 76340 | 84576 |
| 10. Rajkot | 21811130 | 2536644 | 2669066 | 3105478 | 3113143 | 3243871 | 3264682 | 2845688 | 3758269 | 3774394 |
| 11. Jamnagar | 3090790 | 2941373 | 2964986 | 3242286 | 2664823 | 2806412 | 2960785 | 2804860 | 3123826 | 3275491 |
| 12. Bhavnagar | 3743966 | 3159996 | 3485093 | 2855559 | 3655934 | 3588529 | 3468684 | 2601273 | 2813560 | 2869092 |
| 13. Junagadh | 1893127 | 2072024 | 2240750 | 2410189 | 2192586 | 1884348 | 2505587 | 2383114 | 3066229 | 2744480 |
| 14. Surendranagar | 1760281 | 2274342 | 2523947 | 2049346 | 1417878 | 2315631 | 1993933 | 2080542 | 2227011 | 2513716 |
| 15. Amreli | 683830 | 310223 | 429781 | 238689 | 409303 | 389659 | 383366 | 345624 | 409497 | 496462 |
| 16. Kutch | 836982 | 762893 | 416493 | 811606 | 714088 | 846277 | 656425 | 673230 | 772186 | 552693 |
| State | 89853799 | 92586466 | 96461729 | 96984237 | 100745134 | 100330455 | 98433737 | 93287183 | 92720823 | 97426483 |

Source: District-wise Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) The figures of Mandays are in respect of working factories submitting returns.

ii) State total is the total of 16 districts. District of Gandhinagar is included in Ahmedabad and Bulsar district is included in Surat. Only Dangs district is excluded. Thus the total of 16 districts Mandays in fact represents the state total.

iii) Industries are those which are covered under the Payment of Wages Act, 1936.

iv) These data are copied from the unpublished Registers indicated in the source.

## Appendix IV-2

### Mandays worked by Workers earning Less than Rs.200/- per month in Industries in 10 Districts of Gujarat: 1954-1964

| District | Year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Ahmedabad | 43993251 | 52684846 | 49537555 | 47297313 | 44665531 | 45742777 | 46970696 | 47331030 | 47712192 | 47415116 | 47348949 |
| 2. Surat | 6196996 | 7175290 | 4505451 | 6558225 | 7224130 | 9090136 | 9733408 | 9640369 | 10749466 | 10808464 | 11087133 |
| 3. Baroda | 4152501 | 4476472 | 4473318 | 5310001 | 4601226 | 5394450 | 6453057 | 7442572 | 7940307 | 7915264 | 9010907 |
| 4. Kaira | 3359341 | 4084375 | 3927847 | 3175999 | 3930936 | 4403127 | 4405588 | 4702194 | 5027910 | 5096359 | 5179231 |
| 5. Mehsana | 2853032 | 3113227 | 1801878 | 3233075 | 2555881 | 2609702 | 3237846 | 3670448 | 3714494 | 3734320 | 3917386 |
| 6. Broach | 1122220 | 1091046 | 410685 | 584382 | 420171 | 1007264 | 980245 | 1156127 | 1155107 | 1459079 | 1304975 |
| 7. Panchmahals | 432411 | 367760 | 357224 | 408599 | 316962 | 418566 | 448077 | 464899 | 551631 | 567263 | 582833 |
| 8. Sabarkantha | 109912 | 336254 | 239312 | 244959 | 148108 | 423716 | 365003 | 391926 | 435226 | 438451 | 347811 |
| 9. Banaskantha | 40913 | 67799 | 71994 | 65092 | 63102 | 62241 | 119747 | 124658 | 133432 | 104568 | 119115 |
| 10. Amreli | 53031 | 70350 | 44078 | 127015 | 71175 | 15519 | 654417 | 309601 | 422862 | 232076 | 406205 |
| Total | 62313608 | 73467419 | 65369342 | 67004660 | 63997222 | 69177488 | 73368084 | 75233824 | 77836627 | 77770960 | 79904545 |

Source: District-wise Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Amreli district figures do not include the figures of Mandays worked in Okhamandal Taluka which latter on became the part of Jamnagar district.

ii) Total is in respect of 10 districts only.

iii) These data are copied from the unpublished Registers mentioned in the source.

## Appendix IV-3

### Average Daily Industrial Wage Rates of workers earning less than Rs.400/- per month in 10 districts in the state of Gujarat:1958-1969

| District | Year | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1. Ahmedabad | 5.27 | 5.82 | 6.01 | 6.10 | 6.18 | 6.13 | 6.77 | 7.91 | 8.22 | 9.53 | 9.61 | 9.63 |
| 2. Surat | 3.81 | 3.93 | 3.98 | 4.19 | 4.20 | 4.19 | 4.90 | 5.46 | 5.81 | 6.49 | 6.83 | 6.99 |
| 3. Baroda | 3.70 | 4.24 | 4.59 | 4.66 | 4.52 | 4.46 | 5.18 | 5.84 | 6.93 | 6.76 | 7.47 | 7.39 |
| 4. Kaira | 3.91 | 4.05 | 4.25 | 4.15 | 4.27 | 4.35 | 4.81 | 5.33 | 6.02 | 6.71 | 6.93 | 6.70 |
| 5. Mehsana | 4.06 | 4.03 | 4.63 | 4.57 | 4.73 | 4.76 | 5.35 | 5.89 | 6.51 | 7.50 | 7.57 | 7.51 |
| 6. Broach | 2.13 | 3.42 | 3.75 | 3.57 | 3.76 | 3.42 | 3.89 | 4.46 | 5.17 | 5.86 | 6.07 | 6.41 |
| 7. Panchmahals | 2.40 | 2.32 | 2.64 | 2.61 | 2.49 | 2.48 | 2.63 | 2.90 | 3.20 | 3.20 | 3.53 | 4.24 |
| 8. Sabarkantha | 2.26 | 1.97 | 2.28 | 2.36 | 2.29 | 2.00 | 2.31 | 2.14 | 2.57 | 2.95 | 3.63 | 3.86 |
| 9. Banaskantha | 3.37 | 3.56 | 3.32 | 3.24 | 3.42 | 3.70 | 4.17 | 3.77 | 4.27 | 4.85 | 5.92 | 5.62 |
| 10. Amreli | 2.81 | 3.09 | 3.36 | 3.88 | 2.72 | 3.11 | 3.79 | 4.36 | 4.84 | 5.00 | 5.86 | 5.22 |

Source: Calculated from the data on Mandays and total wages collected under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad. Mandays worked are given in Appendix IV-1.

## Appendix IV-4

### Average Daily Industrial Wage Rates of workers earning less than Rs.200/- per month in 10 districts in the state of Gujarat:1954-1964

| District | Year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Ahmedabad | 4.91 | 3.76 | 4.49 | 4.99 | 5.13 | 5.62 | 5.80 | 5.83 | 5.87 | 5.80 | 6.34 |
| 2. Surat | 3.33 | 3.16 | 3.62 | 3.49 | 3.67 | 3.83 | 3.82 | 4.03 | 3.97 | 3.94 | 4.49 |
| 3. Baroda | 3.67 | 3.39 | 3.38 | 3.64 | 3.70 | 4.06 | 4.33 | 4.36 | 4.18 | 4.12 | 4.73 |
| 4. Kaira | 3.88 | 3.44 | 3.76 | 3.64 | 3.80 | 3.99 | 4.15 | 4.04 | 5.14 | 4.15 | 4.45 |
| 5. Mehsana | 3.65 | 3.14 | 3.45 | 3.90 | 3.97 | 3.87 | 4.49 | 4.40 | 4.53 | 4.55 | 5.08 |
| 6. Broach | 2.91 | 2.74 | 1.58 | 2.54 | 2.08 | 3.38 | 3.70 | 3.50 | 3.71 | 3.36 | 3.82 |
| 7. Panchmahals | 2.26 | 2.10 | 2.18 | 2.39 | 2.32 | 2.24 | 2.51 | 2.50 | 2.39 | 2.34 | 2.44 |
| 8. Sabarkantha | 1.80 | 1.82 | 1.69 | 1.98 | 2.22 | 1.94 | 2.22 | 2.34 | 2.24 | 1.98 | 2.29 |
| 9. Banaskantha | 2.67 | 2.03 | 3.09 | 3.72 | 3.34 | 3.44 | 3.25 | 3.16 | 3.38 | 3.56 | 4.01 |
| 10. Amreli | 2.14 | 1.86 | 2.22 | 2.33 | 2.48 | 3.09 | 2.78 | 3.87 | 2.63 | 2.84 | 3.74 |

Source: Calculated from the data on Mandays and total wages collected under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad. Mandays worked are shown in Appendix IV-2.

Appendix IV-5

District Average Daily Industrial Wage Rates expressed as Percentage of all District Wage Rates in each year: 1960-1969

| District | Year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1. Ahmedabad | 10.1 | 9.6 | 9.9 | 9.9 | 9.7 | 10.5 | 9.6 | 10.2 | 9.7 | 9.5 |
| 2. Surat | 6.7 | 6.6 | 6.7 | 6.8 | 7.0 | 7.2 | 6.8 | 7.0 | 7.0 | 6.9 |
| 3. Baroda | 7.7 | 7.3 | 7.2 | 7.2 | 7.4 | 7.7 | 8.1 | 7.3 | 7.6 | 7.3 |
| 4. Kaira | 7.1 | 6.5 | 6.8 | 7.0 | 6.9 | 7.1 | 7.0 | 7.2 | 7.1 | 6.6 |
| 5. Mehsana | 7.8 | 7.2 | 7.6 | 7.7 | 7.7 | 7.8 | 7.6 | 8.0 | 7.7 | 7.4 |
| 6. Broach | 6.3 | 5.6 | 6.0 | 5.5 | 5.6 | 5.9 | 6.0 | 6.3 | 6.2 | 6.3 |
| 7. Panchmahals | 4.4 | 5.1 | 4.0 | 4.0 | 3.8 | 3.8 | 3.7 | 3.4 | 3.6 | 4.2 |
| 8. Sabarkantha | 3.8 | 3.7 | 3.7 | 3.2 | 3.3 | 2.8 | 3.0 | 3.2 | 3.7 | 3.8 |
| 9. Banaskantha | 5.6 | 5.1 | 5.5 | 6.0 | 6.0 | 5.0 | 5.0 | 5.2 | 6.0 | 5.6 |
| 10. Rajkot | 5.8 | 5.7 | 6.3 | 6.0 | 6.0 | 5.9 | 5.9 | 5.7 | 5.7 | 5.8 |
| 11. Jamnagar | 7.0 | 7.0 | 7.3 | 7.1 | 7.3 | 6.6 | 6.6 | 7.2 | 6.7 | 7.1 |
| 12. Bhavnagar | 5.7 | 7.0 | 6.7 | 6.1 | 6.6 | 6.7 | 6.6 | 6.1 | 5.9 | 6.3 |
| 13. Junagadh | 6.1 | 5.6 | 6.3 | 6.4 | 6.6 | 6.2 | 6.8 | 7.2 | 6.7 | 7.1 |
| 14. Surendranagar | 6.5 | 7.0 | 6.7 | 6.2 | 5.8 | 5.6 | 6.4 | 5.7 | 5.3 | 5.7 |
| 15. Amreli | 5.6 | 6.1 | 4.3 | 5.0 | 5.4 | 5.8 | 5.6 | 5.4 | 6.0 | 5.2 |
| 16. Kutch | 3.5 | 5.8 | 5.2 | 5.6 | 4.9 | 5.3 | 5.4 | 5.8 | 5.5 | 5.2 |
| Total of all wage rates | 59.50 | 63.45 | 62.56 | 61.82 | 69.60 | 75.58 | 86.01 | 93.24 | 98.14 | 101.02 |

Source: Table IV-3

Note: Each wage rate is expressed as percentage of $\Sigma W_i$ (total of all wage rates in each year). Thus the effect of absolute size is removed.

## APPENDIX IV-6

If we do not have the equal and identical number of observations, in our case industries, between district and state, the difference in the industrial wage rates of district and the state is not easy to decompose into difference due to industrial structure and difference due to wage rate.

In our present analysis we do not have equal and identical number of industries among the districts or between the individual district and the state.

Hence, on consideration of methodology, it is pertinent to examine the details with the help of a hypothetical model.

Under the conditions outlined above the decomposition of difference into industrial structure and wage rate can be attempted by examining three aspects:

(1) We can put zero for an industry which is absent in the district's industrial structure.

(2) We may consider only those industries from the state's structure which are present in the industrial structure of the district concerned.

(3) Separately find out in what way the wage differential is explained by industrial structural and wage rate on account of the industries which are absent in the district concerned.

In our hypothetical example there are 4 industries having code numbers 010, 231, 250 and 220. In district J there

existed only one industry i.e. industry code 231. The hypothetical figures of mandays and wage rates etc. are shown in table Appendix IV-6.1.

Appendix IV-6.1

Mandays and wage rates in the state and district J

| State | | | District J | | |
|---|---|---|---|---|---|
| Industry code | Maydays (%) | Wage rate (Rs) | Industry code | Mandays (%) | Wage rate (Rs) |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 010 | 0.10 | 2.00 | - | - | - |
| 231 | 0.25 | 4.00 | 231 | 1.00 | 4.00 |
| 250 | 0.30 | 5.00 | - | - | - |
| 220 | 0.35 | 1.0 | - | - | - |
| Weighted average wage | | 3.05 | | | 4.00 |

Now the difference between district J wage and the state wage is Rs.4.00 - 3.05 = + 0.95, which we must explain in terms of differences in industrial structure and differences in wage rates.

According to the formula (which is described and given in chapter IV, p.170 ) we can say that:

(A) Difference in wage rates attributed to differences in industrial structure =

$$\sum_{1}^{4} \text{State wage} \left\{ \begin{matrix} \text{Mandays worked} \\ \text{in ith industry} \\ \text{in district J} \end{matrix} - \begin{matrix} \text{Mandays worked} \\ \text{in ith industry} \\ \text{in the state} \end{matrix} \right\}$$

Thus applying this to our example we get as under:

(Col.5 - Col.2) x Col.3.

| | | | | |
|---|---|---|---|---|
| 0.00 - 0.10 | = | -0.10 x 2 | = | -0.20 |
| 1.00 - 0.25 | = | +0.75 x 4 | = | +3.00 |
| 0.00 - 0.30 | = | -0.30 x 5 | = | -1.50 |
| 0.00 - 0.35 | = | -0.35 x 1 | = | -0.35 |
| | | | | +0.95 (Difference due to industrial structure) |

(B) Similarly difference attributed to wage rate differences =

$$\sum_{1}^{4} \text{State Mandays} \left\{ \begin{matrix} \text{Wage rate in} \\ \text{ith industry in} \\ \text{district J} \end{matrix} - \begin{matrix} \text{Wage rate in} \\ \text{ith industry in} \\ \text{the state} \end{matrix} \right\}$$

Thus applying the formula to our example we get as under:

(Col.6 - Col.3) x Col.2

| | | | | |
|---|---|---|---|---|
| 0 - 2 | = | -2 x 0.10 | = | -0.20 |
| 4 - 4 | = | 0 x 0.25 | = | 0.00 |
| 0 - 5 | = | -5 x 0.30 | = | -1.50 |
| 0 - 1 | = | -1 x 0.35 | = | -0.35 |
| | | | | -2.05 (Difference due to wage rate) |

(C) The jointly explained wage differences or explained both by industrial structure and wage rate =

$$\sum_{i=1}^{4} \left\{ \begin{array}{l} \text{Mandays worked in ith industry in district J} \\ - \\ \text{Mandays worked in ith industry in the state} \end{array} \right\} \left\{ \begin{array}{l} \text{Wage rate in the industry in district J} \\ - \\ \text{Wage rate in ith industry in the state} \end{array} \right\}$$

Thus applying the formula to our example we get as under:
(Col.5 - Col.2)(Col.6 - Col.3)

| | | | |
|---|---|---|---|
| -0.10 | x -2.0 | = | + 0.20 |
| +0.75 | x 0.0 | = | 0.00 |
| -0.30 | x -5.0 | = | + 1.50 |
| -0.35 | x -1.0 | = | + 0.35 |
| | | | + 2.05 (Difference due to cross effects) |

Now if we are to consider only the identical industries between the district and the state it will be only industry (code) 231. In that case the difference due to industrial structure would be Rs.3.00 (See A above) and not +0.95. In other words the difference due to industrial structure is reduced from Rs.3.00 to Rs.+0.95 only because, we have considered the industries which are absent in the district industrial structure. On the other hand (considering again only identical industries) the difference attributed to wage rate would be zero. (See B above). The wage rates in identical industries are not different. The difference attributed to wage rates is -2.05

only because we have considered the industries which are absent in the district structure by putting zero for absent industry wage.

Due to cross effect, we get positive figure i.e. +2.05. A minute observation of the results of A, B, C above will show that in the difference attributed to industrial structure (A, above) the effect of absent industries was -2.05; In the difference attributed to wage rate (B, above), the effect of absent industries was again -2.05. In the cross effect we have the same figure but with positive sign. These are shown in tabular form.

Appendix IV-6.2

Differences in the industrial wage rates of district J and the state attributed to industrial structure and wage rate

| | Wage differences attributed to | | | | |
|---|---|---|---|---|---|
| District | Industrial structure | Wage rate | Both | Total explained difference | Actual difference |
| 1 | 2 | 3 | 4 | 5 | 6 |
| All industries | +0.95 | -2.05 | +2.05 | +0.95 | +0.95 |
| Same (identical) industries | +3.00 | 0.00 | 0.00 | +3.00 | |
| Industries absent in district J | -2.05 | -2.05 | +2.05 | -2.05 | |

Source: A, B, C above.

The results of All Industries (first row Appendix IV-6.2) have been obtained by adding the results of same industries (second row) and the results due to Industries absent in district J (third row).

The differences in wage rates in each of the 16 districts and the state average industrial wage rate have been examined by using the methodology outlined above. These are presented in Appendix IV-6.3. Appendix tables IV-6.4, IV-6.5 and IV-6.6 show the actual computations in respect of the districts of Ahmedabad, Surat and Baroda. These relate to 24 industries which were common among the three districts and the state.

## Appendix IV-6.3

## Wage Differences (between each district and the state) attributed to Industrial Structure and Wage Rate in 16 districts:1969

| District | Industries | Wage differences attributed to: Industrial structure | Wage rate | Both | Total explained difference | Actual difference |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. Ahmedabad | All | +1.26 | -0.16 | +0.38 | +1.48 | +1.49 |
| | Similar | +1.48 | +0.06 | +0.16 | | |
| | Absent | -0.22 | -0.22 | +0.22 | | |
| 2. Baroda | All | -0.87 | -0.56 | +0.59 | -0.84 | -0.83 |
| | Similar | -0.61 | -0.30 | +0.33 | | |
| | Absent | -0.26 | -0.26 | +0.26 | | |
| 3. Surat | All | -0.11 | -1.43 | +0.36 | -1.18 | -1.15 |
| | Similar | +0.02 | -1.30 | +0.23 | | |
| | Absent | -0.13 | -0.13 | +0.13 | | |
| 4. Kaira | All | -1.22 | -0.53 | +0.31 | -1.44 | -1.44 |
| | Similar | -1.06 | -0.37 | +0.15 | | |
| | Absent | -0.16 | -0.16 | +0.16 | | |
| 5. Mehsana | All | +0.40 | -2.05 | +1.00 | -0.65 | -0.65 |
| | Similar | +1.26 | -1.19 | +0.14 | | |
| | Absent | -0.86 | -0.86 | +0.86 | | |
| 6. Rajkot | All | -1.91 | -2.20 | +1.84 | -2.27 | -2.33 |
| | Similar | -1.34 | -1.63 | +1.27 | | |
| | Absent | -0.57 | -0.57 | +0.57 | | |
| 7. Jamnagar | All | -0.97 | -1.89 | +1.82 | -1.04 | -1.07 |
| | Similar | -0.34 | -1.26 | +1.19 | | |
| | Absent | -0.63 | -0.63 | +0.63 | | |
| 8. Bhavnagar | All | -1.15 | -1.69 | +1.00 | -1.84 | -1.86 |
| | Similar | -0.70 | -1.24 | +0.55 | | |
| | Absent | -0.45 | -0.45 | +0.45 | | |
| 9. Surendranagar | All | -1.21 | -2.59 | +0.89 | -2.91 | -2.37 |
| | Similar | -0.31 | -1.68 | -1.99 | | |
| | Absent | -0.90 | -0.90 | +0.90 | | |

Appendix IV-6.3 (contd.)

| District | Wage differences attributed to | | | | Total explained difference | Actual difference |
|---|---|---|---|---|---|---|
| | Industries | Industrial structure | Wage rate | Both | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Junagadh | All | -0.49 | -1.38 | +0.94 | -0.93 | -0.97 |
| | Similar | +0.31 | -0.58 | +0.14 | | |
| | Absent | -0.80 | -0.80 | +0.80 | | |
| 11. Kutch | All | -1.46 | -3.92 | +2.51 | -2.87 | -2.85 |
| | Similar | -0.24 | -2.70 | +1.29 | | |
| | Absent | -1.22 | -1.22 | +1.22 | | |
| 12. Panchmahals | All | -2.37 | -7.10 | +5.54 | -3.93 | -3.93 |
| | Similar | +4.27 | -0.46 | -1.10 | | |
| | Absent | -6.64 | -6.64 | +6.64 | | |
| 13. Broach | All | -0.98 | -2.44 | +1.72 | -1.70 | -1.73 |
| | Similar | +0.69 | -0.77 | +0.05 | | |
| | Absent | -1.67 | -1.67 | +1.67 | | |
| 14. Banaskantha | All | -2.89 | -7.85 | +8.37 | -2.37 | -2.37 |
| | Similar | +6.24 | +1.28 | -0.76 | | |
| | Absent | -9.13 | -9.13 | +9.13 | | |
| 15. Amreli | All | -1.92 | -5.12 | +4.17 | -2.88 | -2.92 |
| | Similar | +0.30 | -2.91 | +1.95 | | |
| | Absent | -2.22 | -2.22 | +2.22 | | |
| 16. Sabarkantha | All | -3.31 | -7.54 | +6.64 | -4.21 | -4.28 |
| | Similar | +4.03 | -0.20 | -0.70 | | |
| | Absent | -7.34 | -7.34 | +7.34 | | |

Source: The data on Mandays and wage rates are derived from the District Registers under the Payment of Wages Act, 1936, Chief Inspector of Factories, Government of Gujarat, Ahmedabad. Mandays are given in Appendix IV-1; for Wage rates see Table IV-3

Note: a. All industries - They include all industries which exist in the district concerned.

b. Similar industries - are those which are identical between the district and the state.

c. Absent industries - are those which are absent in the district but present in the state.

## Appendix IV-6.4

## Calculations Showing Wage Rate Differences attributed to Industrial Structure And Wage Rate Between Ahmedabad District and the State: 1969

| Industry code | District Mandays | State Mandays | $\frac{\text{Mandays}}{D-S}$ (Col.2-Col.3) | State Wage | $\frac{\text{Mandays}}{D-S} \times$ State Wage (Col.4 x Col.5) | District Wage | $\frac{\text{Wage}}{D-S}$ (Col.7-Col.5) | $\frac{\text{Wage}}{D-S} \times$ State Mandays (Col.8 x Col.3) | $\frac{\text{Mandays}}{D-S} \times \frac{\text{Wage}}{D-S}$ (Col.4 x Col.8) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 010 | ·0097 | ·0324 | -·0227 | 3.20 | - .0758 | 3.73 | + 0.53 | + ·0172 | - ·0123 |
| 205 | 0016 | 0041 | - ·0025 | 4.15 | - .0104 | 4.35 | + 0.20 | + ·0008 | - ·0005 |
| 206 | ·0004 | ·0003 | + ·0001 | 4.25 | + .0004 | 4.84 | + 0.59 | + ·0002 | + ·0001 |
| 209 | ·0042 | ·0427 | - ·0385 | 5.24 | - .2017 | 7.15 | + 1.91 | + ·0816 | - ·0717 |
| 214 | ·0011 | ·0010 | + ·0001 | 7.51 | + .0008 | 9.66 | + 2.15 | + ·0022 | + ·0002 |
| 220 | ·0002 | 0119 | - ·0117 | 2.56 | - .0210 | 4.28 | + 1.72 | + ·0205 | - ·0201 |
| 231 | ·3122 | ·5806 | + ·2316 | 9.98 | + 2.3114 | 10.53 | + 0.65 | + ·3774 | + ·1505 |
| 239 | ·0006 | ·0025 | - ·0019 | 3.96 | - 0.0075 | 3.58 | - 0.38 | - ·0010 | + ·0007 |
| 250 | ·0081 | ·0106 | - ·0025 | 4.18 | - .0105 | 4.30 | + 0.12 | + ·0013 | - ·0003 |
| 271 | ·0031 | ·0093 | - ·0062 | 4.39 | - .0272 | 4.42 | + 0.03 | + 0003 | - ·0002 |
| 280 | ·0126 | ·0140 | - ·0014 | 7.77 | - .0109 | 8.03 | + 0.26 | + 0036 | - ·0004 |
| 311 | ·0086 | ·0360 | - ·0274 | 7.81 | - .2140 | 7.74 | - 0.07 | - ·0025 | + ·0019 |
| 319 | 0094 | ·0462 | - ·0368 | 8.22 | - .3025 | 5.97 | - 2.25 | - ·1040 | + ·0828 |
| 332 | ·0001 | ·0106 | - ·0105 | 8.03 | - .0843 | 4.58 | - 3.45 | - ·0366 | + ·0362 |
| 339 | ·0063 | ·0125 | - ·0062 | 3.90 | - .0242 | 5.28 | + 1.38 | + ·0173 | - ·0086 |

Appendix IV-6.4 (contd.)

| Industry* code | District Mandays | State Mandays | Mandays D - S (Col.2-Col.3) | State Wage | Mandays D - S x State Wage (Col.4 x Col.5) | District Wage | Wage D - S (Col.7-Col.5) | Wage D - S x State Mandays (Col.8 x Col.3) | Mandays D - S x Wage D - S (Col.4 x Col.8) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 341 | .0196 | .0206 | -.0010 | 5.57 | - .0056 | 5.59 | + 0.02 | + .0004 | - .0001 |
| 342 | .0028 | .0048 | -.0020 | 6.03 | - .0121 | 5.51 | - 0.52 | - .0025 | + .0010 |
| 350 | .0235 | .0219 | -.0084 | 4.97 | - .0417 | 5.05 | + 0.08 | + .0018 | .0007 |
| 360 | .0606 | .0845 | -.0239 | 5.78 | - .1461 | 6.09 | + 0.31 | + .0262 | - .0074 |
| 370 | .0060 | .0161 | -.0101 | 6.85 | - .0692 | 5.38 | - 1.47 | - .0237 | + .0148 |
| 384 | .0134 | .0214 | -.0080 | 8.08 | - .0646 | 9.18 | + 1.10 | + .0235 | - .0088 |
| 392 | .0008 | .0015 | -.0007 | 4.03 | - .0028 | 3.97 | - 0.06 | - .0001 | + .0001 |
| 399 | .0049 | .0107 | -.0058 | 4.60 | - .0267 | 5.09 | + 0.49 | + .0052 | - .0028 |
| 321 | .0001 | .0025 | -.0024 | 12.65 | - .0304 | 6.88 | - 5.77 | - .0144 | + .0139 |
| Differences between district and state wage due to | | | | | + 0.9286 | | | +0.3947 | +0.1676 |

Source: Mandays and wage rates in each industry for the district and the state are derived from the District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

*For names of industries, See Appendix V-1.

Note: i) The data are in respect of 24 industries which are common between the district and the state.

ii) The data relate to the factories submitting returns and wages are of the workers earning less than Rs.400/- per month.

iii) D - District; S - State.

Appendix IV-6.5

Calculations Showing Wage Rate Differences attributed to Industrial Structure

And Wage Rate Between Surat District and the State: 1969

| Industry code* | District Mandays | State Mandays | $\frac{\text{Mandays}}{D - S}$ (Col.2-Col.3) | State wage | $\frac{\text{Mandays}}{D - S}$ x State wage (Col.4 x Col.5) | District wage | $\frac{\text{Wage}}{D - S}$ (Col.7-Col.5) | $\frac{\text{Wage}}{D - S}$ x State Mandays (Col.8 x Col.3) | $\frac{\text{Mandays}}{D - S}$ x $\frac{\text{Wage}}{D - S}$ (Col.4 x Col.8) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 010 | .0216 | .0324 | - .0108 | 3.20 | - .0346 | 3.00 | - 0.20 | - .0065 | + .0022 |
| 205 | .0064 | .0041 | + .0023 | 4.15 | + .0095 | 3.56 | - 0.59 | - .0024 | - .0014 |
| 206 | .0012 | .0003 | + .0009 | 4.25 | + .0038 | 4.06 | - 0.19 | - .0001 | - .0002 |
| 209 | .0129 | .0427 | - .0298 | 5.24 | - .1562 | 4.04 | - 1.20 | - .0512 | + .0358 |
| 214 | .0019 | .0010 | + .0009 | 7.51 | + .0068 | 4.23 | - 3.28 | - .0033 | - .0030 |
| 220 | .0009 | .0119 | - .0110 | 2.56 | - .0282 | 5.16 | + 2.60 | + .0309 | - .0286 |
| 231 | .5439 | .5806 | - .0367 | 9.98 | - .3663 | 7.70 | - 2.28 | - 1.3238 | + .0837 |
| 239 | .0148 | .0025 | + .0123 | 3.96 | + .0487 | 4.25 | + 0.29 | + .0007 | + .0036 |
| 250 | .0214 | .0106 | + .0108 | 4.18 | + .0451 | 3.57 | - 0.61 | - .0065 | - .0066 |
| 271 | .0110 | .0093 | + .0017 | 4.39 | + .0075 | 4.92 | + 0.53 | + .0049 | + .0009 |
| 280 | .0088 | .0140 | - .0052 | 7.77 | - .0404 | 5.94 | - 1.83 | - .0256 | + .0095 |
| 311 | .0712 | .0360 | + .0352 | 7.81 | + .2749 | 8.86 | + 1.05 | + .0378 | + .0370 |
| 319 | .0763 | .0462 | + .0301 | 8.22 | + .2474 | 8.01 | - 0.11 | - .0051 | - .0035 |
| 332 | .0013 | .0106 | - .0093 | 8.03 | - .0747 | 4.14 | - 3.89 | - .0412 | + .0362 |
| 339 | .0034 | .0125 | - .0091 | 3.90 | - .0355 | 2.76 | - 1.14 | - .0143 | + .0104 |

Appendix IV-6.5 (contd.)

| Industry* code | District Mandays | State Mandays | $\frac{\text{Mandays}}{D-S}$ (Col.2-Col.3) | State wage | $\frac{\text{Mandays}}{D-S} \times$ State wage (Col.4 x Col.5) | District wage | $\frac{\text{Wage}}{D-S}$ (Col.7-Col.5) | $\frac{\text{Wage}}{D-S} \times$ State Mandays (Col.8 x Col.3) | $\frac{\text{Mandays}}{D-S} \times \frac{\text{Wage}}{D-S}$ (Col.4 x Col.8) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 341 | ·0241 | ·0206 | - ·0035 | 5.57 | - .0195 | 5.89 | + 0.27 | + .0056 | - .0009 |
| 342 | ·0202 | ·0048 | + ·0154 | 6.03 | + .0929 | 4.88 | - 1.15 | - .0055 | - .0177 |
| 350 | ·0296 | ·0219 | + 0077 | 4.97 | + .0383 | 5.00 | + 0.03 | + .0007 | + .0002 |
| 360 | ·0664 | ·0845 | - ·0181 | 5.78 | - .1046 | 6.27 | + 0.49 | + .0414 | - .0089 |
| 370 | 0492 | ·0161 | + ·0331 | 6.85 | + .2267 | 4.75 | - 2.10 | - .0338 | - .0695 |
| 384 | ·0053 | ·0214 | - ·0161 | 8.08 | - .1301 | 7.95 | - 0.13 | - .0028 | + .0021 |
| 392 | ·0008 | ·0015 | - ·0007 | 4.03 | - .0028 | 4.36 | + 0.33 | + .0005 | - .0002 |
| 399 | ·0061 | ·0107 | - 0046 | 4.60 | - .0212 | 6.01 | + 1.41 | + .0151 | - .0065 |
| 321 | ·0001 | ·0025 | - 0024 | 12.65 | - .0304 | 10.28 | - 2.37 | - .0059 | + .0057 |
| Differences between district and state wage due t | | | | | - 0.0329 | | | - .3904 | + 0.0803 |

Source: Mandays and wage rates in each industry for the district and the state are derived from the District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

*For names of industries, See Appendix V-1.

Note: i) The data are in respect of 24 industries which are common between the district and the state.

ii) The data relate to the factories submitting returns and wages are of the workers earning less than Rs.400/- per month.

iii) D - District; S - State.

## Appendix IV-6.6

## Calculations Showing Wage Rate Differences attributed to Industrial Structure And Wage Rate Between Baroda District and the State: 1969

| Industry* code | District Mandays | State Mandays | $\frac{\text{Mandays}}{D-S}$ (Col.2-Col.3) | State wage | $\frac{\text{Mandays}}{D-S}$ x State wage (Col.4 x Col.5) | District wage | $\frac{\text{Wage}}{D-S}$ (Col.7-Col.5) | $\frac{\text{Wage}}{D-S}$ x State Mandays (Col.8 x Col.3) | $\frac{\text{Mandays}}{D-S} \times \frac{\text{Wage}}{D-S}$ (Col.4 x Col.8) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 010 | ·0586 | ·0324 | + ·0262 | 3.20 | + .0838 | 3.33 | + 0.13 | + .0042 | + .0034 |
| 205 | ·0032 | ·0041 | - ·0009 | 4.15 | - .0037 | 5.44 | + 1.29 | + .0053 | - .0012 |
| 206 | ·0032 | ·0003 | + 0029 | 4.25 | + .0123 | 1.74 | - 2.51 | - .0008 | - .0073 |
| 209 | ·0104 | 0427 | - ·0323 | 5.24 | - .1693 | 3.19 | - 2.05 | - .0875 | + .0662 |
| 214 | ·0004 | ·0010 | - ·0006 | 7.51 | - .0045 | 3.53 | - 3.98 | - .0040 | + .0024 |
| 220 | ·0153 | 0119 | + 0034 | 2.56 | + .0087 | 3.44 | + 0.88 | + .0105 | + .0030 |
| 231 | ·2030 | ·5806 | - ·3776 | 9.98 | - 3.7684 | 9.80 | - 0.18 | - .1045 | + .0680 |
| 239 | ·0008 | ·0025 | - ·0018 | 3.96 | - .0071 | 3.10 | - 0.86 | - .0022 | + .0015 |
| 250 | ·0032 | ·0106 | - ·0074 | 4.18 | - .0309 | 4.98 | + 0.80 | + .0085 | - .0059 |
| 271 | ·0044 | ·0093 | - ·0049 | 4.39 | - .0215 | 4.73 | + 0.34 | + .0032 | - .0017 |
| 280 | ·0291 | ·0140 | + ·0151 | 7.77 | + .1173 | 8.30 | + 0.53 | + .0074 | + .0080 |
| 311 | 0059 | ·0360 | - ·0301 | 7.81 | - .2351 | 4.35 | - 3.46 | - .1246 | + .1041 |
| 319 | ·2238 | ·0462 | + 1776 | 8.22 | + 1.4599 | 9.12 | + 0.90 | + .0416 | + .1598 |
| 332 | ·0666 | ·0106 | + ·0560 | 8.03 | + .4497 | 7.92 | - 0.11 | - .0012 | - .0062 |
| 339 | ·0097 | ·0125 | - ·0028 | 3.90 | - .0109 | 3.45 | - 0.45 | - .0056 | + .0013 |

Appendix IV-6.6 (contd.)

| Industry* code | District Mandays | State Mandays | $\frac{\text{Mandays}}{D - S}$ (Col.2-Col.3) | State wage | $\frac{\text{Mandays}}{D - S}$ x State wage (Col.4 x Col.5) | District wage | $\frac{\text{Wage}}{D - S}$ (Col.7-Col.5) | $\frac{\text{Wage}}{D - S}$ x State Mandays (Col.8 x Col.3) | $\frac{\text{Mandays}}{D - S}$ x $\frac{\text{Wage}}{D - S}$ (Col.4 x Col.8) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 341 | .0263 | .0206 | + .0057 | 5.57 | + .0317 | 6.12 | + 0.55 | + .0113 | + .0031 |
| 342 | .0047 | .0048 | - .0001 | 6.03 | - .0006 | 4.62 | - 1.41 | - .0068 | + .0001 |
| 350 | .0275 | .0219 | + .0056 | 4.97 | + .0278 | 5.25 | + 0.29 | + .0064 | + .0016 |
| 360 | .1717 | 0845 | + .0872 | 5.78 | + .5040 | 4.92 | - 0.80 | - .0727 | - .0750 |
| 370 | .0694 | .0161 | + .0533 | 6.85 | + .3651 | 8.53 | + 1.68 | + .0271 | + .0895 |
| 384 | .0203 | 0214 | - .0011 | 8.08 | - .0089 | 7.44 | - 0.64 | - .0137 | + .0007 |
| 392 | .0079 | 0015 | + .0064 | 4.03 | + .0266 | 4.01 | - 0.01 | - .0001 | - .0001 |
| 399 | .0217 | .0107 | + 0110 | 4.60 | + .0506 | 3.60 | + 1.00 | - .0107 | - .0110 |
| 321 | .0145 | .0025 | + .0120 | 12.65 | + .1518 | 12.92 | + 0.27 | + .0007 | + .0032 |
| Differences between district and state wage due to | | | | | - 0.9716 | | | - 0.3082 | + 0.4075 |

Source: Mandays and wage rates in each industry for the district and the state are derived from the District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

*For names of industries, See Appendix V-1.

Note: i) The data are in respect of 2 industries which are common between the district and the state.

ii) The data relate to the factories submitting returns and wages are of the workers earning less than Rs.400/- per month.

iii) D - District; S - State.

## Appendix IV-7.1

## Average Daily Industrial Wage Rates in Gins and Presses (industry code 010) in 14 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 2.10 | 2.19 | 2.47 | 2.42 | 2.52 | 2.89 | 3.27 | 3.73 |
| 2. Baroda | 2.03 | 1.96 | 2.03 | 2.08 | 2.51 | 2.54 | - | 3.33 |
| 3. Surat | 1.99 | 1.85 | 1.90 | 1.92 | 2.24 | 2.26 | 2.95 | 2.90 |
| 4. Kaira | 1.36 | 2.08 | 2.16 | 2.02 | 2.09 | 2.23 | 3.15 | 3.30 |
| 5. Mehsana | 2.19 | 2.41 | 2.54 | 2.15 | 2.63 | 2.97 | 3.20 | 3.19 |
| 6. Panchmahals | 2.11 | 1.71 | 2.30 | 1.70 | 1.86 | 2.55 | 2.70 | 4.23 |
| 7. Broach | 1.14 | 1.84 | 2.06 | 1.98 | 2.15 | 2.27 | 2.80 | 3.22 |
| 8. Sabarkantha | 2.21 | 1.83 | 2.03 | 2.04 | 2.21 | 2.19 | 2.76 | 3.00 |
| 9. Kutch | 2.35 | 3.19 | 2.78 | 3.29 | 3.66 | 3.70 | 5.46 | 4.19 |
| 10. Rajkot | 1.65 | 1.17 | 1.74 | 2.03 | 2.62 | 2.61 | 2.47 | 1.93 |
| 11. Bhavnagar | 1.84 | 1.84 | 2.16 | 2.67 | 2.43 | 2.42 | 3.88 | 2.86 |
| 12. Jamnagar | 1.63 | 1.73 | 1.80 | 1.71 | 2.00 | 2.10 | 1.89 | 2.15 |
| 13. Junagadh | 3.33 | 2.81 | 3.51 | 2.21 | 4.15 | 4.08 | 4.15 | 3.57 |
| 14. Surendranagar | 1.86 | 2.28 | 2.47 | 2.38 | 2.26 | 2.71 | 4.78 | 2.97 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.1.1.

## Appendix IV-7.2

## Average Daily Industrial Wage Rates in Manufacture of Grain Mill Products (industry code 205) in 8 districts of Gujarat:1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 2.89 | 3.03 | 2.93 | 3.35 | 3.53 | 3.82 | 2.71 | 4.34 |
| 2. Baroda | 2.25 | 2.67 | 3.06 | 3.78 | 3.68 | 4.24 | 3.39 | 5.44 |
| 3. Surat | 1.85 | 2.18 | 2.26 | 2.26 | 2.80 | 2.51 | 2.78 | 3.56 |
| 4. Kaira | 2.05 | 2.16 | 1.99 | 2.45 | 2.24 | 2.57 | 2.91 | 2.58 |
| 5. Mehsana | 2.34 | 2.05 | 2.02 | 3.06 | 2.92 | 3.26 | 3.26 | 3.24 |
| 6. Panch-mahals | 2.68 | 2.45 | 2.46 | 2.77 | 3.28 | 3.43 | 3.18 | 3.50 |
| 7. Bhavnagar | 2.06 | 2.19 | 2.34 | 4.18 | 3.63 | 4.35 | 3.59 | 3.59 |
| 8. Surendra-nagar | 2.80 | 3.33 | 2.18 | 2.46 | 2.93 | 2.59 | 3.03 | 4.15 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.2.2.

## Appendix IV-7.3

## Average Daily Wage Rates in Manufacture of edible oils except hydrogenated oils (industry code 209a) in 13 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 2.41 | 3.02 | 2.65 | 3.45 | 5.04 | 3.40 | 3.81 | 4.13 |
| 2. Baroda | 2.60 | 2.74 | 2.81 | 3.69 | 3.68 | 3.69 | 3.23 | 3.35 |
| 3. Surat | 2.19 | 2.44 | 3.47 | 2.82 | 3.36 | 3.38 | 4.01 | 4.01 |
| 4. Mehsana | 3.10 | 3.44 | 3.26 | 4.09 | 3.94 | 3.25 | 4.04 | 4.45 |
| 5. Kaira | 2.30 | 2.13 | 2.25 | 2.25 | 3.70 | 3.60 | 3.54 | 3.28 |
| 6. Jamnagar | 3.46 | 3.66 | 3.75 | 4.68 | 4.19 | 4.59 | 4.62 | 5.16 |
| 7. Rajkot | 3.22 | 3.29 | 3.51 | 3.80 | 4.39 | 4.35 | 5.67 | 6.08 |
| 8. Bhavnagar | 2.65 | 2.74 | 3.53 | 4.42 | 4.01 | 4.13 | 3.86 | 4.58 |
| 9. Junagadh | 2.57 | 2.90 | 3.18 | 3.72 | 3.82 | 4.43 | 4.65 | 4.90 |
| 10. Sabarkantha | 2.09 | 2.22 | 2.98 | 2.46 | 2.14 | 3.02 | 3.03 | 3.43 |
| 11. Amreli | 3.42 | 3.17 | 3.05 | 3.80 | 3.92 | 4.56 | 5.13 | 5.48 |
| 12. Panchmahals | 2.14 | 2.45 | 2.07 | - | 3.42 | 3.47 | 3.03 | 3.05 |
| 13. Kutch | 2.60 | 2.85 | 3.56 | 3.17 | 4.41 | 4.03 | 3.35 | 4.73 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.3.3.

## Appendix IV-7.4

## Average Daily Wage Rates in Spinning, Weaving and Finishing of Textiles (industry code 231) in 11 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1.Ahmedabad | 6.63 | 6.57 | 7.37 | 8.58 | 8.93 | 10.39 | 10.56 | 10.63 |
| 2.Baroda | 5.62 | 5.27 | 6.86 | 8.20 | 8.28 | 9.12 | 9.81 | 9.80 |
| 3.Surat | 4.81 | 4.68 | 5.51 | 7.31 | 6.88 | 7.77 | 7.74 | 7.70 |
| 4.Kaira | 5.86 | 5.80 | 6.42 | 7.74 | 8.62 | 9.43 | 9.91 | 9.57 |
| 5.Mehsana | 5.69 | 5.64 | 6.16 | 6.91 | 7.86 | 8.87 | 8.47 | 8.67 |
| 6.Broach | 5.21 | 4.86 | 5.14 | 6.20 | 7.24 | 8.20 | 8.28 | 9.68 |
| 7.Rajkot | 5.70 | 5.58 | 6.01 | 6.21 | 7.42 | 8.34 | 7.56 | 7.20 |
| 8.Bhavnagar | 5.00 | 4.40 | 5.46 | 6.38 | 7.08 | 7.89 | 8.25 | 8.57 |
| 9.Jamnagar | 4.78 | 4.73 | 5.40 | 5.56 | 7.33 | 8.47 | 8.80 | 8.07 |
| 10.Junagadh | 5.98 | 5.53 | 6.32 | 5.72 | 7.32 | 9.34 | 9.13 | 9.28 |
| 11.Surendra-nagar | 4.38 | 4.26 | 5.04 | 5.37 | 6.27 | 7.04 | 7.72 | 7.16 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Mandays are shown in Appendix IV-7.4.4.

## Appendix IV-7.5

## Average Daily Wage Rates in Manufacture of Structural Clay Products (industry code 331) in 10 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 3.03 | 2.87 | 3.27 | 3.95 | 4.21 | 4.90 | 4.40 | 4.36 |
| 2. Baroda | 2.49 | 2.92 | 3.22 | 3.53 | 3.39 | 4.92 | 4.46 | 3.85 |
| 3. Surat | 2.43 | 2.39 | 2.46 | 2.66 | 2.72 | 2.97 | 3.40 | 3.12 |
| 4. Kaira | 2.50 | 3.07 | 3.23 | 3.17 | 3.33 | 3.54 | 4.58 | 4.86 |
| 5. Broach | 2.17 | 2.33 | 2.35 | 3.87 | 2.94 | 3.32 | 3.61 | 3.28 |
| 6. Kutch | 3.89 | 2.19 | - | 3.83 | 2.06 | 2.17 | 2.34 | 3.57 |
| 7. Bhavnagar | 3.05 | 2.63 | 3.04 | 3.53 | 3.57 | 2.90 | 3.48 | 3.11 |
| 8. Junagadh | 2.28 | 2.61 | 2.95 | 2.92 | 3.19 | 3.13 | 3.34 | 3.80 |
| 9. Surendra-nagar | 1.29 | 1.37 | 2.29 | 1.62 | 2.61 | 2.24 | 2.12 | 3.22 |
| 10. Rajkot | 2.02 | 1.91 | 2.25 | 2.49 | 2.99 | 3.41 | 3.63 | 4.61 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.5.5.

## Appendix IV-7.6

## Average Daily Wage Rates in Manufacture of Non-metallic Mineral Products not elsewhere classified (industry code 339) in 11 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 3.07 | 3.31 | 3.86 | 4.16 | 4.35 | 4.83 | 5.23 | 5.28 |
| 2. Surat | 2.00 | - | 1.76 | 2.42 | 3.35 | 3.12 | 2.75 | 2.76 |
| 3. Kaira | 2.57 | 2.58 | 2.65 | 2.92 | 2.97 | 2.97 | 3.53 | 3.64 |
| 4. Panchmahals | 1.29 | 1.66 | 2.17 | 2.14 | - | 2.55 | 2.61 | 2.87 |
| 5. Sabarkantha | 1.82 | 1.82 | 2.49 | - | 1.74 | - | - | 2.69 |
| 6. Rajkot | 2.43 | 2.20 | 2.73 | 2.51 | 3.22 | 4.62 | 3.54 | 3.67 |
| 7. Bhavnagar | 3.30 | 2.45 | 2.39 | 2.89 | 2.18 | 3.00 | 2.94 | 2.42 |
| 8. Jamnagar | 2.58 | 3.06 | 2.99 | 4.02 | 4.74 | 3.67 | 4.89 | 4.95 |
| 9. Junagadh | 2.71 | 2.63 | 3.56 | 1.83 | 3.60 | 3.15 | 3.00 | 2.54 |
| 10. Baroda | 2.62 | 2.51 | 2.82 | 2.72 | 2.63 | 2.77 | 3.54 | 3.45 |
| 11. Mehsana | 2.25 | 2.28 | 3.33 | 1.68 | 3.16 | 2.69 | 3.38 | 2.79 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.6.6.

## Appendix IV-7.7

## Average Daily Wage Rates in Basic (Ferrous) Metal Industries (industry code 341) in 7 districts of Gujarat:1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 4.05 | 4.55 | 4.32 | 5.29 | 5.07 | 5.13 | 6.11 | 5.59 |
| 2. Baroda | 3.02 | 4.02 | 4.22 | 4.60 | 4.71 | 5.99 | 5.28 | 6.12 |
| 3. Surat | 4.35 | 4.06 | 3.70 | 3.91 | 4.70 | 4.78 | 5.24 | 5.89 |
| 4. Rajkot | 3.95 | 4.79 | 4.34 | 4.22 | 4.81 | 4.71 | 4.40 | 5.20 |
| 5. Bhavnagar | 6.02 | 3.84 | 4.38 | 4.26 | 5.35 | 5.06 | 4.85 | 5.58 |
| 6. Surendra-nagar | 4.94 | 2.54 | 2.73 | 3.65 | 5.50 | 3.16 | 4.92 | 4.17 |
| 7. Kaira | - | 4.93 | 3.75 | 3.88 | 3.78 | 4.21 | 4.78 | 4.83 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.7.7.

## Appendix IV-7.8

## Average Daily Wage Rates in Manufacture of Metal Products except machinery and transport equipment (industry code 350) in 10 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 3.32 | 3.82 | 3.89 | 3.97 | 4.19 | 4.49 | 4.86 | 5.05 |
| 2. Baroda | 3.46 | 3.08 | 3.38 | 3.91 | 4.57 | 4.85 | 5.08 | 5.25 |
| 3. Surat | 2.80 | 2.87 | 3.02 | 3.70 | 3.73 | 4.10 | 4.56 | 5.00 |
| 4. Kaira | 3.37 | 3.47 | 3.27 | 3.41 | 4.33 | 4.86 | 5.26 | 5.04 |
| 5. Mehsana | 2.94 | 3.90 | 3.24 | 2.00 | - | 4.36 | 4.70 | 4.25 |
| 6. Rajkot | 3.32 | 3.38 | 5.74 | 3.68 | 4.35 | 4.39 | 5.13 | 5.05 |
| 7. Bhavnagar | 3.53 | 3.33 | 2.93 | 4.13 | 4.56 | 4.36 | 4.52 | 4.23 |
| 8. Jamnagar | 3.63 | 3.17 | 4.00 | 3.57 | 3.95 | 4.45 | 4.46 | 4.75 |
| 9. Junagadh | 2.99 | 3.16 | 3.07 | 2.95 | 3.15 | 4.11 | 3.76 | 4.58 |
| 10. Surendra-nagar | 2.67 | 2.71 | 3.51 | 2.77 | 5.03 | 4.05 | 4.18 | 4.09 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.8.8.

## Appendix IV-7.9

## Average Daily Wage Rates in Manufacture of Machinery except electrical machinery (industry code 360) in 11 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 4.50 | 4.17 | 4.18 | 4.68 | - | 5.66 | 5.65 | 6.09 |
| 2. Baroda | 4.22 | 3.94 | 4.24 | 4.89 | 5.77 | 4.88 | 5.35 | 4.92 |
| 3. Surat | 3.92 | 3.41 | 3.72 | 3.54 | 4.55 | 4.79 | 5.21 | 6.27 |
| 4. Kaira | 3.68 | 3.56 | 4.61 | 4.75 | 4.61 | 5.99 | 6.59 | 7.19 |
| 5. Mehsana | 3.41 | 4.16 | 4.88 | 3.19 | [illegible] | 4.75 | 4.75 | 3.87 |
| 6. Broach | 4.48 | 4.47 | 4.34 | 4.02 | 5.20 | 4.83 | 5.91 | [illegible] |
| 7. Rajkot | 3.88 | 4.73 | 4.56 | 4.92 | 5.80 | 4.87 | 5.44 | 5.79 |
| 8. Bhavnagar | 3.26 | 3.55 | 3.67 | 4.22 | 4.43 | 5.09 | 3.95 | 5.63 |
| 9. Jamnagar | 4.49 | 4.53 | 4.09 | 3.64 | 5.02 | 5.59 | 5.44 | 6.44 |
| 10. Junagadh | 3.91 | 2.81 | 3.97 | 3.23 | 5.17 | - | 6.18 | 5.10 |
| 11. Surendra-nagar | 4.81 | 3.12 | 3.74 | 3.38 | 3.47 | 3.89 | 4.23 | 4.24 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.9.9.

## Appendix IV-7.10

## Average Daily Wage Rates in Repair of Motor Vehicles and Cycles (industry code 384) in 13 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 4.84 | 4.61 | 4.26 | 6.20 | 5.57 | 8.44 | 8.57 | 9.18 |
| 2. Baroda | 4.26 | 4.52 | 4.64 | 5.62 | 5.89 | 6.97 | 7.24 | 7.44 |
| 3. Surat | 4.07 | 4.16 | 4.80 | 5.75 | 6.20 | 7.15 | 7.23 | 7.95 |
| 4. Kaira | 4.23 | 4.38 | 5.71 | 4.61 | 6.11 | 7.20 | 7.87 | 8.05 |
| 5. Mehsana | 3.12 | 3.94 | 4.06 | 5.15 | 5.48 | 6.44 | 7.54 | 8.47 |
| 6. Panchmahals | 3.54 | 5.29 | 5.66 | 4.78 | 7.75 | 6.33 | 8.93 | 8.72 |
| 7. Broach | 3.01 | 3.61 | 4.48 | 5.24 | 6.56 | 9.17 | 7.42 | 6.50 |
| 8. Sabarkantha | 3.30 | 3.97 | 3.92 | 2.43 | 5.27 | 5.99 | 7.74 | 6.38 |
| 9. Banaskantha | 3.63 | 3.46 | 4.36 | 3.95 | 4.99 | 6.31 | - | 7.96 |
| 10. Kutch | 4.80 | 4.30 | 5.77 | 6.29 | 7.12 | 7.82 | 8.81 | 8.63 |
| 11. Rajkot | 4.61 | 6.07 | 3.96 | 4.14 | 6.48 | 4.80 | 6.53 | 6.39 |
| 12. Bhavnagar | 3.78 | 3.97 | 4.29 | 4.38 | 5.46 | 6.03 | 6.91 | 6.95 |
| 13. Junagadh | 2.55 | 4.19 | 4.38 | 4.81 | 6.43 | 7.66 | 7.77 | 7.18 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.10.10.

## Appendix IV-7.11

## Average Daily Wage Rates in Manufacturing Industries not elsewhere classified (industry code 399) in 7 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 3.33 | 4.07 | 3.88 | 4.44 | 4.62 | 4.68 | 4.96 | 5.09 |
| 2. Baroda | 2.49 | 3.09 | 3.10 | 3.92 | 3.69 | 4.07 | 4.07 | 3.60 |
| 3. Surat | 4.15 | 4.38 | 4.46 | 4.39 | 4.12 | 6.51 | 4.75 | 6.01 |
| 4. Mehsana | 2.99 | 3.10 | 3.66 | 4.20 | 4.58 | 4.82 | 5.14 | 4.89 |
| 5. Rajkot | 2.77 | 3.17 | 2.93 | - | 3.15 | 4.92 | 3.85 | 4.29 |
| 6. Bhavnagar | 3.90 | 3.63 | 4.30 | 4.43 | 4.90 | 5.27 | 4.95 | 6.90 |
| 7. Jamnagar | 2.82 | 2.61 | 3.07 | 3.29 | 3.80 | 3.46 | 2.69 | 4.65 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are of workers earning less than Rs.400/- per month.

ii) Mandays are given in Appendix IV-7.11.11.

## Appendix IV-7.1.1

**Mandays worked by Workers earning less than Rs.400/- per month in Gins and Presses (Industry code 010) in 14 districts of Gujarat: 1962-1969**

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 593979 | 671014 | 123901 | 515986 | 457529 | 404075 | 411638 | 378184 |
| 2. Baroda | 380398 | 511044 | 456770 | 413060 | 403361 | 507713 | – | 616219 |
| 3. Surat | 204920 | 302787 | 276278 | 200289 | 214693 | 238793 | 150033 | 238708 |
| 4. Kaira | 195700 | 205576 | 150527 | 212495 | 132494 | 179212 | 147871 | 102468 |
| 5. Mehsana | 310249 | 360851 | 239179 | 307860 | 193539 | 154524 | 184792 | 174096 |
| 6. Panchmahals | 25747 | 6764 | 16017 | 31040 | 13675 | 31601 | 8439 | 29079 |
| 7. Broach | 379558 | 606543 | 475684 | 456425 | 412624 | 450103 | 503893 | 446570 |
| 8. Sabarkantha | 275122 | 314953 | 271263 | 299517 | 191147 | 232864 | 236753 | 184096 |
| 9. Kutch | 43691 | 54049 | 29057 | 40490 | 37947 | 26485 | 33750 | 22409 |
| 10. Rajkot | 146292 | 178280 | 163779 | 152087 | 204235 | 106350 | 158520 | 121918 |
| 11. Bhavnagar | 72974 | 60607 | 91799 | 82195 | 85716 | 87807 | 62903 | 77704 |
| 12. Jamnagar | 114235 | 106291 | 4401 | 76208 | 70070 | 67853 | 31165 | 66436 |
| 13. Junagadh | 36264 | 139028 | 70711 | 144007 | 91458 | 57169 | 116681 | 150800 |
| 14. Surendranagar | 321611 | 313338 | 281544 | 424982 | 261713 | 312283 | 417870 | 268930 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.2.2

## Mandays worked by Workers earning less than Rs.400/- per month in Manufacture of Grain Mill Products (Industry code 205) in 8 districts in Gujarat: 1962-1969

| Mistrict | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 131140 | 139080 | 112260 | 102766 | 102873 | 91051 | 81573 | 70419 |
| 2. Baroda | 48925 | 50340 | 42509 | 35487 | 39703 | 37612 | 11283 | 34041 |
| 3. Surat | 80683 | 84836 | 63277 | 70931 | 45157 | 57701 | 65315 | 71088 |
| 4. Kaira | 38052 | 35629 | 32063 | 31094 | 18841 | 22272 | 25797 | 25537 |
| 5. Mehsana | 25193 | 15319 | 10396 | 17749 | 19223 | 17102 | 16146 | 15734 |
| 6. Panchmahals | 124813 | 136238 | 143071 | 213597 | 87359 | 74041 | 92675 | 93971 |
| 7. Bhavnagar | 9778 | 6140 | 13420 | 11525 | 13692 | 9211 | 10529 | 10590 |
| 8. Surendranagar | 6180 | 5253 | 5270 | 3667 | 3247 | 4039 | 3820 | 6754 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.3.3

**Mandays worked by Workers earning less than Rs.400/- per month in Manufacture of edible oils except hydrogenated oils (Industry code 209a) in 13 districts of Gujarat: 1962-1969**

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 19244 | 20609 | 16665 | 15366 | 7444 | 8985 | 7761 | 5613 |
| 2. Baroda | 64675 | 85230 | 76694 | 48895 | 54833 | 62830 | 32448 | 44173 |
| 3. Surat | 97555 | 111821 | 132439 | 80337 | 64341 | 84022 | 83574 | 105665 |
| 4. Mehsana | 17950 | 18371 | 19588 | 15420 | 16406 | 14490 | 16931 | 18061 |
| 5. Kaira | 36923 | 73816 | 100499 | 110656 | 47109 | 63091 | 62598 | 54901 |
| 6. Jamnagar | 344258 | 285329 | 249794 | 197519 | 215976 | 289466 | 268652 | 255189 |
| 7. Rajkot | 375657 | 395400 | 338805 | 291389 | 301283 | 257193 | 393036 | 306625 |
| 8. Bhavnagar | 171377 | 151540 | 165143 | 285742 | 116108 | 172152 | 177370 | 117637 |
| 9. Junagadh | 496294 | 417850 | 382319 | 312695 | 325459 | 354324 | 563352 | 469156 |
| 10. Sabarkantha | 68042 | 50188 | 33348 | 64639 | 84235 | 56798 | 56970 | 31970 |
| 11. Amreli | 60603 | 67035 | 72100 | 65122 | 58014 | 36755 | 72416 | 68324 |
| 12. Panchmahals | 105235 | 95533 | 115625 | - | 72571 | 56492 | 106393 | 85921 |
| 13. Kutch | 61111 | 42056 | 30583 | 42648 | 36963 | 32338 | 34544 | 31516 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

Appendix IE-7.4.4

Mandays worked by Workers earning less than Rs.400/- per month in Spinning, Weaving and Finishing of Textiles (Industry code 231) in 11 districts of Gujarat: 1962-1969

| D | District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. | Ahmedabad | 42315175 | 41725627 | 43392535 | 42466896 | 41610675 | 38105069 | 35196905 | 35166423 |
| 2. | Baroda | 2737447 | 2778785 | 2615152 | 2873271 | 2089088 | 1863826 | 2068262 | 2132315 |
| 3. | Surat | 6648615 | 6280504 | 7914436 | 5773943 | 6206369 | 5720922 | 6026519 | 6007573 |
| 4. | Kaira | 2453524 | 2496614 | 2520955 | 2471154 | 2201652 | 2245983 | 2105901 | 1987975 |
| 5. | Mehsana | 2591221 | 2616484 | 3046650 | 831470 | 2341458 | 2516262 | 2154129 | 2278001 |
| 6. | Broach | 603876 | 688028 | 713261 | 709816 | 688929 | 657026 | 654316 | 590959 |
| 7. | Rajkot | 7671415 | 666309 | 729454 | 824047 | 764430 | 470634 | 693908 | 611256 |
| 8. | Bhavnagar | 1788727 | 1111253 | 1736651 | 1609010 | 1483272 | 844763 | 865934 | 985822 |
| 9. | Jamnagar | 332690 | 575295 | 343655 | 58531 | 350843 | 281146 | 229269 | 322073 |
| 10. | Junagadh | 553880 | 575295 | 571520 | 596304 | 616684 | 645046 | 713328 | 701936 |
| 11. | Surendranagar | 499178 | 538358 | 525901 | 512184 | 513109 | 529462 | 546551 | 535273 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.5.5

**Mandays worked by Workers earning less than Rs.400/- per month in Manufacture of Structural Clay Products (Industry code 33.) in 10 districts of Gujarat: 1962-1969**

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 552038 | 612351 | 577898 | 431981 | 426471 | 390478 | 166997 | 241337 |
| 2. Baroda | 256410 | 170909 | 232431 | 184050 | 188192 | 102550 | 171076 | 188292 |
| 3. Surat | 464548 | 496042 | 499745 | 555145 | 570427 | 610924 | 611967 | 757530 |
| 4. Kaira | 128772 | 93728 | 100611 | 89819 | 99236 | 134023 | 148978 | 158522 |
| 5. Broach | 4620 | 5580 | 5151 | 9450 | 10644 | 13235 | 14559 | 26727 |
| 6. Kutch | 35599 | 26427 | - | 41170 | 3690 | 3955 | 3991 | 4252 |
| 7. Bhavnagar | 73349 | 60251 | 85194 | 79890 | 69010 | 70572 | 77297 | 74119 |
| 8. Junagadh | 23186 | 28847 | 23464 | 34477 | 39088 | 29967 | 36689 | 42807 |
| 9. Surendranagar | 7440 | 14677 | 7500 | 6900 | 1462 | 13637 | 6447 | 17268 |
| 10. Rajkot | 54291 | 106975 | 133478 | 142684 | 175399 | 184887 | 223650 | 214392 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

Appendix IV-7.6.6

Mandays worked by Workers earning less than Rs.400/- per month in Manufacture on Non-metallic Mineral Products not elsewhere Classified (Industry code 339) in 11 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 136089 | 145452 | 236844 | 225107 | 199638 | 194165 | 205120 | 276667 |
| 2. [illegible] | 15680 | - | 4680 | 16116 | 27134 | 33903 | 31395 | 38400 |
| 3. Kaira | 197480 | 158986 | 195250 | 213932 | 203253 | 217908 | 256765 | 222658 |
| 4. Panchmahals | 68868 | 92311 | 46749 | 88978 | - | 77448 | 105473 | 58800 |
| 5. Sabarkantha | 43302 | 45577 | 8925 | - | 1430 | - | - | 10560 |
| 6. Rajkot | 155962 | 82926 | 60021 | 65786 | 85128 | 82832 | 72707 | 86104 |
| 7. Bhavnagar | 51860 | 50818 | 42317 | 49178 | 55760 | 41439 | 67753 | 101006 |
| 8. Jamnagar | 12064 | 3088 | 2400 | 25320 | 73900 | 46077 | 38618 | 51726 |
| 9. Junagadh | 32397 | 38869 | 36525 | 38645 | 81916 | 62845 | 64425 | 76614 |
| 10. Baroda | 60414 | 85798 | 90311 | 115938 | 119097 | 111230 | 108141 | 101895 |
| 11. Mehsana | 4800 | 4500 | 7200 | 7652 | 12874 | 34174 | 27645 | 59417 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.7.7

## Mandays worked by Workers earning less than Rs.400/- per month in Basic (Ferrous) Metal Industries (Industry code 341) in 7 districts of Gujarat:1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 161815 | 182492 | 310175 | 440879 | 671972 | 645626 | 655586 | 849670 |
| 2. Baroda | 235005 | 141831 | 274614 | 291958 | 309988 | 283879 | 204533 | 277335 |
| 3. Surat | 44543 | 65688 | 140717 | 171772 | 282509 | 166562 | 127007 | 266968 |
| 4. Rajkot | 26056 | 32154 | 19590 | 23280 | 57738 | 65473 | 131568 | 163411 |
| 5. Bhavnagar | 42327 | 55698 | 36557 | 111909 | 115671 | 94796 | 92824 | 100404 |
| 6. Surendranagar | 11451 | 3664 | 4340 | 14429 | 14719 | 5451 | 16515 | 22652 |
| 7. Kaira | - | 1723 | 2941 | 24442 | 30594 | 24240 | 35919 | 57510 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

Appendix IV-7.8.8

**Mandays worked by Workers earning less than Rs.400/- per month in Manufacture of Metal Product except machinery and transport equipment (Industry code 350) in 10 districts of Gujarat:1962-69**

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 290365 | 532932 | 544582 | 575440 | 631534 | 526316 | 483354 | 588716 |
| 2. Baroda | 158080 | 210049 | 207303 | 221636 | 261055 | 283614 | 230295 | 289212 |
| 3. Surat | 187272 | 181366 | 177324 | 254615 | 300363 | 344546 | 224673 | 327198 |
| 4. Kaira | 27298 | 32257 | 34420 | 37054 | 29960 | 24785 | 32235 | 56293 |
| 5. Mehsana | 2408 | 4030 | 927 | 1500 | - | 4076 | 3047 | 3467 |
| 6. Rajkot | 280864 | 107768 | 156073 | 179021 | 152293 | 161941 | 150620 | 174438 |
| 7. Bhavnagar | 67442 | 75520 | 102479 | 75156 | 66068 | 81852 | 110015 | 80413 |
| 8. Jamnagar | 30197 | 29863 | 50263 | 49232 | 198231 | 224681 | 260498 | 312195 |
| 9. Junagadh | 21706 | 20793 | 19052 | 15768 | 15539 | 16647 | 15905 | 27016 |
| 10. Surendranagar | 38343 | 28682 | 22663 | 53974 | 28287 | 35615 | 40448 | 36118 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.9.9

**Mandays worked by Workers earning less than Rs.400/- per month in manufacture of Machinery except Electrical Machinery (Industry code 360) in 11 districts of Gujarat: 1962-1969**

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 2125535 | 2026671 | 2033128 | 2520678 | - | 2398802 | 2241198 | 2627862 |
| 2. Baroda | 505100 | 749096 | 863772 | 758800 | 1136164 | 1363720 | 878822 | 1803811 |
| 3. Surat | 406382 | 457393 | 490518 | 859057 | 589294 | 539813 | 485283 | 733594 |
| 4. Kaira | 184181 | 299696 | 371021 | 467924 | 554970 | 637594 | 636538 | 685270 |
| 5. Mehsana | 66161 | 59219 | 49607 | 93297 | - | 70244 | 77397 | 103376 |
| 6. Broach | 3090 | 2790 | 3399 | 3684 | 2948 | 2222 | 2213 | - |
| 7. Rajkot | 888264 | 242008 | 307304 | 341635 | 443265 | 501210 | 666722 | 813401 |
| 8. Bhavnagar | 253260 | 241734 | 258620 | 218512 | 200366 | 159538 | 135321 | 209192 |
| 9. Jamnagar | 70740 | 88293 | 91831 | 111311 | 106545 | 111270 | 130046 | 150876 |
| 10. Junagadh | 7809 | 3421 | 25093 | 2448 | 13905 | - | 47159 | 50848 |
| 11. Surendranagar | 165515 | 129443 | 220316 | 273402 | 277259 | 237261 | 284434 | 298802 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.10.10

Mandays worked by Workers earning less than Rs.400/- per month in Repair of Motor Vehicles and Cycles (Industry code 384) in 13 districts of Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 739258 | 827066 | 798717 | 793540 | 866719 | 774037 | 704467 | 584419 |
| 2. Baroda | 95922 | 105447 | 56702 | 103182 | 116773 | 108961 | 132428 | 214015 |
| 3. Surat | 130804 | 142619 | 113248 | 113099 | 128603 | 98516 | 157428 | 59617 |
| 4. Kaira | 163638 | 184528 | 38862 | 31943 | 202627 | 206097 | 214394 | 239520 |
| 5. Mehsana | 114246 | 111469 | 128598 | 121470 | 134183 | 133126 | 127726 | 124769 |
| 6. Panchmahals | 19345 | 21170 | 25755 | 33127 | 31145 | 32776 | 29027 | 37186 |
| 7. Broach | 20440 | 19710 | 21190 | 18699 | 182214 | 95218 | 83389 | 34623 |
| 8. Sabarkantha | 30295 | 16790 | 34405 | 32981 | 35900 | 51116 | 59023 | 78295 |
| 9. Banaskantha | 38012 | 38574 | 7750 | 43800 | 43950 | 39293 | - | 4069 |
| 10. Kutch | 29890 | 30393 | 27630 | 24174 | 22265 | 45384 | 54819 | 50940 |
| 11. Rajkot | 50723 | 27063 | 90091 | 41899 | 43549 | 70368 | 75516 | 59811 |
| 12. Bhavnagar | 16952 | 14011 | 13058 | 81757 | 93347 | 65761 | 78978 | 107114 |
| 13. Junagadh | 17885 | 57730 | 57192 | 48887 | 55322 | 63660 | 121611 | 55103 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.

## Appendix IV-7.11.11

## Mandays worked by Workers earning less than Rs.400/- per month in Manufacturing Industries notelsewhere classified (Industry code 399) in 7 districts in Gujarat: 1962-1969

| District | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Ahmedabad | 134452 | 151483 | 145530 | 140223 | 141096 | 173967 | 209817 | 214429 |
| 2. Baroda | 80881 | 200273 | 318606 | 238906 | 150543 | 166518 | 197054 | 228822 |
| 3. Surat | 31436 | 25385 | 32089 | 35691 | 9308 | 14445 | 23323 | 68004 |
| 4. Mehsana | 57151 | 52655 | 62633 | 5635 | 75559 | 52963 | 54325 | 73573 |
| 5. Rajkot | 107100 | 125413 | 114527 | - | 76197 | 83571 | 114430 | 113120 |
| 6. Bhavnagar | 58644 | 62355 | 75777 | 77860 | 55766 | 105172 | 126914 | 154270 |
| 7. Jamnagar | 69836 | 81344 | 92323 | 84854 | 57413 | 46865 | 48402 | 60561 |

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: Mandays are in respect of factories submitting returns.