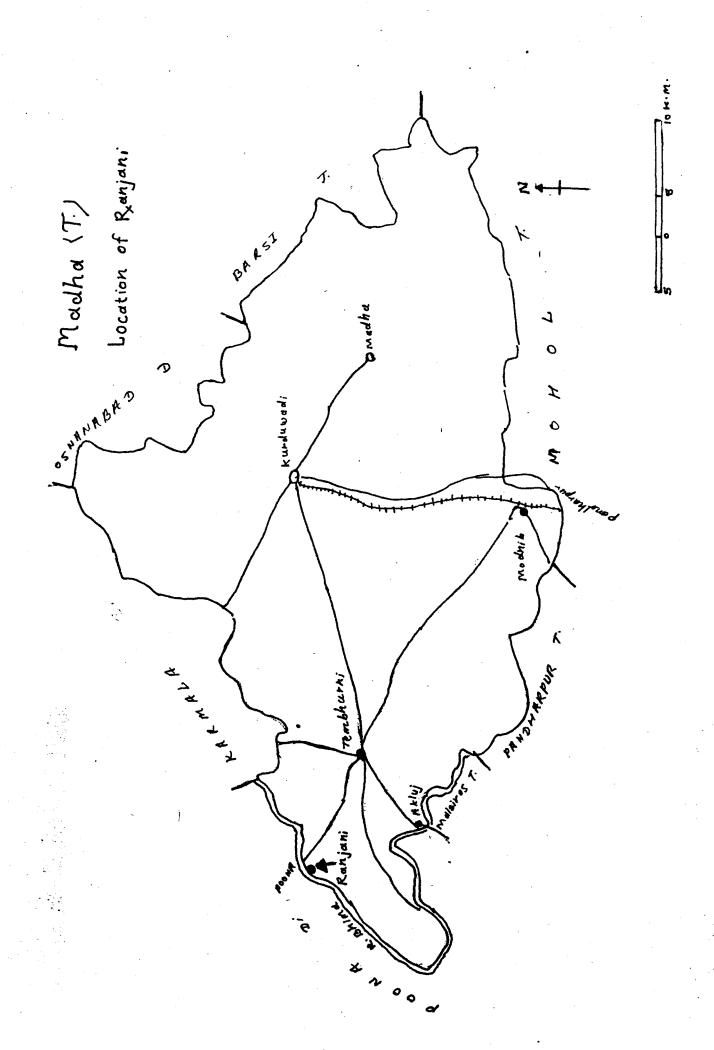
CHAPTER-IV

A CASE STUDY OF THE RANJANI VILLAGE





CHAPTER-IV

A CASE STUDY OF THE RANJANI VILLAGE

The Command Area Development Authority (C.A.D.A.) is having its own irrigation system for utilisation of irrigation water of Bhima (Ujjani) dam. The command area development authority (C.A.D.A.) prepares its seasonwise proposed crop plans for the farmers. The crop plans are prepared according to the quality and the level of the soil. The irrigation water is distributed on co-operative basis. There is villagewise water distribution committee under the supervision of Pani Panchayat Samittee. The co-operative irrigation water distribution society has the following advantages.

- Every farmer is being involved in this process.
 It facilitates easy irrication planning.
- 2) It avoids waste of time.
- 3) The beneficiaries get the correct information about the availability of the water.
- 4) Economic use of irrigation water is possible.
- 5) There is less danger of unauthorised use of irrigation water.

According to the irrigation system each sector of irrigation water supply is made at the rate of 10 houres at the chamber.

An effort is made in this Chapter to study the Co-operative Irrigation Water Distribution System in a village named Ranjani in Madha Taluka.

The Ranjani Village is the first beneficiary village which is situated in Madha Taluka. It is on the border line of Indapur taluka of Poona district. According to 1971 census the population of small Ranjani village was 2597 which increased to 2641 after decade (1981) census. Today there are nearly 600 households of the total population 2840. The total area of the village is 841 hectares.

4.1 SHRI SIDHESHWAR KALAWA PANI WATAP SAHAKARI SOCIETY RANJANI.

Ranjani is the first beneficiary village of
Bhima (Ujjani) dam. The village is situated in the
catchment area of number one small distribution chanal
of Left Bank Canal. The village is getting irrigation
water from 1978-79. From the year 1982-83 the new system
of "Samay Watap Padhat" is being implemented. This has
proved to be the ideal or model irrigation management system
which is based on the co-operative principles. The Sidheshwar
Irrigation Society was registered on 7th February 1986,

with the total membership of 154 and benefiting area of 315 hectares.

under this system every farmer gets irrigation water according to its use cubic meter. There is an agreement between the Sidheshwar Society and irrigation department of government of Maharashtra. According to agreement (5.5.1989) every farmer gets irrigation water but the ownership of the construction work of the small outlets, distribution etc. will be of the government. The proper and retionalised use of irrigation water for implementing the proposed crop plan is the main aim of this agreement.

Today 95% of total number farm households are the members of this Sidheshwar Kalawa Pani Watap Society.

The society gets its ligitimate rights of irrigation water which made available through distribution chanal 1. A 1, 2, 3. The total water quota which is made available as follows.

- A) Kharif Season 0.440 Cubic meter.
- B) Rabbi Season 1.143 Cubic meter.
- C) Hot Whetather 0.747 Cubic meter.

 Total 2.330 Cubic meter.

4.2 IRRIGATION CHARGES:

According to the agreement the irrigation charges are as follows.

- 1) Kharif crops at the rate of Rs. 10 per thousand cubic meter.
- 2) For rabbi crops Ps. 15 per thousand cubic meter.
- 3) Summer crops Rs. 37.50 per thousand cubic meter.

 The irrigation charges are revised after two-years.

The irrigation water distribution system is given in the following table No. IV-1.

TABLE NO. IV-1 : IRRIGATION WATER DISTRIBUTION SYSTEM OF RANJANI.

Sr.	Chanal	Branches	No. of benefi- ciaries	Actual irri- gated area	Potential (in hectare)
1.	1 A	7	40	49.69	68.90
2.	1	4	20	15.09	27.99
3.	2	9	76	110.01	150.05
4.	3	5	48	58.55	68.12
		25	184	223.34	315.06

Accordingly 184 beneficiaries are getting irrigation water for 223.34 hectares of land.

TABLE NO. IV-2: COMPOSITION OF CROPPING PATTERN OF RANJANI: (in hectare)

sr.	Crops	Kharif	Rabbi	Hot Weather	Total
1.	Sugarcane	12.352	24.219	37.332	73.903
2.	Chilies	00.912	01.018	-	01.930
3.	L.I.cotton	06.474	-	07.958	14.432
4.	Hy. Jawar	13.894	ente»	***	13.894
5.	H.W.Ground- nut	-		23.144	23.144
6.	Hy. Bajari	03.705	-	-	03.705
7.	Maize	04.018	-	-	04.018
8.	Vegetables	00.872	-	-	00.872
9.	Wheat	-	22.119	-	22.119
10.	Jawar	-	04.847	-	04.847
11.	Local Jawar	-	39 .5 53	-	39.553
12.	Ratoom	-	04.847	-	04.847
13.	Gram	-	04.736	-	04.736
14.	Vegetables	-	02.150	•	02.150
15.	Sunflower	-	02.150	-	02.150
-,-,-	TOTAL	42.227		73.434	•

It is observed from table No. IV-2 that, the village Ranajani is witnessing tremendous change in the cropping pattern which has become predominantly commercial in nature.

According to the 1971 census the Ranjani village was having 25acres irrigated land only with main cropping pattern of Jawar and Wheat. Today the scene has totally changed and cropping pottern includes sugarcane, chilies, Hy. Jawar. Wheat, Cotton. Hy. Groundnut in three season Kharif, Rabbi and Hot-Weather.

TABLE NO. IV-3 : SIZEWISE CLASSIFICATION OF THE BENEFICIARIES:

Size of land	Total No. of farmers	Total area under irri-tation (in hectare)	per farmer
Less than 0.50 hectare	30 (15.87)	10.01	2.99
0.50 to 1.00 hectare	89 (47.08)	70.20	1.27
1.00 to 1.50 hectare	26 (13.75)	35.44	1.36
1.50 to 2.00 hectare	22 (11.65)	40.52	1.84
2.00 to 2.50 hectare	14 (7.24)	34.25	2.44
Above 2.50 hectare	8 (4.24)	26.73	3.34
TOTAL :	189 (100.00)	217.15	1.15

number 189 farmers, thirty (15.87%) have the average per farmer irrigated area of 2.99 hectares in the first size group of less than 0.50 hectares. The eighty nine farmers are having the irrigated land between the size group of 0.50 to 1.00 hectare and the average irrigated area per farmer in this size group is only 1.27 hectares. Only eight farmers are having irrigated area on an average more than 2.50 hectares irrigated land. Thus the average irrigated land holding per farmer is 1.15 hectares.

It is very remarkable to note that most of the beneficiaries in Ranjani village are not only small farmers but also marginal farmers, who are the participants of modernisation of agriculture. (The list of all beneficiaries is given in appendix at end of the Chapter.)

The cropping pattern for three years is given in table No. IV-4 for canal irrigation and Table No. IV-5 for lift irrigation. It is observed that on canal (flow) irrigation the maximum area under crops is brought in rabbi season during the period of three years under study. The hot weather crops includes mainly commercial crops such as Sugarcane, Groundnut, Fodder etc. The Kharif crops include sugarcane and maize. On lift irrigation the rabbi season dominates the cropping pattern which includes Jawar

42.20 47.50 87.10 Tota 1 198,10 141,25 others Total 180,30 171.20 188,00 216.71 Total (in hectare) 2.60 4.00 others ı 00.6 Vegetable 17,45 2.70 0.70 82,45 31.00 Fodder Groundnut 75.10 Mood 2,20 Sunflower 2.90 ŧ 1.00 8.70 3.60 Ma ize 7.90 ı Maize 0.70 0.80 16,20 Vegetable Moog 0.20 0.50 0.50 13.00 ŧ Harbhara 1,45 6.85 13:20 Sunflower 20.00 25.00 Maize 3,80 3.00 ı Wheat 16,15 16.20 48.75 Ground-nut Bajri 2.00 76.10 2.00 3.00 94.80 127,85 157,60 158,65 45.40 Jawar Sugarcane Sugarcane Sugarcane 30.06 18,35 20.00 20,00 9.00 18,35 9.40 42,20 ı Hot Weather 1987-88 Kharif 1987-88 1988-89 1987-88 1988-89 1986-87 1988-89 1986-87 1986-87 Rabbi ົບ A B

TABLE NO. IV-4 : CROPPING PATTERN OF RANJANI (CANAL) FLOW

34.90 12,10 24.60 23.50 Total 31,00 34.00 26.60 Total Tota 1 (in hectare) others Others 0.60 0.20 1,40 0.30 ŧ ı Others 1.20 Harbhara i Vetebale 1.60 0.80 1.00 Harabhara Sunflower 05.00 ŧ Maise 0.80 11.70 Maise 0.20 0.20 1.00 Maize 1 12.80 1.40 5.90 Fooder TABLE IV-5 : CRCPPING PATTERN OF RANJANI (LIFT) Groundnut Groundnut Groundnut 20.90 11.80 19.90 Wheat Wheat 1.10 1.60 1.20 18.70 31,80 30.00 8:60 Jawar Jawar Jawar ŧ 1987-88 1987-88 Whether 1987 -88 1986-87 1988-89 1986-87 1988-89 1986-87 1988-89 Kharif Rabbi Hot ΰ (a) R

and Wheat and the hot weather (H.W.) crops, mainly include groundnut and fodder. Thus the multi cropping pattern is the great impact of Bhima (Ujjani) irrigation dam in Solapur district. More important aspect of this impact is that, the small farmer is a major producer who is enjoying the fruits of green revolution.

APPENDIX

sr. No.	Nar	me of the Beneficiaries	Irrigation potential	Irrigated area
-, -,				
1.	Smt.	Bai Mahadeo Chaugule	2.48	0.80
2.	Shri	Chagan Srirang Autade	3.64	1.16
3.	**	Babu Rama Awtade	2.71	1.80
4.	Smt.	Amruta Tulshiram Jadhav	2.57	2.44
5.	shri	Jalindar Tulshiram Jadhav	2.57	2.44
6.	13	Kashinath Santram Jadhav	0.59	0.50
7.	H	Babu Santram Mane	0.58	0.50
8.	••	Ganpat Bandu Jadhav	1.71	0.90
9.	#1	Machindra Murlidhar Jagtap	0.35	0.40
			5.30	2.60
10.	••	Nivruti Krishna Jadhav	2.00	1.38
			2.00	1.38
•			1.70	1.70
11.	Smt.	Kamal Manohar Nagane	1.20	1.00
			-	0.70
12.	Shri	Bhanudas Dada Tambile	2.20	2.00
			2.40	2.20
13.	Ħ	Narayan Rangnath Tambile	2.20	2.00
14.	**	Dnyandeo Nivrutti Nalawade	0.45	0.20
			0.40	0.45
15.	Ħ	Mahadeo Nivrutti Nalavade	0.45	0.40
16.	•	Cha ng deo Nivrutti Nalawade	0.45	0.40

(in hectare)

Sr. Nam	me of the Beneficiaries	Irrication potential	Irrigated area
			
17. Shri	Dnyandeo Gangaram Jadhav	3.10	2.92
18. "	Nagesh Krishna Deshpande	4.86	2.40
		4.30	2.50
19. "	Madhukar Sopan Mane	3.40	2.03
		0.91	0.82
20. "	Bhimrao Shamrao Jagtap	-	1.00
21. "	Murlidhar Vithoba Mane	1.00	0.75
22. "	Vithal Vishnu Jadhav	1.80	0.65
23. "	Tukaram Rama Mane	1.20	0.74
		1.50	0.90
24. "	Nivruti Rama Mane	1.20	0.60
25. "	Vithal Rama Mane	1.30	0.90
		1.50	0.55
26. "	Krishna Ishwar Ingale	1.00	0.50
27. "	Pandurang Tulshiram Chaugule	2.75	2.00
28. Smt.	Rangubai Krishna Takik	1.40	1.00
29. Shri	Vasant Tulshiram Chougule	1.00	1.00
30. "	Dasharath Tukaram Bagal	2.41	1.70
		0.80	0.60
31. "	Bhagwat Nivruti Jadhav	2,42	1.89
32 . "	Tukaram Nivruti Jadhav	1.20	1.00
33. "	Maruti Tulshiral Chougule	1.60	1.00
		0.92	0.30

(in hectare)

Sr. Name of the Beneficiaries	Irrigation potential	Irrigatė d area
	, -, -, -, -, -, -, -,	
34. Shri Dnyandeo Ganu Yadav	1.20	0.85
35. * Dagađu Bali Chavan	0.62	0.60
36. " Prakash Vyankatrao Yewale	1.72	1.50
37. " Suryakant Raghunath Pathak	2.74	2.10
	1.10	0.50
	0.79	0.80
38. Shri Dhule Mahadeo Tele	1.50	1.38
39. * Namdeo Mahadeo Tele	1.52	1.32
40. " Gundi Rama Tele	1.50	1.22
41. "" Sahebrao Sambhaji Madane	1.20	1.18
	3.19	1.22
	2.00	1.20
42. " Ramling Namdeo Thorat	2.20	1.99
43. * Sitaram Shivram Thorat	2.31	0.57
44. " Narhari Shivram Thorat	-	0.57
45. " Babu Dattu Jadhav	3.20	2.19
46. " Prabhu Dattu Jadhav	3.20	1.00
47. " Laxman Yashwant Tele	2.00	1.60
48. * Babu Sripati Chougule	1.80	1.00
49. Smt. Gopika Sadashivrao Chougule	2.00	0.72
50. Shri Dattu Krishna Bagal	1.29	0.60
	2.95	2.54

		(In neccare)		
NO.	me of the Beneficiaries	Irrigation potential		
51. Shri	. Bhajsingh Shivdas Ke d ar	2.12	2.00	
52. "	Rohidas Nivruti Gaikwad)		
53. "	Kashinath Kondiba Gaikwad)		
54. "	Ganpat Kondiba Gaikwad))		
55. *	Vishwanath Kondiba Gaikwad	7 . 00	6.36	
56. "	Devchand Kondiba Gaikwad))		
57. *	Dasharath Tukaram Bhise))		
58. "	Shivaji Rama Bagal	0.84	0.74	
		1.00	0.80	
59. *	Balbhim Rama Bagal	0.63	0.30	
60. "	Ramchandra Bhiva Yadav	3.40	1.50	
61. **	Vishwanath Bhiva Yadav	3.20	2.15	
62. "	Sarjerao Rama Jadhav	2.20	2.00	
63. "	Sopan Namdeo Devkar	2.79	2.15	
64. "	Pedu Laxman Gaikwad	0.37	0.25	
65. "	Namdeo Pralhad Patil	2.00	1.40	
66. "	Pandharinath Genu Gaikwad	0.29	0.29	
67. "	Narayan Atmaram Purandare	2.00	1.60	
68 . "	Shamrao Haribhau Pthak	2.40	0.70	
		1.18	0.60	
69. "	Haribhau Digambar Pathak	2.63	0.70	

			(22, 210	
Sr. No.	Nam	e of the Beneficiaries	Irrigation potential	Irrigated area
70.	Shri	Rangnath Bhiva Yadav	3.82	2.80
71.	14	Gopal Tukaram Chavan	7.97	3.60
72.	**	Balbhim Tulshiram Chougule	3.50	2.13
73.	**	Maruthi Dattu Jadhav	3.20	0.95
74.	at	Dinkar Raghunath Pathak	1.10	0.51
			0.80	0.80
75.	**	Chandrakant Raghunath Pathak	1.10	0.50
			0.80	0.60
76.	w	Ramakant Raghunath Pathak	0.80	0.60
77.	11	Rajaram Raghunath Pathak	0.80	0.60
7 8.	10	Anantrao Raghunath Pathak	0.79	0.60
79.	11	Narhari Vithoba Jadhav	2.20	1.60
80.	**	Bharat Machindra Mhaske	1.36	1.16
			1.10	1.00
81.	**	Ramrao Machindra Mhaske	1.36	1.16
			1.10	1.00
82.	**	Sahebrao Machindra Mhaske	1.36	1.16
			1.10	1.00
83.	**	Balaso Machindra Mhaske	1.36	1.16
			1.13	1.00
84.	**	Ashok Laxman Mhaske	1,31	0.80
* **	*)		1.75	-

(in hectare)

Sr. No.	N	ame of the Beneficiaries	Irrigation potential	Irrigated area
-, -,		,		
85.	Shri	Gorakh Laxman Mhaske	1.21	0.76
			1.75	1.60
86.	**	Shahaji ^L axman Mhask e	1.13	0.56
			1.75	1.60
87.	16	Narshing Laxman Mhaske	1.12	0.76
			1.75	1.60
88.	**	Raghunath Digambar Pathak	0,56	0.50
89.	th.	Sambhaji Dyandeo Yadav)		0.25
90.	•	Mahadeo Dyandeo Yadav)	2.52	2.35
91.	H	Maruti Babu Yadav	1.51	1.41
92.	**	Vithal Babu Yadav	1.52	1.15
93.	PR	Jyoti Sopan Pawar	3,43	2.93
94.	Ħ	Pandurang Jyoti Pawar	3,43	2.98
95.	11	Namdeo Vishnu Bagal	1.92	1.50
96.	10	Haridas Ganpat Bagal	2 40	0.40
97.	*	Maruti Vishnu Bagal)	2.49	2.40
98.	**	Dattu Jogu Survase	1.50	1.59
			0.60	0.60
99.	**	Maruti Dattu Mane	1.20	1.00
			1.41	0.64
100.	19	Bhiva Dattu Mane	2,61	1.00

Sr. No. Na	me or the Beneficiaries	Irrigation potential	Irrigated area
-,		*************************	
101. Shri	. Soudagar Tukaram Pol	1.00	1.00
		1.20	1.00
102. "	Machindra Mahadeo Lengare	1.80	1.80
1032 "	Mahadeo Nivruti Javalge	1.00	0.80
104. "	Suruko Dhula Bangar	1.00	1.00
105. "	Arun Janardhan Vyawahare	0.62	0.50
106. "	Sukhadeo Vithoba Pol	0.40	0.45
		2.10	2.00
107. Smt.	Mangal Haridas Pol	0.62	0.40
108. shri	Bibhishan Janardhan Vyavahare	1.00	1.00
109. "	Haridas Shahurao Patil	1.01	1.00
110. "	Ramdas Pralhad Pol	1.60	1.40
		1.64	1.60
111. "	Rama Krishna Takik	1.70	1.60
112. "	Sopan Krishna Takik	1.70	1.60
113. "	Ankush Babu Jadhav	0.56	0.30
114. "	Bhairu Srirang Kawade	2.61	2.30
115. "	Satish Soudagar Pol	1.40	1.00
116. "	Kalyan Soudagar Pol	1.40	1.00
117. "	Navnath Sambhaji Madane	1.40	1.20
118. *	Uttam Bodhiram Mane	1,63	1.50

Sr. No.	Nā	ame of the Beneficiaries	Irrigation pot en tial	Irrigated area
-,-,-		, -, -, -, -, -, -, -, -, -, -, -, -, -,		
119.	Shri	Shivaji Dattu Mane	1.61	1.23
120.	n	Kisan Dyandeo Chavan	1.86	1.46
121.	H	Ramdas Dyandeo Chavan	2.73	2.23
122.	11	Bhimrao Sidhu Bhosale	0.80	0.75
123.	Smt.	Laxmibai Ganpat Ravan	5.24	5.24
124.	Shri	Dastgir Basu Shaikh	1.00	1.00
125.	smt.	Tanubai Dyandeo Chavan	1.13	1.00
126.	S hri	Ramu Sambhaji Kadam	1.15	1.00
127.	**	Janardan Balu Kawade	1.75	0.85
128.	**	Popat Pralhad Kawade	1.07	1.00
129.	**	Rohidas Tatya Rajguru	0.44	0.40
130.	Smt.	Subhadra Narayan Chandankar	1.08	0.50
131.	Shri	Mahadeo Arjun Devkar	1.06	0.50
132.	••	Jayling Vishwanath Kanade	1.80	1.00
133.	P8	Satish Vishwanath Shelar	1.80	1.60
134.	Smt.	Godabai pandurang Kawade	0.92	0.80
135.	Smt.	Triveni Kundling Gaikwad	0.93	0.78
136.	Shri	Maruti Rajaram Chavan	1.12	0.52
137.	S hri	Apparao Sambhaji Madane	1.00	1.00
138.	Smt.	Sarubai Pandurang Kawade	0.80	0.60
139.	Shri	Trimbak Ganpat Wagh	0.45	0.27
140.	**	Bhika Keshav Wagh	0.30	0.28

			(In nectate)		
sr.	Nar		Irrication potential	Irrigated area	
		,			
141.	Shri	Pitambar Damu Wagh	0.40	0.30	
142.	50	Bhiva Gundi Yadav	2.88	-	
143.	H	Laxman Hari Maske	0.80	0.80	
144.	Ħ	Shrirang Bhau Awatade	-	1.15	
145.	**	Gorakha Babu Yadav	1.34	0.50	
146.	*	Mahadeo Tulshiram Wagh	0.30	0.30	
147.	Smt.	Sitabai Shivaji Ghadge	0.80	0.30	
148.	Shri	Dattu Damu Wagh	0.30	0.30	
149.	Ħ	Tulshiram Jiwala Chougule	4.17	-	
150.	Ħ	Vasa mt Kondiba Ubale	~	-	
151.	**	Machindra Kondiba Ubale	~	•	
152.	**	Gorakh Kondiba Uba le	-	-	
153.	11	Waman Vasant Ubale	•••	-	
154.	Ħ	Mahadeo Ganpat Pavan	••	-	
155.	**	Machindra Hari Maske	0.58	0.40	
156.	**	Waman Krishna Ubale	0.40	0.28	
			3.40	2.40	
			0.85	0.40	
			1.00	0.45	
157.	H	Kondiba Pandurang Ubale	0.20	0.20	
			2.25	1.29	
			1.40	0.90	
			1.60	0.42	

sr. Na	me of the Beneficiaries	Irrigation potential	Irricated area
			~, ~, ~, ~, ~, ~, ~,
158. Shri	Hanumant Pama Bagal	0.83	0.70
159. Shri	Sambhaji Rama Bagal	0.83	0.63
160. "	Narayan Rama Bagal	0.83	0.75
161. *	Kondiba Sawala Gaikwad	0.20	0.20
162. "	Pama Genu Gaikwad	0.40	0.40
163. "	Suresh Uttam Vyavahare	0.41	0.40
164.	Arjun Uttam Vyavahare	0.40	0.40
165. "	Genu Sambhu Chandankar	0.80	0.60
166. *	Limba Sambhu Chandankar	0.45	0.45
167. "	Hambirrao Damu Wagh	-	0.30
168. "	Tanaji Rangnath Tambile	1.09	0.40
		315.06	223.34