

CHAPTER-IV

**IMPACT OF VARIOUS SCHEMES OF BHOGAWATI FACTORY
ON SMALL AND MARGINAL FARMERS.**

- Development of the Area in General.
- Sugarcane Development And Agricultural Development.
- Economic Development.
- Social Welfare Activities.
- Cropping Pattern.
- Subsidiary Occupations.
- Conclusion.

Measuring impact of various schemes of Bhogawati Factory (or for that matter any sugar factory) on small and marginal farmers coming under the area of its jurisdiction is a formidable task. This, the researcher has tried to measure with the help of data collected through the questionnaire administered on 107 small and marginal farmers in the selected five villages of both Radhanagari and Karveer Talukas.

Impact is tried to be measured under the following heads :

1. Development of Area in general.
2. Agricultural Development and Sugarcane development.
3. Economic Development.
4. Social Welfare.
5. Cropping Pattern.
6. Subsidiary Occupations.

Development of the Area in General :

In ~~the~~ Table No.4.1 gives the details of responses from 107 respondents to the questions concerning development of the area in general that took place because of the Bhogawati Factory.

The questions asked related to the various aspects of the development of the area in general and the positive responses received to the questions on such aspects.

Table No.4.1 : Statement showing the Development of Area in general.

Sr. No.:	Item of Benefits	Name of the village & positive responses to the questions	Total respondents (and percentage)
:	:	Dewale:Parite :Rashi- :wade Bk:	Gudal :Kambal- :wadi :
1.	Employment potentialities created in rural areas.	16	22
		25	29
		5	97 (91%)
2.	Increase in transport & communication facility.	16	22
		25	30
		5	98 (92%)
3.	Scope for subsidiary occupations	16	22
		25	20
		5	88 (82%)
4.	Increase in Standard of living	16	22
		25	25
		5	93 (87%)
5.	Higher education facilities for children	16	22
		25	28
		5	96 (88%)
6.	Increase in Medical facilities	16	22
		24	24
		5	91 (85%)
7.	Increase in annual income	13	22
		23	23
		5	86 (80%)
8.	Increase in commerce and industries	14	22
		24	20
		5	85 (79%)
9.	Timely supply of credit	16	15
		20	28
		5	86 (80%)
10.	Competition to earn higher income	19	16
		24	25
		5	89 (83%)
11.	Implimentation of new farm practices	15	18
		21	28
		5	87 (81%)
12.	Use of improved fertilizers, pesticides and seeds	16	18
		22	28
		5	89 (83%)
13.	Diversified cultivation facilitated	16	18
		21	24
		5	85 (79%)
14.	Increase in water supply and yield per acre	16	18
		18	27
		5	85 (79%)
15.	National Programmes like family welfare, Houses to landless labourers & bio-gas etc. would be implemented	16	18
		21	25
		5	86 (80%)
16.	Average savings increased	15	18
		20	26
		5	84 (78%)

Source : Compiled from the Questionnaires collected from 107 respondents.

From the Table No.4.1, it is clear that the small and marginal farmers in the five sample villages felt that they have reaped the benefits from the general development of the area. For example, all the five respondents from village Kamabalwadi feel that they have benefited in respect of all the 16 aspects of the general development. More than 78.5% of the respondents feel that they have reaped the benefits. In case of some of these development aspects, as high as 92% of the respondents have reaped the benefits.

Sugarcane Development and Agricultural Development :

The Bhogawati Factory has introduced various sugarcane and agricultural development schemes for the economic development of the small and marginal farmers.

Table No.4.2 shows the details of various schemes implemented by the Bhogawati Factory and the responses given by 107 respondents from the selected villages.

From the Table (No.4.2), it is observed that majority of the Small and Marginal farmers have benefited from the above schemes.

The agricultural development schemes like supply of horticultural plants and press-mud are most popular from the

Table No.4.2 : Statement showing the number of beneficiaries of Schemes of Agricultural Development & Sugarcane Development introduced by the Bhogawati Factory.

Sr. No. :	Particulars	Name of the Village & No. of Beneficiaries of the Scheme				Total (and percentage)
		Dewale :	Parite :	Rashi-vade Bk :	Kambal-Gudal :	
		16	23	26	5	37
						107
A) Agricultural Development Schemes :						
1.	Lift Irrigation Schemes	15	12	1	5	11
2.	Subsidy for plantation of Adsali sugarcane	8	18	21	1	10
3.	Pilot Project Scheme	2	6	4	5	1
4.	Supply of horticultural plants	15	20	19	5	35
5.	Supply of press-mud	12	18	25	4	35
B) Schemes for Sugarcane development :						
1.	Seed Nursery	1	16	9	5	8
2.	Cane crop competition/prizes	2	8	6	-	2
3.	Supply of improved seeds, fertilizers and pesticides	5	13	13	5	3
4.	Smut Control Scheme	10	18	10	5	35
5.	Crop Protection and cultivation	-	-	-	-	-
6.	Soil Testing Scheme	10	13	6	5	2
7.	Supply of sprayers	-	6	2	3	3
8.	Guidance-Seminars & Tours of the farmers	9	11	2	3	2

Source : Compiled from the Questionnaires collected from 107 respondents.

point of view of the shareholders than any other schemes. The 94 respondents out of 107 have benefited from these schemes.

However, it is observed from above table that the schemes like Pilot Project, Cane-crop competition, supply of sprayers, guidance seminars and tours have got poor response.

Table No.4.2, further indicates that the respondents from village Kambalwadi are more alert in taking benefits of the said schemes. Village Parite and Dewale stand second and third in taking benefits of these schemes. The respondents from village Rashivade Bk. and Gudal are some what less interested in these schemes.

Economic Development :

These mainly include the schemes like assistance to backward class - cane grower members, bio-gas and employment generation etc. These schemes have been provided by the Bhogawati factory for the benefit of the Small and Marginal farmers. Table No.4.3 gives the details of the beneficiaries of these scheme.

Table No.4.3 shows that the number of beneficiaries of Economic and other schemes implemented by the Bhogawati factory in selected villages.

Table No.4.3 : Statement showing the number of Beneficiaries of Economic and other Schemes implemented by the Bhogawati Factory in Selected Villages.

Sr. No.:	Name of the villages selected and:					Total:	%
	Dewale:	Parite:	Rashi-vade:	Gudal:	Kambal:		
	16	23	Bk.26	37	5	107	
1. Assistance to Backward Class members.	-	1	2	-	-	03	(3%)
2. Bio-gas Scheme	12	7	7	17	3	46	(43%)
3. Employment Generation	3	6	6	2	2	19	(18%)

Source : Collected from the Questionnaire collected from 107 respondents.

Table (No.4.3) shows that the bio-gas scheme has the highest response. Out of 107 respondents 46 small and marginal farmers have taken advantage of this scheme.

In case of employment generation 19 out of 107 i.e. nearly 18% have sought employment in the Bhogawati Factory. However, it should be noted that nearly 5000 to 6000 small and marginal farmers and landless laboure are provided with seasonal employment during the crushing season every year. As these farmers are not the members of the Bhogawati Factory they are not covered the sample survey.

The response for financial assistance to backward class (Harijans and Nav-Budhas) shows negligible response as 3 out of 107 respondents benefited from this scheme. The reason behind low response is that, this scheme is mainly meant for B.C. communities.

In addition to the above schemes for improving the economic condition of the small and marginal farmers the Table Nos.4.4, 4.5, 4.6, 4.7 and 4.8 provide important indicators, which are useful for measuring the impact.

It is clear from the Table No.4.4 that how the net income increased during the last five years.

Table No.4.4 : Statement showing the Income of the selected respondents from various sources.

Sr. No. of the village	Number of Respondents in the Income groups									
	1979-80					1983-84				
	Rs.0 to Rs.5000	Rs.5000 to Rs.10000	Rs.10000 to Rs.15000	Rs.15000 to Rs.20000	Rs.20000 to Rs.50000	Rs.50000 to Rs.100000	Rs.100000 to Rs.150000	Rs.150000 to Rs.200000	Rs.200000 to 500000	& above
1. Dewale	2	10	4	-	2	8	3	2	1	
2. parite	11	10	2	-	9	8	4	2	-	
3. Rashivade Bk.	24	2	-	-	21	4	1	-	-	
4. Gudal	28	9	-	-	18	19	-	-	-	
5. Kambal-wadi	1	3	1	-	1	1	3	-	-	
Total :	66	34	7	-	51	40	11	4	1	

Source : Compiled from the Questionnaires collected from 107 respondents.

In the year 1979-80, out of 107 respondents 66 were below income group of Rs.5,000/-; 34 were in-between Rs.5000 to 10,000/- income group and 7 were in-between Rs.10,000 to Rs.15,000/- income group. However, in 1983-84, the income position changed. The income of 4 respondents increased upto Rs.20,000/- while one respondent's income increased above Rs.20,000/- per annum. Increase in Household and other appliances is shown in Table No.4.5.

From ~~the~~ Table No.4.5, it is clear that the household equipments and other appliances have increased during the span of period from 1979-80 to 1983-84.

It is observed that in the wake of the emergence of the Bhogawati Factory the small and marginal farmers who were not able to earn their living, have been able to purchase useful domestic appliances like fans, radios, tape-records and autos etc.

Agricultural equipments and other appliances belonging to the 107 respondent small and marginal farmers can be shown on Table No.4.6.

~~In~~ Table No.4.6 throws light on the agricultural and other appliances used by the respondent small and marginal farmers during the 5 years.

Table No.4.5 : Statement showing the Household Equipments and Appliances of the Respondent farmers in five villages

Sr. No. of Households	Respondents having Household Equipments and appliances									
	Dewale (16)	Parite (23)	Rashivade Bk. (26)	Gudal (37)	Kambalwadi (5)					
1. Cycles	9	19	7	4	5	1	1	1	1	-
2. Auto-cycles	3	-	3	1	2	2	1	-	-	-
3. Scooters	-	-	2	-	1	1	-	-	-	-
4. Sewing machine	-	-	4	3	3	3	-	-	2	2
5. Fans	3	-	3	-	-	2	-	-	1	1
6. Electric Heater/Stoves	-	1	1	-	-	1	-	-	-	-
7. Gas Heater/Stoves	-	-	-	1	1	-	1	1	1	-
8. Bio-gas stoves	6	1	7	3	4	5	1	3	4	1
9. Tables	12	8	8	5	3	3	17	22	5	2
10. Chairs	33	8	38	32	6	6	32	57	25	1
11. Radios	13	8	21	4	3	3	15	20	5	4
12. Tape-Recorders	3	1	-	-	-	-	-	-	-	-

Source : Compiled from the Questionnaire collected from 107 respondents.

Table No.4.6 : Statement showing the Agricultural Equipments and other Appliances of the Respondents in five villages.

Sr. No.:	Respondents having the Agricultural Equipments & Appliances														
	Agricultural Equipments	Dewale(16)	Parite(23)	Rashivade Bk.(26)	Gudal(37)	Kambalwadi	Total	Incrs:1979-80	Incrs:1983-84	Incrs:1979-80	Incrs:1983-84				
1. Plough	16	15	13	15	+2	17	17	17	52	53	+1	13	13	-	113
2. Furrow	15	15	12	13	+1	17	17	--	36	36	-	6	6	-	87
3. Bullocks	21	21	18	17	(-1)	22	22	-	53	53	-	8	6	(-2)	119
4. Bullock-cart	10	10	4	4	-	12	10	(-2)	24	22	(-2)	3	1	(-1)	47
5. Oil-Engines	1	1	7	7	-	8	9	(-1)	6	5	(-1)	1	1	-	23
6. Electric Motors	-	-	5	8	+3	2	3	+1	1	1	-	-	3	+3	15
7. Tractors	-	-	1	1	-	1	2	+1	1	1	-	-	-	-	4
8. Bul-dozers	2	1	-	-	-	-	-	-	-	-	-	-	-	-	1
9. Harvester	-	-	-	-	-	-	1	+1	-	-	-	-	-	-	1
10. Other appliances (Huller)	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1

Source : Compiled from the Questionnaires collected from 107 respondents.

The farmers who were economically very poor, previously used to take help of old agricultural equipments. But after the emergence of the Bhogawati Factory they can use modern farm equipments and appliances like electric motors, tractors, bull-dozers and harvesters. The Bhogawati factory guarantees to pay the instalments of loan taken for purchase of these equipments through the cane bill of the concerned members.

Out of 107 respondents who are in the category of small and marginal farmers, 4 have tractors, one has a bull-dozer and one has a harvester of his own.

The housing position of these 107 respondents is shown in Table No.4.7.

The Table No.4.7 shows the details of position of housing of 107 respondents from 5 villages. In 1979-80 there were 35 simple houses, 83 stone-bricks houses and 1 R.C.C. building belonging to the small and marginal farmers. But at the end of 1983-84 the housing position of these farmers changed to 31 simple, 88 stone-brick and 2 R.C.C. buildings. This change took place due to increase in income and standard of living of the small and marginal farmers because of the Bhogawati factory.

Table No.4.7 : Statement showing the position of
Housing of the Respondents

Sr. No. of villages selected	Number of Houses belonging to the Respondents									
	1979 - 80					1983 - 84				
	No. of simple houses	No. of stone-brick houses	No. of R.C.C. Bldgs.	Total	No. of simple houses	No. of stone-brick houses	No. of R.C.C. Buildings	Total	No. of simple houses	No. of stone-brick houses
1. Dewale	3	16	-	19	2	18	1	21		
2. Parite	8	22	-	30	6	24	-	30		
3. Rashivade Bk.	9	18	1	28	9	18	1	28		
4. Gudal	15	22	-	37	14	23	-	37		
5. Kambalwadi	-	5	-	5	-	5	-	5		
Total	35	83	1	119	31	88	2	121		

Source : Compiled from the Questionnaires collected
from 107 respondents.

In addition to these, activities like generation of Small Savings, Capital formation by deducting compulsory non-refundable deposits from the sugarcane bills and providing employment opportunities to nearly 5000 to 6000 small and marginal farmers and landless labours in the area seasonally and thereby raising the standard of living of the small and marginal farmers are also noticed on account of the Bhogawati factory.

Social Welfare activities :

For the Social Welfare of the Small and Marginal farmers the Bhogawati Factory introduced welfare activities which are shown in Table 4.9.

Table No.4.8 shows that out of 107 respondents only 23% respondents have benefited from the scheme of family welfare, while only 20% respondents' children have taken benefits of educational facilities provided by the Bhogawati Factory.

The Parite village has highest beneficiaries taking benefit of family welfare and educational facilities.

Cropping Pattern :

Due to establishment of the Bhogawati Factory the cropping pattern of the area changed from crops like wheat, maize, nagali, vegetables and jowar to sugarcane cultivation.

Table No. 4.8 : Statement showing the No. of Beneficiaries of Social Welfare Schemes Implemented by the Bhogawati Factory.

Sr. no.	Social Welfare Schemes	Name of the villages selected and number of beneficiaries				Total and percentage of total	
		Dewale	Parite	Rashiva- de Bk.	Gudal :Kambal- :wadi		
		(16)	(23)	(26)	(37)	(5)	
1.	Family Welfare Schemes	-	13	6	3	3	25 (23%)
2.	Educational facilities	5	10	5	1	-	21 (20%)

Source : Compiled from the Questionnaires collected from 107 respondents.

Table 4.9 : Statement showing the member respondents cultivating various crops in the sample villages

Sr. No.	Name of the crops	Area under various crops (in Acres)														
		Dewale(16)	Parite(23)	Rashivade Bk.(26)	Gudal(37)	Kambalwadi(5)										
Grown		:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84	:1979-:1983-:80 : 84		
1.	Sugarcane	24.10	24.0	(-0.10)	16.25	16.23	(-0.02)	40.27	46.02	+5.15	31.28	33.0	+2.12	5.35	6.00	+0.05
2.	Rice	6.20	6.30	+0.10	10.05	11.18	+1.13	22.17	21.21	(-0.36)	21.14	22.30	+1.16	3.16	3.20	+0.04
3.	Wheat	1.20	1.00	(-0.20)	0.15	0.15	-	-	-	-	-	0.04	+0.04	-	-	-
4.	Maize	0.20	1.10	+0.30	1.00	0.25	-0.15	-	-	-	0.02	0.04	+0.02	0.10	0.15	+0.05
5.	Nagali	-	-	-	-	-	-	2.30	2.30	-	7.05	7.00	(-0.05)	2.00	2.00	-
6.	Vegetables	0.10	0.10	-	-	-	-	1.20	1.20	-	-	-	-	-	-	-
7.	Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Jowar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Ground-nuts	-	-	-	-	-	-	-	-	-	-	0-05	+0.05	1.00	1.05	+0.05
10.	Grass	-	-	-	-	-	-	-	-	-	-	-	-	1.10	1.10	-
11.	Chillies	-	-	-	-	-	-	-	-	-	-	-	-	1.05	1.07	+0.02

Source : Compiled from the Questionnaires collected from 107 respondents.

Table No.4.9 shows that how the cropping pattern has changed from other crops to sugarcane crop.

From table No.4.9, it is seen that almost all the sample respondent farmers have shifted from other crops to sugarcane cultivation. Rice stands as the second important crop.

Subsidiary occupations :

The Bhogawati Factory assisted in various ways to small and marginal farmers to undertake subsidiary occupations like dairy and poultry farming. This fact is shown on Table No.4.10.

From this Table it is observed that the respondent small and marginal farmers have mainly undertaken subsidiary occupations like dairy and poultry farming.

Table No.4.10 also shows the number of cows, buffalows and hens owned by the sample respondents. The subsidiary occupations like cycle-shop and bakery have received poor response.

Table No.4.11 shows the schemes of subsidiary occupations introduced by the Bhogawati Factory.

~~From the~~ Table No.4.11, shows that out of 107 respondents 8 have benefitted from the cattle breeding scheme while 3 respon-

Table No.4.10 : Statement showing the No.of Subsidiary Occupations undertaken by the Sample respondents.

Sr. No.:	Name of allied business activities:	No. of Cows, Hens etc.									
		Dewale (16) : 1979-80 : 1983-84	Parite (23) : 1979-80 : 1983-84	Rashivade Bk. (26) : 1979-80 : 1983-84	Gudal (37) : 1979-80 : 1983-84	Kambalwadi (5) : 1979-80 : 1983-84					
1. Dairy Farm :											
a)	Cows	2	3	8	8	2	6	5	7	-	-
b)	Buffalows	32	36	39	45	42	45	45	55	6	8
2. Poultry Farm :											
	Hens	55	86	49	42	47	61	118	175	27	31
3. Other Activities :											
a)	Cycle Shop	-	-	1	1	-	-	-	-	-	-
b)	Hair Cutting Saloon. Bakery.	-	-	-	-	1	1	-	-	-	-

Source : Compiled from the Questionnaires collected from 107 respondents.

Table No.4.11 : Statement showing the Number of Beneficiaries of Subsidiary Occupational Schemes Introduced by the Bhogawati Factory.

Sr. No. : Schemes for Subsidiary Occupation	Name of the villages selected					Total : Percentage of Total
	Dewale :	Parite :	Rashivade :	Gudal :	Kambal- wadi :	
1. Cattle Breeding Centre	-	5	2	1	-	08 (7%)
2. Financial assistance to small & marginal farmers for purchase of bullocks and bullock-carts.	-	-	-	-	3	03 (3%)

Source : Compiled from the Questionnaires collected from 107 respondents.

dents have benefitted from the scheme of financial assistance given to the small and marginal farmers for purchase of bullocks and bullock-carts.

Conclusion :

The above discussion based on the responses received from the selected 107 small and marginal farmers from five villages in the area of jurisdiction of the Bhogawati Factory, leads us to conclude :

- i) that majority of the respondents feel that they have received benefits from the general development of the area;
- ii) that the beneficiaries of Schemes of Agricultural Development and Sugarcane Development were, in some cases, as low as 13% (supply of sprayers), 17% (cane-crop competition prizes and pilot project scheme), 25% (Guidance - Seminars & Tours) and 34% (Soil testing scheme) and, in some cases, as high as 88% (supply of horticultural plants and supply of pressmud);
- iii) that the benefits received by the Small and Marginal farmers from Schemes of Economic Development implemented by the Bhogawati Factory seem to be marginal except in case of bio-gas scheme in which case 43%

of the respondents have been benefitted; as noted earlier the researcher has considered the seasonal employment opportunities made available because of the operations of the Bhogawati Factory during its crushing season;

- iv) that the Small and Marginal farmers lag behind in taking benefits from Social Welfare Schemes of the Bhogawati Factory;
- v) that there is no substantial change in the cropping pattern when figures of 1979-80 and 1983-84 are compared; however, it is noteworthy that sugarcane has been the major crop taken by the responding Small and Marginal farmers; and
- vi) that a small number of Small and Marginal farmers from the selected villages has turned to poultry and dairy farming.

Thus the Small and Marginal farmers have received substantial benefits from the general development of the area and marginal to substantial benefits from the schemes of Agricultural Development and Sugarcane Development implemented by the Bhogawati factory. Benefits accruing to them from all other schemes, in majority of the cases, are marginal.

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