



IMPACT ASSESSMENT STUDY OF
AGRICULTURAL DEVELOPMENT INITIATIVES
OF
GLOBAL VIKAS TRUST (GVT)



CENTRE OF EXCELLENCE IN CSR
TATA INSTITUTE OF SOCIAL SCIENCES, MUMBAI

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Impact Assessment Study of Agricultural Development Initiatives of Global Vikas Trust (GVT)

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CSR is a rapidly growing area of research and activity, especially in developing countries like India. An increasing number of companies are realizing their own social responsibility; given that they work within societal networks. Given the newness of the field, the work on CSR in India is still in the initial stages. Most importantly, there is a need to highlight issues concerning CSR activities using sound methodologies and scientific data. The various stakeholders associated with CSR need to have a sound knowledge of how to conduct studies related to baseline data generation, community needs assessments, community profiling, stakeholder mapping, social impact assessments, monitoring and evaluation, as well as the social auditing of CSR projects and other related issues.

Given the multi-dimensional activities in CSR in the areas of research, training, teaching, capacity building and networking among various stakeholders, holistic and comprehensive approaches are very much needed. The National CSR Hub which was formed earlier at the Institute is part of the Centre for Excellence in CSR. Accordingly, the Centre for Excellence in CSR at the Institute focuses on various programmes designed on the basis of multi-disciplinary and trans-disciplinary perspectives. The Centre is carrying out domain specific activities under major divisions viz. Research & Development and Training & Strategic Operations. The Centre also provide diverse services to public and private sector companies such as assisting companies in formulating CSR policies aligned to their business frameworks, facilitating companies in creating CSR programmes and action plans for implementation and undertaking various research studies.

Accordingly, Global Vikas Trust(GVT) has approached the Centre of Excellence in CSR at the Tata Institute of Social Sciences (TISS) to assess the impact of their agriculture development initiatives in the project locations of Palghar, Nanded, Beed, Solapur, Osmanabad (Dharashiv) and Jalgaon in Maharashtra and Burhanpur and Dhar/Barwani in Madhya Pradesh.

Objectives of the study

The specific objective of the study were the following:

1. Conduct an impact assessment study to evaluate the impact of agriculture development initiatives on the rural communities
2. Analyse stakeholders' engagement with communities of the areas, and
3. Suggest measures for effective implementation of activities of GVT in the areas under focus.

Chapterization

The study report is divided into five chapters. The first chapter titled 'Introduction' describes the agriculture scenario in India in detail, while the second chapter 'Methodology' provides the information related to the approach for the study. The third chapter 'Findings of the study' details out the study findings which are divided into five categories, first providing information about GVT as a whole and other four based on the type of agro-climatic conditions of the study areas viz. Palghar, Marathwada, Raver/Burhanpur and Dhar/Barwani. The fourth and final chapter, 'Way Forward' concludes the study report and suggests way forward for future activities .

Chapter II

Methodology

A mixed method comprising both quantitative and qualitative approaches was used in the study. Sample surveys and interviews were carried out with direct and indirect beneficiaries as part of quantitative and qualitative study. All other stakeholders associated with CSR activities such as panchayat members and staff of the implementing partner(s), were covered in the study. Various tools of data collection like, interview schedules and key informant interviews were administered to the selected respondents on the basis of their engagements with the concerned project. For the secondary research, literature review, detailed analysis of documents received for the specific projects, and other documents were reviewed.

Sample Framework and Size

Sr.	Cluster name	Farmer count	Clusters combined based on geographical location	Sample Size based on percent share of farmers within cluster
1	Ardhapur, Nanded, Maharashtra	1127	5545	81
2	Dhoki, Osmanabad, Maharashtra	1531		111
3	Sirsala, Beed, Maharashtra	2258		162
4	Akluj, Solapur, Maharashtra	629		61
5	Raver, Jalgaon, Maharashtra	876	1539	186
6	Burhanpur, Burhanpur, MP	663		146
7	Palghar, Maharashtra	627	627	251
8	Barwani / Dhar, MP	588	588	250
TOTAL		8299		1248

Field procedures and Training

The necessary data from the sample respondents was collected by trained field investigators with the help of structured/semi-structured/open-ended interview schedule based on the applicability. The interview schedule was finalized after receiving inputs from GVT. Data collection was carried out using digital devices. Necessary check-list for different questions was prepared and the same was provided to the field investigators. The field investigators were given adequate training on interviewing and various field activities by the senior project staff - Research Associate with the assistance of the Project Officer.

Data analysis

The survey data was analysed by using computer facility and the software package ‘Statistical Package for Service Solutions (SPSS). The analysis of qualitative data was on the basis of transcripts of interviews. The analysis of these text-based data was very different from the analysis of statistical surveyed data. The intention in analysing the qualitative data was mainly to use such data and perspectives in general to better define the problem without intending to measure its scope.

Ethical Issues

Ethical considerations are very important in social science research. Researchers have an ethical obligation to pursue a study that has potential benefit to humans. At the same time, they have obligations to ensure that the design of the study is appropriate to its objective (so that individuals are not subjected to unnecessary or unproductive research) and that results are disseminated. Sufficient care was taken to inform the selected respondents about the purpose of the investigation, the criteria used in selecting them as respondents, the content of the interview schedule, probable time to be taken for eliciting the information from them, the importance of their response for the inquiry and their right to withdraw from the study at any time. They were also assured of confidentiality of their information.

Annexure B : Tables (District-wise)

Table no.1. Age composition

Sr. No.	Age	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar / Barwani N=250
1	20 to 30 years	6.8	14.8	6.2	14.4	16.4	6.5	7.5	4.0
2	31 to 40 years	20.7	36.4	34.6	25.2	16.4	16.1	19.2	21.6
3	41 to 50 years	33.5	25.3	27.2	28.8	36.1	31.2	24.7	31.6
4	51 to 60 years	21.9	16.0	18.5	23.4	19.7	27.4	24.0	25.2
5	61 and above years	17.1	7.4	13.6	8.1	11.5	18.8	24.7	17.6
7	Mean Age	48.5	43.0	46.7	45.1	45.5	50.0	50.5	49.5

Table no. 2. Gender of the Registered Farmers

Sr. No.	Gender	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar / Barwani N=250
1	Female	7.2	17.9	18.5	14.4	6.6	12.9	19.2	15.2
2	Male	92.8	82.1	81.5	85.6	93.4	87.1	80.8	84.8

Table no. 3. Family Size

Sr. No.	Family Size of the Farmer	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar (Barwani) N=250
1	Upto 4 members	26.7	28.4	37.0	46.8	36.1	51.1	50.0	44.0
2	5 to 7 members	56.2	53.1	51.9	45.0	47.5	39.2	32.9	43.2
3	8 and above members	17.1	18.5	11.1	8.1	16.4	9.7	17.1	12.8
4	Mean Family Size	5.8	6.0	5.4	5.1	5.7	5.0	5.4	5.3

Table no. 4. Type of Farmers

Sr. No.	Type of the Farmer	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar (Barwani) N=250
1	Registered Farmer	56.2	56.8	45.7	60.4	59.0	47.3	34.2	52.0
2	Other (Practicing but land Registered in family member/relative name)	43.8	43.2	54.3	39.6	41.0	52.7	65.8	48.0

Table no. 5. Livestock Details

Sr. No.	Livestock owned by Farmer	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar (Barwani) N=250
1	Own livestock	77.3	87.7	82.7	89.2	78.7	58.6	53.4	64.0
		Palghar N=203	Beed N=142	Nanded N=65	Dharashiv (Osmanabad) N=99	Solapur N= 48	Jalgaon (Raver) N=109	Burhanpur N= 77	Dhar (Barwani) N=160
	Chicken	90.1	19.7	12.3	8.1	60.4	4.6	0.0	0.0
	Goat	11.8	31.0	10.8	19.2	66.7	8.3	6.5	0.6
	Buffalo	10.8	64.8	50.8	28.3	83.3	64.2	58.4	80.0
	Cow	28.6	61.3	76.9	87.9	64.6	71.6	79.2	79.4
	Bullock	60.6	78.9	80.0	37.4	8.3	56.0	57.1	37.5
	Sheep	0.5	2.8	0.0	0.0	4.2	0.0	0.0	0.6

*

multiple responses

Table no. 6. Source(s) of Irrigation

Sr. No.	Source of Irrigation	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar (Barwani) N=250
1	River	47.4	3.4	4.9	0.0	5.7	11.4	1.8	34.3
2	Canal	8.0	3.4	13.1	0.0	16.0	0.0	0.0	1.5
3	Pond	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0
4	Well	30.3	47.1	59.8	54.1	32.1	33.3	37.6	43.8
5	Farm Pond	0.8	3.4	0.0	3.2	2.8	0.0	0.0	0.0
6	Borewell	25.5	41.8	21.3	42.7	43.4	54.2	60.6	20.4
7	Rainfed/monsoon	75.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*

multiple responses

Table no. 7. Land and Cultivation Details

	Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar (Barwani) N=250
Average land size (Owned : irrigated)	2.4	3.1	3.6	2.8	3.2	3.4	3.5	5.2
Average land size (Owned : non-irrigated)	1.3	1.8	1.4	1.7	1.5	2.1	1.7	3.8
Average land size (Owned: Total)	3.7	3.7	3.7	3.1	3.3	3.4	3.5	5.3
Types of Plants Given By GVT								
Banana	6.10	3.7	100.00	11.70	100.00	100.00	100.00	84.40
Custard Apple	-	29.0	-	-	-	-	-	-
Guava	-	1.2	-	-	-	-	-	-
Lemon	-	0.6	-	-	-	-	-	-
Mango	-	2.5	-	-	-	-	-	-
Mogra	93.90	-	-	-	-	-	-	-
Papaya	-	14.8	-	5.40	-	-	-	15.60

Pomegranate	-	1.2	-	-	-	-	-	-
Sericulture/ Mulberry plantation	-	46.9	-	82.90	-	-	-	-
Average no. of plants given	799	3186	2483	4890	2184	3859	4174	4292
Average land size under cultivation (horticulture/ sericulture) before GVT program	6.5 Guntha	2.6	2.4	2.3	1.9	3.6	1.8	3.5
Average land size under cultivation (horticulture/ sericulture) after GVT program	15.0 Guntha	3.2	3.4	2.1	3.2	4.8	2.5	3.1

* 1 acre = 40 guntha

Table No. 8 Income from earlier agricultural practices*

Amount (in Rs.)	Overall	Districts							
		Palghar**	Beed	Nanded	Dharashiv (Osmanabad)	Solapur	Jalgaon (Raver)	Burhanpur	Dhar (Barwani)
	1387	415	195	101	127	54	175	89	231
<25000	63.9	89.9	65.1	51.5	83.5	7.4	30.3	34.8	60.6
25000-49999	21.8	4.1	26.2	18.8	15.0	27.8	32.6	55.1	32.5
50000-74999	5.6	2.7	5.1	5.0	0.8	38.9	7.4	4.5	5.2
75000-99999	2.3	2.2	1.0	5.0	0.8	18.5	1.7	2.2	0.0
100000-124999	2.5	0.7	1.5	6.9	0.0	7.4	9.7	0.0	0.4
125000-150000	1.4	0.2	0.5	5.9	0.0	0.0	5.1	1.1	0.9
>150000	2.5	0.2	0.5	6.9	0.0	0.0	13.1	2.2	0.4
Mean income (in Rs.)	38723	28149	25340	54282	15968	57373	67786	34063	25174

*multiple responses

**Respondents from Palghar district largely practiced subsistence agriculture earlier, such respondents are included in <25000 category. No such respondents in rest of the districts

Table No. 9 Income after participating in GVT project

Amount (in Rs)	Districts*								
	GVT Overall	Palghar	Beed	Nanded	Dharashiv (Osmanabad)	Solapur	Jalgaon (Raver)	Burhanpur	Dhar / Barwani
	N=1121	N=139	N=152	N=79	N=111	N= 60	N=185	N= 146	N=249
Less than Rs.100000	1.5	0.0	1.3	1.3	0.9	0.0	2.7	0.0	4.0
Rs. 100001-200000	9.6	0.7	3.9	12.7	5.4	6.7	21.1	5.5	18.5
Rs.200001-300000	28.0	2.2	52.6	26.6	64	33.3	25.4	32.9	24.1
Rs.300001-400000	18.9	1.4	7.9	25.3	18	38.3	30.8	28.8	24.1
Rs.400001-500000	10.8	3.6	7.2	21.5	5.4	15	11.9	22.6	12.9
Rs.500001 and above	29.9	92.1	27	12.7	6.3	6.7	8.1	10.3	16.5
Mean income (in Rs.)	393986	766647	407314	347859	304291	325651	309256	351934	338936

*Farmers whose plants are yet to give any yield are excluded from income table, hence the N is less.

Table No 10 Details about earlier Crops cultivated*

Aspects	Type of crop									
	Banana	Black gram split	Chickpea	Corn	Cotton	Paddy	Pigeon peas	Soyabea n	Sugarcane	Turmeri c
N	74	79	163	53	338	238	65	222	64	21
Average Area (Acres)	2.2	4.4	13.6	3.3	2.7	6.1	3.3	2.1	2.3	1.3
Average Quantity produced	61123.0	68.6	2103.7	14001.3	2668.9	2005.4	120.2	1315.0	37217.7	2307.6
Average Rate per kg/quintal/ton	10.0	85.0	5780.8	3125.6	5463.7	848.1	5275.0	3381.3	3121.3	3827.6

* Crops reported by 20 farmers or more are considered for the analysis

Table No 11 Details about crops cultivated through GVT Project*

Aspects	Type of crop				
	Banana	Papaya	Custard Apple	Mulberry	Mogra
N	806	68	47	168	142
Average Area (Acres)	1.9	2.4	1.8	1.2	142.0
Average Quantity produced	55632.2	68605.7	6790.4	560.2	13.64(Guntha)
Average Rate per kg/quintal/ton	13.2	11.4	58.5	52035.2	368

*multiple responses

Table no. 12. Sources of Awareness about GVT's project

Sr. No	Sources of Awareness about GVT's project	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar / Barwani N=250
1	Gram Panchayat	0.0	0.6	2.5	0.9	1.6	2.2	0.7	.4
2	Family Members	3.6	2.5	6.2	3.6	16.4	2.7	3.4	14.4
3	Other Farmers	58.2	34.0	58.0	27.0	52.5	62.4	53.4	68.8
4	Agriculture Department	3.6	1.9	0.0	0.9	0.0	0.5	0.0	1.2
5	Social Media	1.2	3.1	7.4	0.9	1.6	0.0	2.1	12.4
6	GVT Banners	31.5	45.1	34.6	26.1	8.2	2.2	0.0	4.0
7	GVT Staff	0.0	55.6	27.2	55.0	23.0	43.5	41.1	22.4
8	Any other	2.0	0.0	0.0	0.0	1.6	.5	0.0	0.0

* multiple responses

Table no. 13 Level of Satisfaction with GVT activities (Satisfied only)

Sr. No.	GVT support	Districts							
		Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar /Barwani N=250
1	Subsidised Rates of Plants	99.6	100.0	100.0	100.0	100.0	98.9	98.6	100.0
2	Best Quality Saplings	96.4	100.0	100.0	100.0	100.0	96.8	99.3	99.2
3	Technical Guidance	99.2	98.8	100.0	100.0	100.0	100.0	100.0	97.6
4	Market information	23.5	*	*	*	*	*	*	84.0
5	Vermibed	85.7	100.0	97.5	97.3	100.0	*	*	*
6	Go Krupa Amuratam	83.7	100.0	97.5	97.3	100.0	*	*	*

*

Question was not included in the interview schedule for the district

Table no. 14. About the Programme

Aspects	Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar / Barwani N=250
Frequency of monitoring: One to Four visits per year	100.0	99.4	100.0	100.0	100.0	100.0	100.0	99.2
Satisfied by the training & the topics covered	88.4	98.8	100.0	100.0	100.0	*	*	89.2
Received the training material / “Mahiti Pustika”	98.9	98.8	100.0	97.3	100.0	*	*	*
Capacity building of village/community	80.1	*	*	*	*	*	*	97.2
Need of a farmers training centre	99.6	98.8	100.0	97.3	100.0	98.9	100.0	98.4

*

Question was not included in the interview schedule for the district

Table no. 15. Reasons for Income below expectations

Aspect	Palghar N=251	Beed N=162	Nanded N=81	Dharashiv (Osmanabad) N=111	Solapur N= 61	Jalgaon (Raver) N=186	Burhanpur N= 146	Dhar / Barwani N=250
Income not generated as per expectations :Yes	21.3	3.1	1.2	2.7	0.0	7.0	5.5	3.2
Reasons	N=53	N=5	N=1	N=3	N=0	N=13	N=8	N=8
COVID Impact	3.9	20.0	0.0	0.0	0.0	0.0	0.0	25.0
Unseasonal Excess rainfall	7.8	0.0	100.0	0.0	0.0	61.5	62.5	25.0
Unaffordable fertilizers	7.8	20.0	0.0	0.0	0.0	30.8	12.5	0.0
Water scarcity	58.8	60.0	0.0	33.3	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	66.7	0.0	7.7	25.0	50.0