



Report of the Bombay Economic and  
Industrial Survey Committee  
1938-1940

Volume II

Notes on the Economy and Industries of the different  
Districts of the Bombay Province

AHMEDNAGAR

BOMBAY

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## PREFATORY NOTE.

Volume II of the Report contains notes on the economy and industries of the various districts of the Province and of the City of Bombay. These notes have been drafted by Dr. V. K. R. V. Rao and are based upon the reports collected by the Committee's investigators, the records of their interviews with the artisans and traders and such other information as was available to the Committee in the form of published documents and memoranda submitted by officials and non-officials; the notes were discussed by the Committee and they resolved that the same be published as Volume II of the Report.

It must be made clear that these notes are not intended to be recommendatory to Government, nor do the information and suggestions contained therein represent the views either of Dr. Rao or of the other members of the Committee. Such views as these notes contain are in most cases the views of the artisans and traders interviewed by the investigators and in some cases they also include the views of the investigators themselves. The Committee, therefore, do not hold themselves responsible for any of the views expressed in this Volume.

The Committee are aware that the data contained in these notes is not always adequate and in some cases it is possible that some inaccuracies of fact might have crept into these notes. After all, it must be remembered that the investigators on whose returns these notes are mainly based, cannot have spent on an average more than 15 days in a district and their main function was to record views. They have faithfully done that and if there are any inaccuracies or erroneous beliefs or undue expectations about the industrial possibilities, they merely represent part of the accepted ideas of those who are engaged in industrial occupations in the districts. The Committee were anxious that data should be collected regarding the number of those engaged in different industries and with this end in view suggested to Government that a sample industrial census should be taken of the Province. But Government did not see their way to accept the scheme submitted by the Committee with the result that it has not been possible for the Committee to collect statistical data regarding the condition of small scale and cottage industries of the Province. With

the limited staff and funds at their disposal, the Committee had to restrict themselves to ascertaining the experience, views and difficulties of those who are engaged in small scale and cottage industries of the Province ; and as persons engaged in small scale and cottage industries are scattered, unorganised, and spread over the whole of the Province, the Committee had to appoint investigators for the purpose of interviewing a few persons in each district who are engaged in different cottage and small scale industries. The industrial side of the notes, which follow, merely sums up the information collected by the investigators from the artisans and traders whom they interviewed. The Committee nevertheless have to recommend the publication of this material as Volume II of their Report in order that public interest may be roused in the economic and industrial conditions of the Province and these reports should be made the starting point for further and more elaborate investigation. They hope that Government will follow this up with a sample industrial census of the Province ; if this is done, these notes together with the results yielded by such a census will constitute a valuable storehouse of information for those who are engaged in the task of planning the industrial future of the Province.

PURSHOTAMDAS THAKURDAS,

May 3, 1940.

Chairman.

## EXPLANATORY NOTE.

These Notes on the Economy and Industries of the various districts in the Province and of the Bombay City, comprising Volume II of the Report of the Bombay Economic and Industrial Survey Committee, were submitted to Government by the Committee in May 1940. The Committee expressed the view that these Notes should be printed for general information in order that public interest might be roused in the economic and industrial conditions of the Province. The Notes as received by Government needed, however, revision and re-shaping before they could be published. Government, therefore, appointed with effect from 3rd January, 1941, Mr. P. S. Nadkarni of the Finance Department, who had worked as the Assistant Secretary of the Committee, to carry out this work. Mr. Nadkarni worked under the general supervision of the Director of Industries and in the preliminary stages, in consultation with the Chairman and the Secretary of the Committee. Beyond putting into shape, and editing the Notes for purposes of publication, no alterations have been made in the drafts as originally submitted to Government by the Committee.

March, 1941.

P. B. ADVANI,  
Director of Industries.

## CONTENTS

	PARAS.	PAGES
Position and area .. .. .	1	1
Physical features .. .. .	2	1
Climate and rainfall .. .. .	3	1
Population .. .. .	4	1-2
Health and medical facilities .. .. .	5	2
Literacy and educational facilities .. .. .	6	3
Transport facilities .. .. .	7	3
Survey of Resources : Agriculture and Pasture .. .. .	8	3-6
Minerals .. .. .	9	6
Forests .. .. .	10	6
Power .. .. .	11	7
Capital .. .. .	12	7
Industries in the District—General .. .. .	13-14	7-9
Handloom weaving .. .. .	15-21	9-11
Brass and copperware industry .. .. .	22-26	11-14
Sugarcane crushing industry .. .. .	27	14
Tanning industry .. .. .	28-30	14-16
Boots and shoes .. .. .	31-33	16-17
Production of lime .. .. .	34	17
Possibilities of New Industries .. .. .	35	17

## AHMEDNAGAR.

### POSITION AND AREA.

The district of Ahmednagar lies between  $18^{\circ} 20'$  and  $19^{\circ} 59'$  north latitude and  $73^{\circ} 37'$  and  $75^{\circ} 41'$  east longitude and occupies an area of 6,611 square miles. It is bounded on the north by the Nasik district, on the east by the Nizam's Territory, on the south by the Sholapur district and on the west by the Poona and the Thana districts.

### PHYSICAL FEATURES.

2. Except in the east, where the Dominions of the Nizam surround Jamkhed Mahal and run inwards to within ten miles of Ahmednagar city, the district is compact and unbroken. The Western Ghats extend along a small portion of the western boundary and throw out spurs eastwards into the heart of the district. The valleys between these spurs of the Western Ghats form the beds of the Pravara and Mula rivers. Except near the centre of the eastern boundary where hills rise to a considerable height, the surface of the district eastwards becomes gradually less broken. The chief river of the district is the Godavari which runs for about 40 miles along the north and north-east boundary. The other rivers in the district are the Pravara, the Mula, the Sina, the Ghod and the Dhora. The Bhima river flows in this district for about thirty-five miles and forms the boundary between this district and the Poona district.

### CLIMATE AND RAINFALL.

3. The climate is on the whole genial. In the cold season the air is dry and invigorating. The hot season begins in February and lasts till the middle of May, and from that date till the monsoon breaks, the weather gets sultry and oppressive. During the monsoon the climate is temperate and pleasant. Rainfall varies considerably in the district. In the hilly villages of west Akola it is as high as two hundred inches while at Akola the average rainfall is only twenty-one inches. The average rainfall for the district as a whole is about 22 inches.

### POPULATION.

4. The district has a total population of 988,206 persons of whom 889,546 live in rural areas consisting of 1,350 villages while the remaining 98,660 are to be found in 7 towns. The more important towns are :—

	Population.
Ahmednagar (including Cantonment) ..	57,529
Sangamner .. .. .	15,355

The proportion of the urban population to the total population is about 10 per cent.

According to the Census returns of 1931 the total number of principal earners in the district is 360,910 of whom 265,391 are males. The occupational distribution of this total number is as follows :—

Exploitation of animals and vegetation .. ..	279,349
Exploitation of minerals .. ..	9
Industry .. ..	38,099
Transport .. ..	2,171
Trade .. ..	11,964
Public force and Administration .. ..	9,872
Professions and liberal arts .. ..	4,780
Persons living on their income .. ..	783
Domestic service .. ..	4,945
Insufficiently described .. ..	4,527
Unproductive .. ..	4,411
Total ..	<u>360,910</u>

The proportion of the industrially occupied persons to the total principal earners is 10·5 per cent. But in addition to the 38,099 persons shown as engaged in industrial occupations according to Census classifications, there are 11,176 persons engaged in stock-raising, 1,327 persons engaged in forestry and 835 persons engaged in fishing. Though these have been included in the Census returns under “exploitation of animals and vegetation” they are engaged more or less in industrial occupations. The total number of persons in the district engaged in industrial occupations of different kinds can, therefore, be taken as 51,437.

#### HEALTH AND MEDICAL FACILITIES.

5. The mean ratio of births per thousand for the five years ending 1937 was as high as 44·03. The mean ratio of deaths for the same period was 27·35 per thousand thus giving a survival rate of 16·68 per thousand.

There is only one hospital maintained by Government in Ahmednagar town. Of the twenty dispensaries in the whole of the district, twelve are maintained by the District Local Board, six by a Mission, one by the Poona Seva Sadan Society and one by a municipality. The total number of doctors in the district are 57 and of these 29, or more than half, are in Ahmednagar town. In the district excluding Ahmednagar town the proportion of doctors to population comes to one doctor for about 33,800 persons.

## LITERACY AND EDUCATIONAL FACILITIES.

6. According to the 1931 Census, 59,475 persons have been returned as literates, which constitutes a literacy percentage of nearly 6 for the whole district. Next to the West Khandesh and Belgaum districts, this district has the lowest percentage of literacy in the whole of the Province.

The educational facilities available in the district are summed up in the following statement for the year 1937-38 :—

Description.	Number of Institutions.	Number of Pupils.
Primary Schools .. .. .	852	54,228
Secondary (including lower secondary and English teaching) Schools.. .. .	12	2,527
Commercial, Industrial and Agricultural Schools ..	7	264

Of the 1,350 villages in the district, only 654 villages had schools in them.

## TRANSPORT FACILITIES.

7. The Dhond-Manmad line of the Great Indian Peninsula Railway is the only railway line in the district. It joins the Calcutta and Madras railways and runs through the centre of the Ahmednagar district. The district is well served by roads, the important ones being connected with the railways by feeder roads. The total length of roads maintained by the Public Works Department and the local authorities is 805 miles of metalled roads and 379 miles of unmetalled roads.

## SURVEY OF RESOURCES : AGRICULTURE AND PASTURE.

8. The district has a total area of 4,242,462 acres of which 2,992,236 acres constitute the gross cropped area. Current fallows constitute 335,284 acres. Forests occupy 492,130 acres while other uncultivable land measures 468,418 acres. There are 34,549 acres which are returned under culturable waste or land which is theoretically available for cultivation.



The following table gives details of the classification of crops of the cultivated area :—

					1937-38.
					Area in acres.
Rice	..	..	..	..	21,394
Wheat	..	..	..	..	184,016
Jowari	..	..	..	..	980,342
Bajri	..	..	..	..	851,108
Ragi	..	..	..	..	25,710
Maize	..	..	..	..	1,418
Gram	..	..	..	..	100,254
Other food grains including pulses	..		..	..	293,975
Linseed	..	..	..	..	25,019
Sesame ( <i>til</i> )	..	..	..	..	19,015
Groundnuts	..	..	..	..	25,077
Others	..	..	..	..	147,165
Condiments and spices	..		..	..	5,761
Sugarcane	..	..	..	..	15,767
Cotton	..	..	..	..	201,860
Other fibres	..	..	..	..	8,773
Tobacco	..	..	..	..	2,249
Fodder	..	..	..	..	69,040
Fruits and vegetables	..		..	..	13,766
Other miscellaneous crops			..	..	527
<b>Total</b>					<b>2,992,236</b>

The important commercial crop of the district is cotton which accounts for a considerable portion of the cropped area. The other important commercial crops are sugarcane, linseed and groundnuts. The staple food crops are jowari and bajri.

Fruits and vegetables accounted for an area of 13,766 acres in 1937-38. More details regarding these crops were obtained from the Department

of Agriculture which supplied the following information in respect of 1938-39 :—

	Acres.
<i>Vegetables—</i>	
Potatoes .. .. .	738
Sweet potatoes .. .. .	485
Carrot .. .. .	500
Onions .. .. .	840
	<hr/>
	2,563
<i>Green vegetables—</i>	
Fenugreek .. .. .	1,658
Edible hibiscus ( <i>Bhendi</i> ).. .. .	65
Musk melon .. .. .	161
Water melon .. .. .	190
Others .. .. .	695
	<hr/>
	2,769
<i>Fruits—</i>	
Plantain .. .. .	295
Mango .. .. .	329
Lime .. .. .	482
Sweet lime .. .. .	5,056
Orange .. .. .	616
Pomegranate .. .. .	195
Guava .. .. .	613
Papaya .. .. .	195
Grapes .. .. .	63
Others .. .. .	71
	<hr/>
	7,915
	<hr/>
Total, Fruits and Vegetables ..	13,247

The district has 69,040 acres under fodder crops. In parts of Akola and Sangamner talukas where there is a fair amount of natural grazing, some good specimen of cattle are bred. The Akola breed is known as the *Dangi*, while the Sangamner breed is akin to the *Mhasvad Khillari* type.

There are no important breeds in the other parts of the district. According to the Census of cattle taken in 1934-35, the details of live-stock in the district are:—

Bulls and Bullocks (breeding, working and young stock)	..	..	..	..	386,761
Cows	do.		do.	..	312,632
Buffaloes	do.		do.	..	13,791
Cow-buffaloes	do.		do.	..	54,770
Sheep and goats	..	..	..	..	415,138
Horses and Ponies	..	..	..	..	18,088
Donkeys	..	..	..	..	6,564

Of these, the milch cattle number 235,438, consisting of 200,633 cows and 34,805 cow-buffaloes. This district has the largest number of cows in the whole of the Province.

#### SURVEY OF RESOURCES : MINERALS.

9. The Gazetteer states that coarse agates and carnelian like stones are found at Katul and near Ahmednagar city. Agates are also reported to be scattered over the Karjat sub-division. Crystallised quartz of various colours are reported to occur in the vicinity of the hill fort of Harischandergad. Trap suitable for building stone is found all over the district not only in quarries but a few feet under the surface. Basalt is found near Ahmednagar and Dongargaon while limestones occur in large quantities to the north of Ahmednagar fort, at Sangamner, Arangaon and other places. The Sangamner and Arangaon lime-stones are reported to be purer than the others. The district, on the whole, does not seem to be particularly rich in mineral resources.

#### SURVEY OF RESOURCES : FORESTS.

10. The total area under forests is 492,130 acres of which the larger portion is to be found in the talukas of Akola and Sangamner. The hill forests belong to three classes: the lower slopes, the central region and the evergreen western forests. The lower slopes contain mostly bushes, scrub trees, *khair* and *dhavda* trees. The central region mostly contains teak. It is treated as coppice, the demand being chiefly for poles and rafters. *Dhavda*, *khair* and some kinds of underwood are also grown in this region. The evergreen western forests consist mainly of trees like the *anjan*, bamboo, mango, *jambul*, etc. The minor forest products include grass, *harda*, *babul* pods, tamarind berries, etc.

## SURVEY OF RESOURCES : POWER.

11. There are two electric supply companies in the district. The figures for their output are given below :—

	Units generated.	Total Units sold.	Units sold for industrial purposes.
Ahmednagar Electric Supply Company Limited .. .. .	315,417	247,974	132,845
Sangamner Electric Supply Company Limited .. .. .	100,634	73,020	11,453

## SURVEY OF RESOURCES : CAPITAL.

12. There were 165 agricultural societies in the district in 1937-38 and their total working capital amounted to more than Rs. 11 lakhs. There were also 20 non-agricultural societies with a working capital of Rs. 22.62 lakhs. Besides these co-operative societies, there were 88 post office savings banks in which there were 10,142 accounts current in 1937-38 with a balance of Rs. 423.08 lakhs. During the same year postal cash certificates to the extent of Rs. 5.21 lakhs were sold in the district. There is also a branch of the Imperial Bank of India at Ahmednagar.

## INDUSTRIES IN THE DISTRICT : GENERAL.

13. The population engaged in industrial occupations has been estimated at 51,437 persons including the 13,338 persons engaged in stock-raising, forest industries and fishing. Of these the following classes of industrial workers are more or less suppliers of pure services and cannot be classed under makers of manufactured commodities :—

Sawyers .. .. .	263
Butchers .. .. .	443
Tailors, milliners, etc. .. .. .	1,438
Washing and cleaning .. .. .	1,084
Barbers, hair dressers, etc. .. .. .	2,153
Scavenging .. .. .	512
Total .. .. .	5,943

The remaining 45,494 may be regarded as persons engaged in industry. The Census tables give the following classified statistics :—

Forest Industries .. .. .	1,327
Stock-raising .. .. .	11,176
Fishing .. .. .	835
Cotton ginning, cleaving, etc. .. .. .	112
Cotton spinning, sizing and weaving .. .. .	6,844
Rope, twine, etc., making .. .. .	3,070
Wool carding, spinning and weaving .. .. .	682
Dyeing, bleaching, etc. .. .. .	111
Working in leather .. .. .	134
Carpenters .. .. .	2,895
Basket makers .. .. .	729
Blacksmiths, etc. .. .. .	1,316
Workers in brass, copper and bell-metal .. .. .	332
Potters, etc. .. .. .	2,067
Manufacture and refining of vegetable oils .. .. .	1,360
Makers of sugar molasses and <i>gur</i> .. .. .	631
Sweetmeat and condiment makers .. .. .	434
Boot and shoe makers .. .. .	4,344
Lime burners, cement workers, etc. .. .. .	3,358
Makers of jewellery and ornaments .. .. .	1,660
Other miscellaneous industries .. .. .	2,077
Total .. .. .	45,494

Of these, 1,976 workers were employed in concerns coming under the Indian Factories Act during the Census year 1931. The following statement gives details regarding the number of factories and the number of workers employed therein for 1931 and 1938 respectively :—

	Number of factories.		Number of workers.	
	1931.	1938.	1931.	1938.
Government and Local Fund ..	1	1	13	17
Food, drink and tobacco ..	1	....	330	....
Chemicals, dyes, etc. ..	....	1	....	Not stated.
Paper and printing ..	....	2	....	69
Processes connected with hides and skins .. .. .	1	2	47	72
Seasonal factories .. .. .	59	113	1,586	4,119
Total .. .. .	62	119	1,976	4,277

14. The investigator, Mr. N. M. Joshi, spent about a fortnight and interviewed a number of artisans and traders working in the district. The following notes on some of the cottage and small scale industries of the district are based mainly on the returns and other information collected by the investigator during this stay in the district as also on other data available to the Committee.

#### HANDLOOM WEAVING.

15. The handloom weaving industry is spread over many centres in the district and continues to be the most important. The investigator studied the condition of this industry at Ahmednagar, Sangamner, Pathardi and Bhingar. His general impression is one of unrelieved gloom. Both from the point of view of output and prices of the products, conditions appear to have steadily deteriorated during the last 10 to 15 years. Thus for example, it was estimated that there were nearly 3,500 looms at Sangamner in 1910-11. When Mr. Telang made his survey in 1928 the number had gone down to 2,000. According to the investigator, to-day there are not more than 800 looms at that centre. Conditions at other centres are not far dissimilar. In Bhingar, for instance, the number of looms was 1,000 in 1932. It is reported to be not more than 480 now. It is also estimated that the imports of yarn into Ahmednagar City which were valued at Rs. 5 lakhs about 10 years back have now gone down to nearly Rs. 2 lakhs.

16. Along with the fall in the number of looms there have been large reductions in the prices of the *sarees* and the remuneration received by the weavers. The *nagari saree* with real silk border which very easily fetched Rs. 8 in 1925 does not even fetch Rs. 3-8-0 now. And a Sangamner wage-earner who was getting Rs. 1-4-0 per piece in 1920 has now to work for 4 annas on a similar piece. One very noticeable outcome of this deterioration in economic conditions is the disruption of the *karkhanas*. Out of the 40 families, whose condition was studied in detail by the investigator at Ahmednagar, only three had more than four looms. Similarly out of the 132 families at Bhingar about whom information was collected, only one had more than five looms. A result of this has been a lowering of *saree* prices. In many cases the independent artisans have to sell their produce to local dealers at any price to satisfy their daily want for bread. As for the wage-earners they are generally leaving their ancestral occupation to work as casual labourers in mills or in the fields. Most of the weavers are heavily in debt. It is estimated that the 193 weavers' families of Sangamner are indebted to the extent of Rs. 1,50,000. This indigent condition of the weavers is stated to be mainly responsible for the failure of the various weavers, co-operative credit societies started in the district.

17. A characteristic of the handloom centres in the Ahmednagar district about 15 years back, was the specialisation of different centres in different designs. In Ahmednagar city the weavers mostly

concentrated on the *nagari* type of *sarees* whereas the Sangamner producers produced the *band* variety and the Pathardi *Salis* specialised in *shahpuri* border *sarees*. Whereas such an arrangement had its own advantages at that time, to-day the competition from machine production and change in taste have brought to the forefront new problems. The Ahmednagar weavers, for instance, have seen their markets slip away before their eyes due to the production of cheap *sarees* with *nagari* designs by the Dhulia mills. Similarly, whereas in 1925 almost all the looms at Pathardi were producing *shahpuri* border *sarees*, now there is hardly any demand for this garment. In Sangamner too the production of *band sarees* by the Dhulia and Chalisgaon mills and the shift to some extent in rural demand from *band* to fancy *patals* have brought very different problems before the weavers. Their poverty, illiteracy and conservatism make it difficult for them to adjust themselves to new conditions. And a few of those who realise the necessity of a change and try to adjust production to demand find immense difficulties in their way. Some of them cannot afford to go in for the necessary equipment. For example, there are about 40 weavers at Ahmednagar who can weave fancy *patals* but have no dobbies to help them in their work. Moreover, the dealers in *sarees* come in the way by refusing to pay cash for these new types.

18. At present the daily output of *sarees* at Sangamner is 200 during the brisk season and 125 in the slack. Of this, cotton *sarees* of the *band* variety form 66 per cent. and the rest consist of silk bordered *sarees*. Recently a few looms have begun to produce fancy *patals* and *dhotees*. At Bhangar about 135 *sarees* are produced in a day. The counts of yarn used are 20s and 40s. Artificial and real silk are also utilised. At Bhangar, cotton yarn from 20s to 32s, and mercerised yarn of 2/60s, 2/64s, 2/80s, 2/84s are used. In addition, artificial silk of 80s, 100s, 125s (both single and double) and real silk are used. The main products from these are *bhangari sarees*, *ilkal sarees* and fancy *patals*. At this place there is a *punch* for certifying the quality of the product and about 20 per cent. of the product is stamped by the *punch*; such stamped product is said to be readily marketed.

19. In all the handloom centres of the district the product is sold to the local dealers from day to day. About ten years back the dealers used to take the *sarees* of the district to Khandesh and Berar. But the Dhulia, Amalner and the Chalisgaon mills have displaced entirely the handloom products from these areas. At present the product is mainly marketed within the district but a part is also sent to Nasik.

20. A difficulty facing some of the weavers is to finance the production and marketing of specialised and new products. Some designs like *Ilkal sarees* are demanded in good numbers during the marriage season, i.e., during the months of March, April and May but the products have to be hypothecated with dealers at heavy cost. To improve the deplorable condition of the weavers of the district, Government have started, with the co-operation of the weavers, a District Industrial Association. At present the Association has 500 members and owns about 175 looms. Its activity is mostly centred in the Ahmednagar

city and the average annual production is valued at Rs. 20,000. The products of the members are marketed by the Association and the weavers get about 6 to 8 annas a day. With a view to shift production from the traditional products, the demand for which is steadily dwindling and to make the district self-supporting in other lines of piece-goods production, the Association encourages the production of *dhotees*, shirting, coating, etc. This has improved the situation in two ways: the producers of the *nagari sarees* are getting some relief as there is less production in that variety, while the other weavers are also now getting better wages by weaving new types of designs.

21. To put the handloom industry on its legs, the weavers demand protection against mill and powerloom production. They feel that so long as coloured *sarees* are produced on machinery without hindrance the handloom industry can never hope to compete with these products on an equal footing. They suggest, therefore, that Government should prohibit the powerlooms from producing *sarees* or that Government should put a heavy tax on powerloom production to equalise prices. Further, they want Government to supply them the right type of yarn for warp and weft together with a guarantee for its quality and quantity, at low rates, so that the middlemen can be eliminated. The weavers also demand that the municipal taxes on imports of yarn at some places should be removed. They want to be supplied with improved appliances and to be trained to produce new designs to meet changing demand. At some places the weavers desire training in dyeing yarn. Another suggestion is about the use of *Dharmadaya* funds. According to the Secretary, Weavers' Union, Sangamner, the dealers at present deduct as much as 1 anna per cotton *saree* and 4 annas per silk *saree* for charity purposes. These charity funds are at the disposal of the dealers and it is alleged that they are not used for their avowed objects. It is suggested that the funds should now be taken over by Government by legislation and used for the reconstruction of the handloom industry. The other demands are: (1) redemption from past indebtedness, (2) representation of weavers on the provincial legislatures to safeguard the interests of the industry, and (3) a special marketing organisation for marketing their products.

#### BRASS AND COPPERWARE INDUSTRY.

22. This is an important industry of the district though at present it is not in the same flourishing condition that it was some 20-25 years back. About 20 years ago, it is stated there were fifteen prominent dealers and about 100 *karkhanas* engaged in the manufacture of brass and copper articles and the total number of persons who subsisted on this industry was nearly 1,000; to-day it is reported there are only five to six prominent dealers and 15 to 20 *karkhanas*, while the number of artisans subsisting on this industry is said to be about 150.

23. The dealers supply raw materials to the artisans who work in their own workshops and return the finished articles to the dealers. In return for their work the artisans are paid on the basis of fixed rates



according to the nature of the metal worked in. The raw materials are mostly imported from Bombay. They consist of brass and copper sheets, *bhangar* (scrap metal), zinc, tin, etc. The cost of transport comes to about Rs. 1-4-0 per cwt. Besides this they have to pay *octroi* duties. These raw materials are distributed between different artisans. Usually about 15 to 20 maunds of raw materials are given to each artisan who prepares and returns the necessary products in about a month. The contract rates at which the work is given are usually Rs. 5 per maund of bell-metalware, Rs. 3-8-0 per maund of brassware and Rs. 3-4-0 for copperware. Sometimes the rates offered are even less. The artisan has to account to the dealer for every maund of the raw material supplied to him. Sometimes these artisans are advanced their wages up to 50 per cent. of their anticipated earnings. The different types of products manufactured at this centre and their selling prices are stated to be as follows:—

		Rate per 13½ seers.	
		Rs. a. p.	Rs. a. p.
Brass—			
<i>Pateli</i>	.. ..	.. 10 8 0	to 11 0 0
<i>Kadhayi</i>	.. ..	.. 9 8 0	
<i>Pitali</i>	.. ..	.. 10 8 0	
<i>Tapeli</i>	.. ..	.. 12 8 0	to 13 0 0
<i>Pali</i>	.. ..	.. 10 0 0	to 10 8 0
Copper—			
<i>Kalashi</i>	.. ..	.. 16 0 0	
<i>Gund</i>	.. ..	.. 16 8 0	
<i>Ghangal</i>	.. ..	.. 16 8 0	
Bell-metal—			
Plates	.. ..	.. 19 8 0	
Cymbals	.. ..	.. 18 8 0	to 19 0 0
Bells	.. ..	.. 19 0 0	

Most of the dealers stated that they made very little profit out of their trade.

24. Some of the contract workers were themselves dealers some years back but due to adverse conditions they now accept work from other dealers on contract basis. They employ labourers who are paid at rates varying from 8 annas to 12 annas per day. The raw material is brought from the dealers. The equipment in the workshop consists mostly of hand tools worth Rs. 300 to Rs. 1,000 according to the size of the workshop. All the tools are locally manufactured. A workshop employing about eight workers can prepare articles weighing about

2½ maunds in a day while another workshop where only 3 members of the family worked produces about one maund of articles in a day. From 20 maunds of metal sheets 16 maunds of finished articles are prepared and the remaining 4 maunds of cuttings are returned to the dealer. The cost of preparing the 16 maunds of utensils is reported to be about Rs. 16 or on an average one rupee per maund. This artisan reports that he gets Rs. 2 per maund from the dealer for his work. Thus his earnings come to about Rs. 16 for a fortnight or Rs. 30 to Rs. 32 per month. The products are sold in local markets and are also exported to Khandesh, Berar and the Nizam's Territories. A few years back, they were also exported to Madras, United Provinces, Delhi, etc., but these markets are now closed. There is keen competition from machine-made articles which are reported to be cheaper and to present a more attractive appearance; this has practically restricted the scope of the markets for the handmade products of this district. There is also competition from aluminium wares but this is not so keenly felt as it is stated that aluminium ware is not now so popular because of its defects. Due to these causes, the production in this centre has fallen very low. The total production of Ahmednagar to-day is estimated to be worth only about Rs. 1½ lakhs per year whereas 25 years back the production is stated to have been worth as much as Rs. 25 lakhs. The dealers want Government to show them the way to improve their industry and trade. It has been suggested that new types of products might be introduced by training the artisans, that adequate financial help might be given to the *karkhandars*, and that marketing facilities might be afforded to the dealers.

25. In addition to these dealers and artisans engaged in the manufacture of brass and copper utensils, there are reported to be about 2 workshops which specialise only in rolling the metal sheets. This industry is said to have been started during the last war, when prices of brass and copper sheets reached prohibitive levels. The local dealers and artisans began to get their metal melted and rolled into sheets, particularly in the case of the manufacture of brass pots from *bhangar* (scrap metal) and of bell-metal pots from scrap bell-metal. To-day the depression affecting the local brass and copper-ware industry has considerably reduced the demand for these rolled sheets. It is now reported that the rolling machines have to remain idle in the slack season for nearly 25 days in a month. Owing to these causes, one of the two workshops maintaining rolling machines is reported to be doing no business for the last two years.

26. Besides these artisans, there are a few others who do only repair work, i.e., renew old utensils. One such artisan interviewed by the investigator, employs two assistants whenever the work is heavy and does the work on contract at the rate of Rs. 2-8-0 to Rs. 3 per maund. He specialises in repairing only brass pots. The average monthly turnover is stated to be about 15 to 20 maunds. The tools and equipment cost about Rs. 150 and the repair charges thereon come to nearly Rs. 10 annually. The two assistants who work for 8 to 9 hours a day are paid

12 annas a day for beating the metal and 8 annas a day for polishing it. The net earnings of the artisan after paying all expenses are reported to be about Rs. 16 per month. It is stated that there has been a considerable fall in the wages earned by these artisans and that unless the economic condition of the general public improves there is no future for this industry.

#### SUGARCANE CRUSHING INDUSTRY.

27. The Ahmednagar district has the largest area under sugarcane crop in this Province. There are four large factories in the district which are engaged in the manufacture of sugar. Besides these large-scale factories there are many agriculturists, big and small, who are engaged in the preparation of *gur* from sugarcane. The investigator interviewed a few *gur* manufacturers at Kopergaon. Some of them are using power crushers which cost from Rs. 3,000 to Rs. 12,000 according to horse power. The non-power crusher is said to cost about Rs. 500. The extraction capacity of the crushers worked by power varies from 65 per cent. to 70 per cent. and that of the non-power crusher is about 62 per cent. The cost of raising one acre of sugarcane crop is estimated at Rs. 523 while that of preparing *gur* out of the same quantity of sugarcane is placed at Rs. 138. The outturn is on an average 50 *pallas* of *gur* for one acre of sugarcane. The cost of preparing one *palla* of *gur* thus comes to Rs. 13. The cost of transport, commission, depreciation, etc., charges come to approximately 10 annas per *palla*. The selling price of *gur* is reported to be about Rs. 18 per *palla*.

#### TANNING INDUSTRY.

28. There are 2 fairly modern tanneries equipped with machines and several small hand-worked units in the district. The investigator visited some of the latter at Ahmednagar, Pathardi and Rahuri. The tanner interviewed at Ahmednagar, is paying Rs. 40 per month as rent for his tanning ground measuring 150' × 250'. He purchases his raw materials from Bombay, Kalyan, Bhiwandi, etc. The rate for hides and skins varies considerably. Buffalo hides are reported to cost from Rs. 120 to Rs. 150 per twenty, and bullock and cow hides from Rs. 60 to Rs. 100 per twenty. The cost of transport is said to come to Rs. 1-4-0 to Rs. 1-8-0 per maund, the weight of 20 hides being roughly 3 maunds. The other raw materials required are lime, myrabolams and *babul* bark. The process of tanning takes about a month. The total investment so far, in the equipment of the workshop, on the tanning pits, etc., is reported to be about Rs. 3,000 while the cost of tools alone is said to be Rs. 50. All the processes are done by hand, no machinery being

employed. The cost statistics of tanning 20 buffalo hides and 20 bullock or cow hides as supplied by him are as follows :—

	20 buffalo hides.			20 cow or bullock hides.		
	Rs.	a.	p.	Rs.	a.	p.
Lime .. ..	1	8	0	1	8	0
Babul bark .. ..	20	0	0	12	0	0
Myrabolams .. ..	15	0	0	7	0	0
Wages .. ..	11	0	0	10	0	0
For stitching, etc. .. ..	0	8	0	0	6	0
Total .. ..	48	0	0	30	14	0

Most of his hides are only half-tanned and sold at varying rates depending on the rates for raw hides. The investigator states that the annual sales of this tanner amount to about 1,000 hides. On an average he appears to earn from the tanning business, about Rs. 300 to Rs. 400 a year after meeting all costs. Besides tanning of hides, the artisan also prepares leather *mots* (water-carriers). About 100 *mots* are prepared and sold every year. It is stated that the same artisan sold thrice this quantity of *mots* ten years back but due to the keen competition from iron *mots*, the leather *mot* industry has been very much affected. The leather *mots* are sold for Rs. 8 to Rs. 15 per *mot*. The cost of preparing *mots* of the type which are usually sold for Rs. 15, is said to be Rs. 225 per 20 *mots*. This leaves a margin of Rs. 75 of which Rs. 20 are paid out as wages and Rs. 55 retained by the artisan. On the basis of figures supplied by the artisan himself, he gets about Rs. 275 a year from his business of preparing *mots*. In addition to the three family members, 14 workers are engaged by him. Out of these 7 are women who work on piece-work basis and 7 are men who work for nearly 8 hours a day and are paid wages varying from Rs. 10 to Rs. 20 per month. The artisan reports that he has to face competition from the local *Dhors* who are also engaged in tanning hides. Regarding the tanning factories he has no complaint as they are said to be specialising in making compressed soles and dyed uppers.

29. At Pathardi the tanners are all small artisans. There are, it is reported, some five or six families engaged in this industry. Their methods are crude and very old. The raw hides are purchased locally for prices varying from Rs. 90 to Rs. 100 per 20 hides. The cost of tanning these 20 hides is said to be Rs. 30 and the selling price Rs. 150. Thus for every twenty hides tanned, each family gets about Rs. 20 to Rs. 30. The investigator reports that on an average about 4 to 5 hides are tanned per month. The tanned leather is sold in the local markets. Besides tanning and selling the skins and hides, the artisans

also prepare leather *mots*. One *mot* is prepared in about two days. It costs Rs. 11 to make it and it fetches about Rs. 12 leaving a margin of one rupee per *mot* to the artisan.

30. There are stated to be only two families of tanners at Rahuri. Each house maintains two tanning pits and tans a considerable quantity of hides for six months in a year. As in other centres, here also the tanned leather is very crude and rough and is used for making *mots* or for soles of shoes, *champals*, etc. Here the cost of raw hides which are mostly of bullocks and cows varies from Rs. 60 to Rs. 90 per score and the tanned leather is sold for Rs. 130 per score. After meeting the cost of tanning, each family is estimated to earn about Rs. 30 per score of hides which requires a month for tanning. The *mots* prepared at this centre are sold for Rs. 8-8-0 each. The cost of 20 *mots* is stated to be about Rs. 170, inclusive of Rs. 20 for wages. The tanners thus do not earn any profit on the *mots* but only get their wages. Each family is said to prepare about 5 *mots* a month, and earn Rs. 5 as wages. The total earnings per family per month come to Rs. 35 from both the sale of tanned leather and leather *mots*. This work is carried on only for six months from September to March and during the remaining six months they work for the agriculturists in exchange for fixed quantities of grain. The work consists of preparing whips, straps, belts, etc., and of repairing the *mots*. Usually each family gets about 8 to 9 maunds of grain per year from this kind of work.

#### BOOTS AND SHOES.

31. In Ahmednagar City, there are nearly 25 shops where boots and shoes are manufactured. Each shop also imports boots, shoes, *champals*, rubber and canvas shoes, etc., from outside to the extent of Rs. 1,200 per annum and sells them in retail. Apart from these shops there are about 15 families of *mochis* specialising in the production of *vahanas* and *jodas*.

32. The equipment of a shop is worth about Rs. 100 and consists of a sewing machine worth about Rs. 50, some lasts worth about Rs. 20 to Rs. 30 and a few ordinary tools. In the shops where boots and shoes are manufactured, two to three artisans are generally employed. The workers are paid a piece rate of 10 to 12 annas per pair of shoes, and the daily output of the whole shop is 2 to 3 pairs. The product is sold locally. In recent years the margin of profit left to the owner of the shop has considerably lessened. It is pointed out that about 10 years back the dealers used to make a profit of Rs. 15 to Rs. 18 on every 20 pairs of shoes and slippers; to-day the margin is only about Rs. 5 to Rs. 7-8-0. The condition of the producers of *vahanas* and *jodas* is reported to be still worse. There is practically no demand for *jodas* and their production is rarely undertaken. The artisans are thus forced to rely only on *vahanas* and *champals*. Twenty pairs of *vahanas* can be prepared by an artisan family in seven days and for doing so, they get a remuneration of about Rs. 2.

33. The whole trade in locally produced boots and shoes is in a depressed condition. The *mochis* cannot develop an export trade in shoes and slippers for want of finance. Mutual co-operation amongst the *mochis* themselves is also lacking. They request Government to give them finance at low rates of interest and also request that good quality leather should be supplied to them at cheap rates.

#### PRODUCTION OF LIME.

34. The Pengiri hills are reported to be rich in lime. The *ramoshis* of the locality exploit the hills, burn the lime and sell it to the dealers. They find this a convenient subsidiary industry during the non-agricultural season. Their chief problem, however, is that the sugar factories there have established their own kilns to meet their requirements of lime and no longer purchase their supply from the artisans. The lime workers desire that these companies should purchase through them and should not directly exploit the lime resources. This would help them to add to their meagre income from agriculture. The number of lime kilns worked are 4 and they give employment to about 100 people.

#### POSSIBILITIES OF NEW INDUSTRIES.

35. The district has nearly 9,000 acres under fibres other than cotton and there seems, therefore, to be much scope for the commercial utilisation of these fibre resources. At Ahmednagar Rev. Loy Long assisted by a grant from the Department of Industries has been making successful attempts in the utilisation of the fibres. At Pengiri, there was, it is reported a flourishing glass-bangle industry some years back. The Pengiri hills are reported to contain raw materials useful for the preparation of glass. The possibility of reviving the glass bangle industry at this place seems worth further investigation.