

ॐ श्रीगणेशाय नमः

Dhananjayrao Gadgil Library



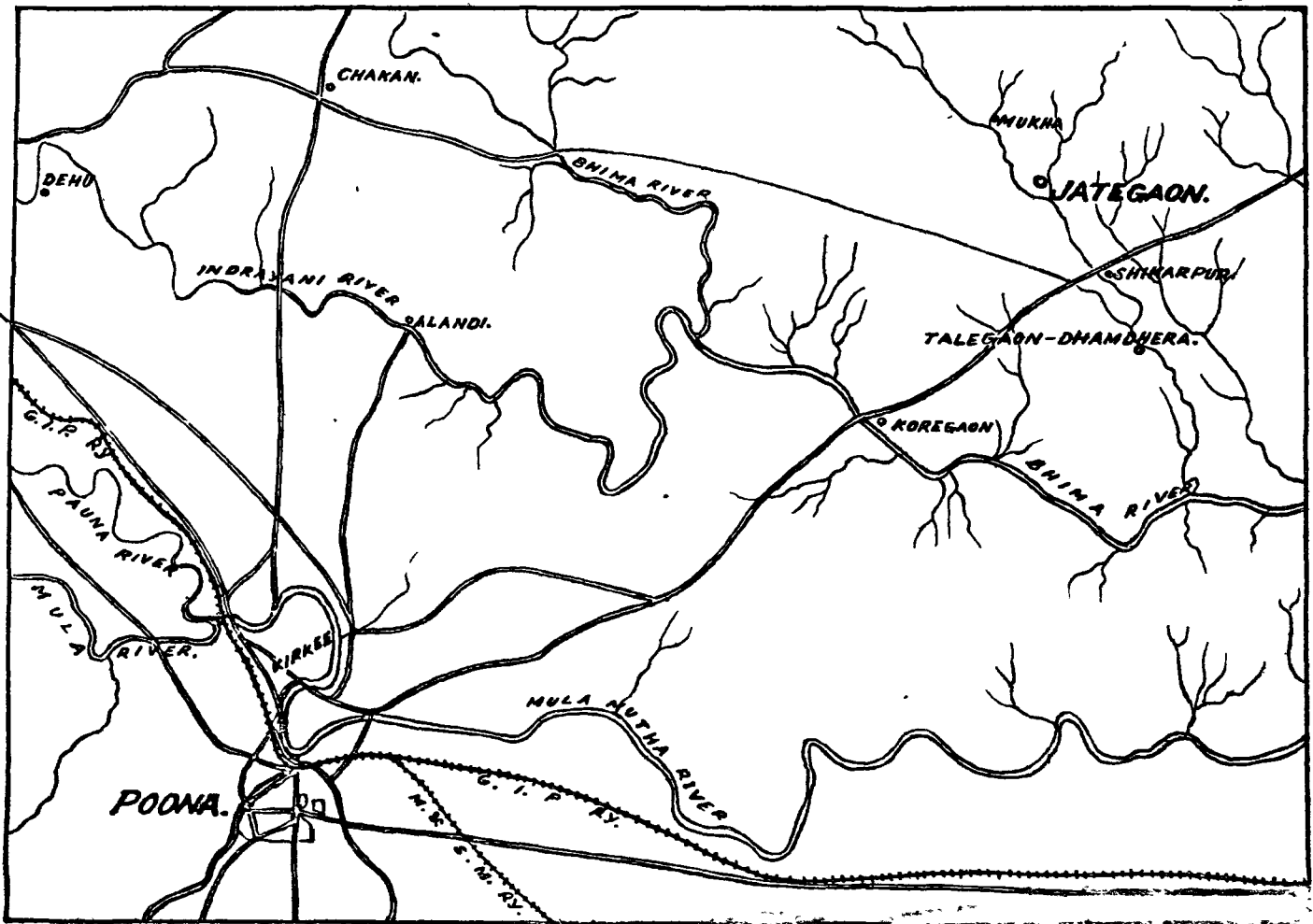
GIPE-PUNE-000249

BA 130

Rare section

The Servant of India

To SIRUR.



To NAS.

To BOMBAY

CHAKAN.

DEHU

MURHA

JATEGAON.

SHIRPUR

INDRAYANI RIVER
SALANDI.

TALEGAON-DHAMBHERA.

KOREGAON

BHINA RIVER

G. I. P. RY.
PAUNA RIVER

MULA RIVER.

KIRKEE

MULA MUTHA RIVER

POONA.

G. I. P. RY.
M. S. S. RY.

Rare section

UNIVERSITY OF BOMBAY
ECONOMIC SERIES, No. III.

LAND AND LABOUR
IN A
DECCAN VILLAGE

STUDY No. 2.

BY

HAROLD H. MANN, D. Sc.,
Director of Agriculture, Bombay Presidency,

AND

N. V. KANITKAR, B. Sc., L. Ag.,
Assistant Professor in the Poona Agricultural College

HUMPHREY MILFORD,
OXFORD UNIVERSITY PRESS,
LONDON, BOMBAY, CALCUTTA, MADRAS
1921

PRINTED AT THE KANARESE MISSION PRESS, MANGALORE

Y31.23156

F1

249

PREFACE

THE study of rural life and of rural conditions by close inquiry into the circumstances of a single unit, be it village, parish, ~~or estate~~, has come to the front prominently in recent years as a method of social and economic investigation. And by the use of this method, if the villages to be studied are well chosen, a very much more intimate acquaintance with the actual conditions of life than by any other method can be obtained. And this is certainly true in the Deccan where the villages are still the economic and social units in a sense that is far more true than is the case in most countries, and to an extent which even in India is, I think, only found in the Peninsula. The villages are perhaps now tending to be less the relatively isolated units than hitherto, but they are still so to an extent that gives the knowledge even of a single village a very special value for the study of the whole rural conditions of the country.

On this account, with the collaboration of a number of friends and assistants, I undertook some years ago the study of a single village near Poona, and the result was published in 1917 under the title of 'Land and Labour in a Deccan Village.*' This purported to give a picture of life and conditions in a 'dry' Deccan village. By a 'dry' village, I mean one where irrigation is very limited in amount and where the prosperity of the village depends almost entirely on the annual monsoon rain. That study revealed a number of unexpected facts, and the general conclusions which I drew were certainly of a far more depressing character than I had expected. Only one serious criticism has, however, been made. It is said that

*University of Bombay, Economic Series No. 1 (Oxford University Press, Bombay).

the village chosen (Pimpla Soudagar) was not typical and did not represent the conditions in any large area in the Deccan. It was, so critics averred, too near Poona, and had too many of its inhabitants working at non-agricultural occupations to be in any sense a type of what would be found further afield.

I, at once, recognised the justice of this criticism. And as a result my collaborators and myself began to seek for a village which while otherwise of a similar character would be free from the defects noted in the former study. This led us to the village which forms the basis for the present study. Jategaon Budruk, though double the size of Pimpla Soudagar in point of area has a population not widely different. The proportion of irrigated area is of the same order. The class of land is not unlike. But it is twenty-five miles from Poona from which, till recently, it was separated by an unbridged road, and it has no local demand for labour for purposes not found in any rural area. It differs truly in another sense, in that it is in an area of smaller and more uncertain rainfall, and as we shall see, this uncertainty is one of the chief features in the village life. But it certainly is typical of a very large area in the Deccan, and I do not think that any criticism can be made of the present study that it does not represent conditions occurring over extensive areas.

The actual local inquiry has been chiefly made by my colleagues, and, in fact, it is to them and their careful collection and recording of data that any real value that the present study may possess is due. Mr. N. V. Kanitkar, B. Sc., who shares with me the responsibility of the present publication, lived for a long time on the spot, and became the friend and confidant of almost the whole of the people. Mr. D. L. Sahasrabuddhe, B. Sc., did the same, and a number of students from the Poona Agricultural College spent the greater part of their annual vacation in assisting in the inquiry. Beyond this many data had to be collected

from various Government offices. Some facts are in the office of the District Inspector; others in that of the Mamlatdar of the taluka; others are guarded by the Director of Agriculture. For the older history of the village we were allowed to examine and copy the manuscript records in the Poona record office. And, we had, moreover, to request information from many other sources. But we have always been furnished with the data we wanted, or with permission to dig them out for ourselves, with great readiness, and for this our heartiest thanks are due to the various authorities and officials concerned.

HAROLD H. MANN.

CONTENTS

	PAGE.
<i>Preface</i>	iii
CHAPTER I. Introduction	1
CHAPTER II. The Physical Features of the Village of Jategaon Budruk	4
A. The Rainfall and Climate	5
B. The Geology of the Village	10
C. The Soils	11
D. The Drainage of the Village	19
E. The Water-Supply	21
CHAPTER III. The Land and its Divisions	30
A. The Village <i>Inams</i> or lands held under privileged tenure... .. .	31
B. The History of the Land Revenue of the Village	34
C. The Land Holdings in the Village... .. .	40
D. The Areas taken for Cultivation in the Village	45
Note to Chapter III. Extract from Village Records 1790 A. D.	49
CHAPTER IV. Vegetation, Crops and Cultivation of the Village	51
A. The Trees of the Village... .. .	52
B. The Herbaceous Vegetation of the Village	54
C. The Implements used for Cultivation	56
D. The Crops of the Village... .. .	60
E. The Rotations of the Crops in the Village	67

	PAGE-
F. to M. The Several Important Crops grown.	68
N. <u>General Summary</u>	93
CHAPTER V. The Agricultural Stock of the Village	97
CHAPTER VI. The People of the Village	106
CHAPTER VII. The Value of the Village	136
CHAPTER VIII. The Effect of Rise of Prices on Rural Prosperity	142
CHAPTER IX. <u>General Conclusions</u>	157
 <i>Appendices.</i>	
APPENDIX I. Analyses of the Water of the Vel River	162
APPENDIX II. Analyses of the <i>Nala</i> Water at Jategaon... ..	163
APPENDIX III. Analyses of Well-waters at Jategaon	164

APPENDIX I.

Analyses of the Water of the Vel River at Jategaon Budruk.

(See page 24)

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts.	32.00	34.00	26.00	36.00
Containing—				
Calcium carbonate	8.00	10.00	6.00	8.00
Magnesium carbonate	3.05	3.05	3.05	9.13
Sodium carbonate	1.03	—	—	—
Sodium bicarbonate	4.76	6.43	4.06	5.02
Sodium sulphate	2.46	3.69	3.69	4.88
Sodium chloride	9.24	4.62	4.62	6.93

APPENDIX II.

Analyses of the *Nala* Water at Jategaon Budruk.

(See page 25)

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	42.00	40.00	44.00	48.00
Containing—				
Calcium carbonate	6.00	8.00	10.00	8.00
Magnesium carbonate	4.58	10.68	3.05	9.13
Sodium carbonate	2.06	1.03	—	—
Sodium bicarbonate.	9.80	2.38	9.66	10.23
Sodium sulphate.	4.92	2.46	6.15	4.88
Sodium chloride	9.24	9.24	13.86	11.55

APPENDIX III.

Analyses of Well Water at Jategaon Budruk.

(See pages 28-29)

Well No. 1 (Survey No. 13).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	34.00	32.00	40.00	40.00
Containing—				
Calcium carbonate	10.00	10.00	10.00	10.00
Magnesium carbonate	7.63	7.63	6.10	6.08
Sodium carbonate	1.03	—	—	—
Sodium bicarbonate.	3.12	3.12	10.62	4.69
Sodium sulphate	2.46	2.46	4.92	7.32
Sodium chloride	4.62	4.62	4.62	9.24

Well No. 2 (Survey No. 15).

	8th April 1917	9th June 1917	10th Oct. 1917	Jan. 1918
	Parts per 100,000			
Total Salts	28.00	30.00	30.00	28.00
Containing—				
Calcium carbonate	10.00	12.00	10.00	16.00
Magnesium carbonate	3.05	1.44	6.10	1.71
Sodium bicarbonate.	7.98	8.40	5.04	—
Sodium sulphate	1.23	2.46	2.46	—
Sodium chloride	4.62	4.62	4.62	4.62
Magnesium sulphate	—	—	—	3.70

Well No. 3 (Survey No. 17).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	34·00	32·00	34·00	36·00
Containing—				
Calcium carbonate	12·00	10·00	10·00	16·00
Magnesium carbonate	7·63	7·63	4·58	7·61
Sodium carbonate	1·03	—	—	—
Sodium bicarbonate	1·82	5·18	8·15	1·55
Sodium sulphate	1·23	2·46	3·69	1·64
Sodium chloride	5·78	4·62	5·78	4·62

Well No. 4 (Survey No. 19) (*Kaccha.*)

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts.	36·00	36·00	36·00	38·00
Containing—				
Calcium carbonate	12·00	10·00	12·00	14·00
Magnesium carbonate	3·05	6·10	7·63	7·37
Sodium carbonate	—	—	—	—
Sodium bicarbonate	9 80	7·43	4·98	—
Sodium sulphate	2·46	2·46	2·46	—
Sodium chloride	4·62	4·62	4·62	6·93
Magnesium sulphate	—	—	—	4·10

Well No. 5 (Survey No. 25 (*Kaccha*.)

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	40.00	38.00	38.00	38.00
Containing—				
Calcium carbonate	6.00	8.00	10.00	4.00
Magnesium carbonate	9.16	9.34	4.58	11.17
Sodium carbonate	1.03	1.03	—	1.04
Sodium bicarbonate	7.00	4.42	8.12	6.62
Sodium sulphate	2.46	2.46	2.46	3.66
Sodium chloride	9.24	6.93	6.93	9.24

Well No. 6 (Survey No. 35) (*Kaccha*.)

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	36.00	36.00	36.00	42.00
Containing—				
Calcium carbonate	10.00	10.00	4.00	8.00
Magnesium carbonate	7.63	4.58	3.05	18.10
Sodium carbonate	—	—	—	—
Sodium bicarbonate	7.56	9.66	14.70	1.12
Sodium sulphate	1.23	2.46	4.92	2.44
Sodium chloride	6.93	6.93	6.93	9.24

Well No. 7 (Survey No. 36).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	32.00	40.00	34.00	38.00
Containing—				
Calcium carbonate	4.00	10.00	10.00	8.00
Magnesium carbonate	1.52	4.58	4.58	4.55
Sodium carbonate	1.03	1.57	—	—
Sodium bicarbonate	13.58	8.12	7.56	13.39
Sodium sulphate	2.46	3.69	2.46	3.66
Sodium chloride	6.93	4.62	6.93	6.93

Well No. 8 (Survey No. 36). (Near Nala.)

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	80.00	48.00	38.00	42.00
Containing—				
Calcium carbonate	12.00	6.00	4.00	10.00
Magnesium carbonate	13.64	4.58	4.58	3.04
Sodium carbonate	—	—	—	1.04
Sodium bicarbonate	17.22	11.48	18.06	12.88
Sodium sulphate	6.15	7.38	2.46	2.44
Sodium chloride	25.41	13.86	6.93	9.24

Well No. 9 (Survey No. 37).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	36.00	40.00	40.00	44.00
Containing —				
Calcium carbonate	12.00	10.00	12.00	12.00
Magnesium carbonate	3.05	7.63	3.05	10.65
Sodium carbonate	—	—	—	0.52
Sodium bicarbonate	9.80	6.72	11.20	0.49
Sodium sulphate	2.46	7.38	3.69	8.54
Sodium chloride	5.78	6.93	4.62	6.93

Well No. 10 (Survey No. 38).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	36.00	38.00	40.00	28.00
Containing —				
Calcium carbonate	8.00	10.00	12.00	12.00
Magnesium carbonate	4.58	10.68	4.58	4.56
Sodium carbonate	1.03	—	—	—
Sodium bicarbonate	8.54	3.64	7.98	2.80
Sodium sulphate	2.46	3.69	3.69	2.44
Sodium chloride	6.93	4.62	6.93	4.62

Well No. 11 (Survey No. 38).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	28.00	40.00	38.00	36.00
Containing—				
Calcium carbonate	4.00	14.00	8.00	10.00
Magnesium carbonate	3.05	6.10	4.58	4.56
Sodium carbonate	1.03	—	—	—
Sodium bicarbonate	10.64	8.26	12.18	11.38
Sodium sulphate	1.23	2.46	2.46	3.66
Sodium chloride	5.78	4.62	5.78	4.62

Well No. 12 (Survey No. 42).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	22.00	24.00	26.00	18.00
Containing—				
Calcium carbonate	4.00	6.00	6.00	4.00
Magnesium carbonate	3.05	4.58	3.05	3.04
Sodium carbonate	—	—	—	0.52
Sodium bicarbonate	6.02	4.20	10.04	4.03
Sodium sulphate	1.23	2.46	1.23	3.66
Sodium chloride	3.46	4.62	3.46	2.31

Well No. 13 (Survey No. 42).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	40.00	44.00	48.00	40.00
Containing —				
Calcium carbonate	12.00	10.00	14.00	16.00
Magnesium carbonate	7.60	4.58	6.10	9.13
Sodium bicarbonate	7.80	12.18	7.32	5.25
Sodium sulphate	1.23	2.46	3.69	2.44
Sodium chloride	6.93	9.24	9.24	6.93

Well No. 14 (Survey No. 43).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts.	50.00	32.00	36.00	42.00
Containing —				
Calcium carbonate	8.00	6.00	6.00	8.00
Magnesium carbonate	4.56	3.05	3.05	7.61
Sodium carbonate	—	1.03	—	0.52
Sodium bicarbonate	13.16	9.80	13.85	10.01
Sodium sulphate	2.46	2.46	1.23	3.63
Sodium chloride	13.86	6.93	9.24	9.34

Well No. 15 (Survey No. 63).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	64.00	70.00	68.00	54.00
Containing —				
Calcium carbonate	8.00	6.00	8.00	4.00
Magnesium carbonate	4.56	4.56	6.10	14.10
Sodium carbonate	—	2.06	—	4.16
Sodium bicarbonate	19.60	19.60	18.90	—
Sodium sulphate	3.69	7.38	3.69	—
Sodium chloride	23.10	23.10	23.10	23.10
Magnesium sulphate	—	—	—	3.07

Well No. 16 (Survey No. 64).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	68.00	60.00	58.00	64.00
Containing —				
Calcium carbonate	6.00	8.00	6.00	10.00
Magnesium carbonate	4.56	3.05	9.16	13.70
Sodium carbonate	—	1.03	—	—
Sodium bicarbonate	22.36	19.74	15.04	10.94
Sodium sulphate	3.69	3.69	2.46	6.10
Sodium chloride	23.10	18.48	18.48	18.48

Well No. 17 (Survey No. 95).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	38.00	40.00	40.00	42.00
Containing—				
Calcium carbonate	8.00	12.00	12.00	14.00
Magnesium carbonate	4.56	3.05	7.63	9.13
Sodium carbonate	—	—	—	1.04
Sodium bicarbonate	10.78	7.98	5.87	2.06
Sodium sulphate	1.23	3.69	1.23	4.88
Sodium chloride	6.98	6.93	4.62	9.24

Well No. 18 (Survey No. 102).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	44.00	44.00	44.00	44.00
Containing—				
Calcium carbonate	16.00	14.00	14.00	8.00
Magnesium carbonate	3.05	3.05	9.16	9.13
Sodium carbonate	1.03	—	—	—
Sodium bicarbonate	7.98	13.58	3.50	11.97
Sodium sulphate	2.46	2.46	2.46	1.22
Sodium chloride	9.24	6.93	6.93	9.24

Well No. 19 (Survey No. 156).

New Well.

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	38.00	36.00	36.00	33.00
Containing—				
Calcium carbonate	6.00	6.00	6.00	6.00
Magnesium carbonate	4.58	4.58	7.63	9.13
Sodium carbonate	—	—	—	—
Sodium bicarbonate	17.08	16.38	10.08	11.91
Sodium sulphate	2.46	1.23	2.46	2.44
Sodium chloride	4.62	4.62	4.62	6.23

Well No. 20 (Survey No. 156) (*Kaccha*.)

Old Well.

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	46.00	48.00	40.00	48.00
Containing—				
Calcium carbonate	10.00	10.00	12.00	8.00
Magnesium carbonate	6.15	6.10	7.63	13.70
Sodium carbonate	—	—	—	—
Sodium bicarbonate	11.48	11.49	8.30	7.42
Sodium sulphate	2.46	2.46	2.46	4.88
Sodium chloride	9.24	11.55	6.93	11.55

Well No. 21 (Survey No. 157).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	40.00	42.00	52.00	44.00
Containing—				
Calcium carbonate	4.00	12.00	14.00	12.00
Magnesium carbonate	3.05	9.14	6.10	13.70
Sodium carbonate	2.06	1.03	—	—
Sodium bicarbonate	11.48	6.86	8.13	2.32
Sodium sulphate	2.46	3.60	6.15	3.66
Sodium chloride	11.55	6.93	13.86	9.24

Well No. 22 (Survey No. 162).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	50.00	48.00	46.00	52.00
Containing—				
Calcium carbonate	6.00	8.00	10.00	12.00
Magnesium carbonate	3.05	7.63	4.58	7.61
Sodium carbonate	—	—	—	—
Sodium bicarbonate	20.30	11.76	13.02	10.12
Sodium sulphate	3.69	3.69	6.15	9.76
Sodium chloride	11.55	9.24	8.09	9.24

Well No. 23 (Survey No. 179).

	8th April 1917	9th June 1917	10th October 1917	Jan. 1918
	Parts per 100,000			
Total Salts	44.00	38.00	44.00	42.00
Containing				
Calcium carbonate	14.00	12.00	14.00	10.00
Magnesium carbonate	3.05	3.05	3.05	7.61
Sodium carbonate	—	—	—	—
Sodium bicarbonate	7.78	7.98	9.52	9.73
Sodium sulphate	4.92	3.69	4.92	5.54
Sodium chloride	9.24	6.93	5.78	6.93

INDEX

A.

Acacia arabica—52-53, 59, 116.
Adansura—37.
Agates—11.
Agave—20.
Agricultural Department,
Bombay—85.
Ahmednagar—4, 5.
Ailanthus excelsa—53.
Ambadi—61, 70, 72, 75.
Amethysts—11.
Anna valuation of crops—63, 75,
77, 95.
Areas held for cultivation—45-49.
Artizans of the village—114-115.
Aurangzebe—30.

B.

Babul—see *Acacia arabica*.
Bahars of fruit trees—90, 91.
Bajri—12, 37, 61, 64, 65, 66, 67,
68-77, 78, 81, 83, 100, 124.
Bajri Mixture—12, 13, 14, 15, 55,
66, 67, 68-77, 78, 94.
Bakan tree—see *Melia Azedirach*.
Bakshi wheat—82.
Balance Sheet of Families in
Village—127-128.
Balutas—107, 116, 117, 122-123,
120, 133.
Balutedars—56, 107.
Banyan tree—see *Ficus bengalensis*.
Barbers in village—107, 109, 113,
122.
Barley—61.
Baroda—45.

Bay of Bengal—1-
Berad tax—37.
Bhide, Mr. R. K.—54.
Bhima River—3, 4, 5.
Bhokur tree—see *Cordia myxa*.
Bhuskat or *bajri* husk—100.
Bigari tax—36.
Bigha—31, 32.
Births in village—111, 112.
Blacksmiths—see *Lohars*.
Black Soils—11-15, 16, 17, 18, 19,
29, 81, 90.
Bloodstones—11.
Board of Agriculture for India—
45.
Bombay—3, 47, 110, 111, 118, 158.
Bombay Deccan—see Deccan.
Bombay Legislative Council—45.
Bor tree—see *Zizyphus jujuba*.
Bores, as substitutes for wells—
27.
Brahmins—107, 108, 109, 113.
Buffaloes—97, 98, 99, 100, 102, 104,
105, 135.
Bullocks—97, 98, 100, 101, 102, 104,
105, 135.
Bulls—97, 98, 104.
Bunds or embankments—19, 20,
21.
Butter—99.

C.

Calves—97, 98, 102, 104.
Capparis divaricata—53.
Carbonates in water—24, 25, 28-
29.
Carpenter of village—56, 122.

- Carts in village—53, 56, 59, 60, 140.
 Cattle, Housing of—103.
 Cattle of village—97-105, 107, 112, 135.
Celosia argentea—55, 75.
 Cesses for local purposes—123.
Chahur (a land measure)—31, 32.
 Chalcedony—11.
Chambhars (shoe-makers)—107, 109, 113, 122, 130.
Chapha tree—53.
 Chillies—61, 93, 155, 157.
 Cholera—110, 112.
 Circle Inspectors—60.
 Climate of the village—5-9.
 Clothing, Cost of necessary—123, 124, 125, 126.
Commelina bengalensis—55, 76.
Commelina Forskalii—55, 76.
Commelinaceæ—56.
 Communal property—22.
 Communal spirit—29.
 Cornelian—11.
 Copartnership in ploughing—72.
 Copper Sulphate, as remedy for smut—79.
Cordia myxa—53.
 Cotton—61, 93, 155, 157.
 Cows—97, 98, 99, 100, 102, 104, 105, 135.
 Cowdung cakes for burning—103.
 Crops of village—60-96, 141.
Cyanotis axillaris—55.
Cynodon dactylon—55.
- D.**
- Daulatrao Shinde—38.
 Deaths in village—111, 112.
 Debts of village—117-121, 129, 130, 132, 135, 141, 146, 150, 160.
 Deccan—1, 3, 4, 5, 9, 12, 16, 21, 24, 27, 30, 31, 40, 45, 53, 54, 56, 57, 58, 59, 60, 71, 72, 74, 79, 85, 90, 93, 95, 97, 98, 103, 104, 106, 107, 111, 112, 134, 143, 156, 157, 158, 159.
 Deer, as a crop pest—79, 82.
 Delhi—30.
 Depressed classes—113, 131.
Deshmukh—50.
Deshpande—34, 50.
 Diseases of cattle—102, 104.
 Drainage of village—5, 19-21.
 Drinking water of village—21, 23, 24, 25.
- E.**
- Embankment of fields—19-21, 99, 160.
 Erosion—19-20, 21.
Eugenia jambolana—53, 54.
 Expenditure per family, etc.—117-126, 127.
- F.**
- Fallow area—60, 62-63, 67, 68, 94, 134.
 Famine—1, 2, 104, 105, 110, 135, 137.
 Farmyard manure—72, 78, 85, 87, 90.
 Feeding of animals—99.
 Felspar—11.
Feronia elephantum—53, 54.
 Fibre from *Ambadi*—71.
Ficus bengalensis—53.
Ficus glomerata—53.
Ficus religiosa—53.
Ficus Tsiela—53.
 Figs—54.
 Flint—11.
 Food, Expenditure for—123, 124, 126.
 Foot and Mouth Disease—104.
 Fowls—see Poultry.
 Fragmentation of cultivation—47-49.

Fragmentation of holdings—29,
43-45.
Fruit lands—22.
Fruit trees—53, 89-93, 94, 95, 116.
Fuel, Cost of—125.

G.

Gaothan, or village site—35, 103.
Garden crops—61.
Garden lands—12, 22, 39, 136, 138.
Gayaran or village grazing land—
32, 33, 35.
Geology of village—5, 10-11.
Ghee—99.
Glauconite—11.
Goats—97, 104, 140.
Grain in food—124.
Grain crops—61, 64-85.
Gram—12, 61, 64, 67, 68, 83-85, 94,
160.
Grass lands—60.
Grasses in village—55.
Ground-nut crop—61, 68, 93.
Guavas—54.
Gul or crude sugar—86, 124.
Guntha (a land measure)—31.
Gurav or priest—107, 109, 113,
122, 130.
Gwatya kena—see *Commelina*
Forskali.

H.

Hariali—see *Cynodon dactylon*.
Harrows—59, 72, 73, 87.
Herbaceous vegetation—51, 54-56.
Hindu customs of inheritance—43.
Hoes—59, 74, 79.
Holdings of land—31, 40-45, 46, 47,
48, 49.
Horses—97, 104.
Houses, Value of—139-140.
Housing conditions—114.
Hukkadars—37.

I.

Implements—51, 56-60, 140, 159.
Inam rights—5, 107.
Inamdars—5.
Inam Commission—30.
Inams—31-34, 36, 42, 107, 108.
Income, Average—115-117, 126,
127, 128-133.
Income per acre of cultivation—
94, 95, 115.
Interculturing implements—59.
Interest paid on loans—117, 118,
119-121, 143-144, 154.
Irrigation—2, 5, 12, 21, 22, 23, 24,
27, 28-29, 68, 86, 87, 89, 95, 103,
138.
Ischæmum pilosum—55.

J.

Jambul tree—see *Eugenia jambolana*.
Jirayat land—39.
Joshi or Astrologer—122.
Jowar—12, 61, 65, 66, 68, 69, 70,
71, 75, 77-81, 84, 94, 100, 103, 124.
Jujube tree—see *Zizyphus jujuba*.

K.

Kani disease in *jowar*—see Smut.
Karanj tree—see *Pongamia glabra*.
Kauli land—39, 40.
Kavat tree—see *Feronia elephantum*.
Keatinge, Mr. G. F.—45.
Khapli wheat 82.
Kharif crops—12, 13, 14, 75, 93,
94.
Kharif jowar—see *jowar*.
Kharif season—63, 75, 81, 84.
Khilari breed of cattle—98.
Kirkee—150.
Kirloskar Brothers—12, 57, 72.

- Kulkarni*—33, 34, 50, 60, 108, 109, 158.
Kulthi—61, 66, 70, 71, 73, 75, 76, 124.
Kunda—see *Ischæmum pilosum*.
Kurdu—see *Celosia argentea*.
- L.**
- Land Assessment—4, 16, 31, 34-40, 123, 141, 143, 157.
 Land holdings—see Holdings of Land.
 Land Laws—30.
 Land Revenue—see Land Assessment.
 Land settlements, British, 39-40.
 Land Tax—see Land Assessment.
 Land Tenure, Conditions of—30.
 Land Value—136-139, 140.
 Leasing of land—46.
 Levelling of land—19-21.
 Lighting, Cost of—125.
 Live-Stock of the village, 97-105, 140.
 Locusts—49, 53, 96.
Lohars or blacksmiths—107, 109, 113, 122.
- M.**
- Mahars*—26, 32, 33, 34, 36, 107, 109, 113, 120, 122, 130.
Maharug tree—see *Ailanthus excelsa*.
 Mahomedans—107, 109, 113, 122.
 Maize—61.
 Malaria—112.
 Malhar Bhat Puranik—32, 33, 34.
Malvi breed of cattle—98.
Mamlatdar—63.
 Mango trees—53, 54, 116.
 Manure used—72, 76, 78, 80, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 101, 102, 103.
- Marathas*—106, 107, 109, 113, 115, 130, 131.
Marwaries—106, 107, 109, 113, 118
Matki—61, 66, 70, 71, 73, 75, 76, 100.
Maval tract—1.
Melia azedirach—53.
Melia Azidirachta—53.
Mhot—92, 140.
Michelia champaca—53.
 Milk—98, 99, 101, 102, 104.
 Milking animals—98, 99, 101, 104.
 Mixtures of crops—67-68, 68-77.
 Mollison's Textbook of Agriculture—85.
 Money-lenders—106, 113, 118, 119, 137.
 Mortgages—117-120, 135, 137, 139.
Mudat kharedi (a type of mortgage) 118.
Mug crop—61.
Mukadam (*i. e., patil*)—32, 33.
 Mukhai village—22, 109.
Mulani—see Mahomedans.
Murmad soil—13, 14, 18, 19.
Murum—11, 13, 72, 90.
- N.**
- Najar gahan* (a type of mortgage)—118.
Nalas in village—10, 11, 19, 20, 21, 24-25, 27, 28, 52, 54, 85, 87, 159, 163.
Navis—see Barbers.
 Niger seed—61, 70, 72, 75.
Nilwa jowar—70, 71, 75.
Nim trees—see *Melia azidirachta*.
- O.**
- Oil—71, 124.
 Oilseeds—71,
 Onions—93, 94. [160.
 Orange orchards—54, 89-93, 94,
 Oranges—12, 89-93, 115.

P.

- Pachunda* tree—53.
Pand—31.
Panicum isachne—55.
Pat for irrigation—22-23, 54.
Patil—32, 33, 34, 107, 108.
 People of the village—106-135.
Peshwa—32, 34, 37, 38, 39, 41, 58, 108.
 Physical features of village—4-29.
 Pigeon pea—see *Tur*.
Pimpal tree—see *Ficus religiosa*.
Pimpla Soudagar—1, 2, 18, 24, 31, 38, 42, 43, 45, 47, 54, 81, 95, 98, 125, 141, 143-150, 154.
Pimpri tree—53.
 Plague—110.
 Plantains—54.
 Ploughs—12, 14, 56-60, 72, 78, 95, 159.
 Pomegranates—54.
Pongamia glabra—53.
 Ponies—104.
Poona—1, 2, 3, 4, 5, 9, 91, 95, 110, 111, 150.
 Population of village—109, 110, 111.
Pot kharab land—55.
 Potatoes—93, 94.
 Poultry—97, 104.
 Prickly pear—60.
 Priest—see *Gurav*.
 Prices and prosperity—142-156, 157.
Prosopis spicigera—53.
 Public Works Department—5.
 Pulse crops—61, 66, 71.
Puranik—see *Malhar Bhat Puranik*.
- R.
- Rabi* crops—8, 9, 12, 15, 29, 56, 84.
Rabi jowar—see *Jowar*.
Rabi lands—12.
Rabi season—63.
 Rainfall—1, 2, 3, 60, 62, 64, 71, 85, 95, 158.
 Rainfall of Jategaon—5-9, 19.
Rala—61.
Ramoshi—33, 34, 107, 109, 113, 122.
 Ransome, Sims and Jefferies, Messrs.—57.
Raya kena—see *Commelina bengalensis*.
 Record Office at Poona—30.
 Red Soil—15, 18-19.
 Rent of land—115, 116, 137-139.
 Revenue Survey of 1835—16.
 Rice—61, 124.
 Rock Crystal—11.
 Rotations of village—51, 67-68.
Ryotwari tenure—5, 60, 108.
- S.
- Safflower—61, 77-81, 82, 83, 94.
 Salt in food—124.
 Salts in village waters—24, 25, 28-29.
 Satara district—57.
Savandad tree—53.
Sawad-karue or co-operative ploughing—72.
 Sayhadri mountains—1.
 Seed drills—59, 70, 82.
 Seed, Quality of—73, 74, 79, 82.
 Sesamum—61, 70, 71, 75.
 Settlement reports—58, 60, 62, 63.
Shalu jowar—12, 67, 68.
 Sheep—97, 104, 140.
 Shikrapur—5, 7, 9, 89, 90, 99, 112, 119.
 Shoemakers—see *Chambhars*.
 Sirur—4.
 Sirur taluka—58, 97.
 Smut in *jowar*—79.
 Soils of village—8, 11-19, 81.
 Soils, Classification of for rev-

enue purposes—16-18, 43, 81.

Sosti land—39.

Standard of life—117, 129, 134, 144.

Subdivision of Holdings—29, 160.

Subsoil drainage—28.

Subsoils of village—11-19.

Sugarcane—12, 25, 61, 85-87, 94,
115, 155. [115.

Sweet potatoes—12, 85, 87-88, 94,

T.

Tabe gahan (a form of mortgage)
—118.

Tagai loans—26, 120-121, 135.

Talati—60, 109, 158.

Talegaon Dhamdhere—4, 5, 7, 9, 57,
60, 89, 90, 99, 103, 112, 117.

Taluka—58, 60, 62.

Tamarind—see *Tamarindus*
indica.

Tamarindus indica—53, 54, 116.

Temperature in village—9.

Temples as *inamdars*—31, 33, 34.

Terracing—19.

Trap rock—10, 11, 13, 24, 27, 28, 72.

Trees of the village—51-52.

Tur—61, 66, 70, 71, 72, 72, 74, 75
77, 124.

U.

Udid—61, 68, 70.

Umber tree—see *Ficus glomerata*.

Upri land—39.

V.

Value of village—136-141.

Vegetables—61.

Vegetation of village—51-56.

Vel river—4, 10, 13, 21-24, 27, 28,
119, 162.

Vichka—see *Cyanotis azillaris*.

W.

Wages in 1917—115, 116.

Water Supply of village—5, 21-29

Weavers—114-115, 157.

Weeds—55-56, 75, 76, 90, 95.

Wells—5, 12, 21, 24, 25-29, 51, 120,
121, 140, 159, 164-175.

Western Ghats—1, 4.

Wheat—12, 61, 65, 66, 68, 69, 81-83,
84, 94, 103, 124.

Wood-apple tree—see *Feronia*
elephantum.

Z.

Zizyphus jujuba—53

UNIVERSITY OF BOMBAY
ECONOMIC SERIES No. 1

LAND AND LABOUR
IN A
DECCAN VILLAGE

BY

HAROLD H. MANN, D.Sc.
Principal, Poona Agricultural College

IN COLLABORATION WITH

D. L. SAHASRABUDDHE, B.Sc., L.A.G.
N. V. KANITKAR, B.Sc., B.A.
V. A. TAMHANE, B.Sc., L.A.G. AND OTHERS.

*Demy 8vo. Pp. 190. With four photographs, six plans,
Appendices and an Index.*

Price Rs. 2.

PRESS OPINIONS

LAND AND LABOUR IN A DECCAN VILLAGE is a storehouse of rich and rare economic materials, a careful study of which will repay perusal. Dr. Mann has had the advantage of the collaboration of several Indian colleagues and this fact enhances the value of the book. HINDUSTAN REVIEW.

Dr. Mann and his collaborators deserve thanks for the excellent work they have done. We should be glad if work like this is undertaken in other parts of India. MYSORE ECONOMIC JOURNAL.

OXFORD UNIVERSITY PRESS
LONDON BOMBAY CALCUTTA MADRAS

UNIVERSITY OF BOMBAY
ECONOMIC SERIES No. 2.

INDIAN CO-OPERATIVE STUDIES

EDITED BY
R. B. EWBank, I.C.S.

WITH AN INTRODUCTION BY
HENRY H. WOLFF

*Late President of the International Co-operative Alliance,
Author of "Peoples' Banks," "Co-operative Banking,"
"Co-operation in Agriculture," "Co-operative
Credit for the United States," "Co-operation
in India," etc.*

Demy 8vo. Pp. 274. Full Cloth. Price Rs. 6.

PRESS OPINIONS

Mr. Ewbank has done yeoman service in collecting and editing "Indian Co-operative Studies," a book well worth reading, not only because it is in itself a mine of information, but also because it forms a very valuable guide to the solutions of the problems of the future Each subject is dealt with from the Indian standpoint and is treated by an expert. Not the least attractive feature of the book is the excellent introduction by Mr. Henry Wolff, a great authority in the co-operative world. CAMBRIDGE REVIEW.

. . . the fact remains that the book fulfils the promise of the preface, and it is well worthy of serious study by everyone who is interested in the social and economic regeneration of India. ASIATIC REVIEW.

We do not remember having ever come across a book on Indian co-operation which in practical understanding of co-operative problems and clear expression of co-operative principles exceeds in value and interest the present collection of studies. It is a composite work . . . , MADRAS MAIL.

Studies like those presented by Mr. Ewbank have an immense educative value. They are calculated to set people thinking about the different aspects of co-operation dealt with by men who have a right to be heard with respect The writers have been judiciously selected with the view of giving to the public presentation of the problems dealt with, at the hands of experts and practical workers. BOMBAY CHRONICLE.

The characteristic problems of Indian co-operation and the methods which have been employed for solving them are here set forth with a clearness and practical grasp which must make the book almost indispensable to practical co-operators The book is a valuable contribution to the growing literature on Indian co-operation because the writers are experts in their chosen lines and write clearly, critically and with inside knowledge. INDIAN REVIEW.

OXFORD UNIVERSITY PRESS
LONDON BOMBAY CALCUTTA MADRAS