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# technical bulletin

DEPARTMENT OF AGRICULTURE, GUJARAT STATE, AHMEDABAD-6

Survey of fallow land in Surat and Bulsar districts.

# F-O.R.B.W.A'R.D

This report is second in the series of fallow land surveys. The districts included in the earlier report were Mehsana and Surendranagar, while 1/1 the present report deals with survey of fallow land of Surat and Bulsar districts of Gujarat State.

The work was carried out by the field staff and Officers of the statistics section of the Director  $\Lambda^{ate}$ Agriculture, without whose help this bulletin would not have been possible.

Ahmedabad-6, Dt.24-3-1970.

G.A.PATEL Director of Agriculture.

M/25/3/

REPORT ON SCHEME FOR ASCERTAINING THE EXTENT AND CAUSES OF FALLOW AREAS IN GUJARAT STATE. (SURAT AND BULSAR DISTRICTS)

#### INTRODUCTION:

In order to arrive at the correct classification and interpretation of the different methods of classification of areas followed in various states in country and for inter-state comparability of these figures a technical committee of Government of India in 1949 standardised the definitions for classification of fallow area known as mine way classification. The committee's recommendations for adoption of uniform definition for recording area under fallow were implemented by erst while Bombay State as early as in 1950-51. Later on the extent of area under fallow and its break up in various categories were found to be defective and imperfect, Further the standing committee of the State Rural Development Board in the meeting held on 10th March, 1951 reviewed the question of extending cultivation to fallow areas in the meeting neld on 10th March,1951 and concluded that the extent of rotational fallow and fallow due to other reasons be estimated by the method of random sample survey.

After the formation of Gujarat State along with other schemes this scheme was also continued and this report pertains to Bulsar and Surat districts of Gujarat State. <u>Object:-</u> The main objects of the scheme were: A) To obtain reliable estimates of the total area under fallow in the district and to classify it under three types viz. a) current fallow b)other fallow and c) culturable waste.
B) To ascertain the causes of the land remaining fallow.
<u>Organization:</u> The survey was conducted in Bulsar and Surat districts under the technical control of the Directorate of Agriculture, Gujarat State, in co-operation with the concerned Superintending Agricultural Officers. The field work of the survey was carried out by the staff consisting of non-graduate agriculture diploma holder, Agricultural Assistants, and the survey is carried out by supervisors who were graduates in agriculture.

<u>Coverage:</u> The total area under fallow for the whole of Gujarat State in 1965-66 is reported to be of the order of 3156800 acres. Out of this area 66126 acres i.e. about 2.07% of the total fallow area was reported from Bulsar district. In case of Surat district the survey was under taken during the year 1964-65 and fallow area reported during 1964-65 in the State was 32,09,100 acres. Cut of this, the total fallow area reported in Surat district was 4-554 acres which works out to be 1.29% of the total fallow area in the State.

Lesign of the survey:- The sampling design adopted for the survey was startified unistage random sampling with taluka as strate and village as the unit of sampling.

A sample of 100 villages in each of the districts under survey was selected. Allocation or villages was done in different talukas of the respective districts approximately in proportion to the fallow area reported with minimum three villages in each taluke. The villages in each taluke were selected by simple random sampling with equal probability. The information about the extent of total fallow area in each of the

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selected villages was obtained by way of complete enumeration. Each Agricultural Assistant was assigned about 33 to 35 Villages. For this purpose, the area cultivable but not cropped during the year was recorded by spot inspection after rough measurement of each survey number in the selected villages.For such survey number, the total cultivable area and the area under fallow as reported by "Talati" was also recorded from revenue records. The fallow area was classified as under:

- L) Current fallow:-Land which is kept fallow for the current year i.e. for one year only.
- Other fallow:-Land which is kept fallow for a period of two to five years and
- 3) Culturable waste:-Land which is kept fallow for a period of more than five years.

For the purpose of correct classification of fallow area and also facilitating their checking the year-wise information about the total fallow area for each survey number during the past five years was also recorded.

For ascertaining the causes for the land being kept fallow in each selected village, a sub-sample of 50 survey numbers under fallow was chosen. The concerned cultivators were interogated and reasons for keeping land fallow were recorded. For this, the survey numbers were classified on the basis of depth of soil, soil profile, and extent of soil erosion into four categories, viz. A,B,C, and D, as per criteria followed in the waste\_land survey conducted by the Department of Agriculture.

The four categories of land are defined as under :-Category:-A Land which can be brought easily under plough

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without any special soil conservation measures and having slope not exceeding one percent.

<u>Category-B</u> Land which requires intensive soil conservation measures to bring it under cultivation and the slope of which does not exceed 8 percent.

<u>Category-C</u> Land under this class is suitable only for afforestation and is not suitable for cultivation. The slope of this land is more than 8 percent and it is highly eroded. <u>Category-D</u> The land under this class is away from the forest and not suitable for cultivation but it is suitable for vegetation. This type of land can thus be used for successful growing of grass only.

<u>Scrutiny of returns:</u> Two schedules were canvassed under the survey. Table 'A' of the schedules gives the survey numberwise area under fallow in each of the selected villages and its split up into three categories of fallow viz. (i) current fallow,(ii) other fallow and (iii) culturable waste. It also gives the information about the extent of area under fallow during the past 5 years. Table 'B' of the schedules furnishes the information about the reasons for keeping the land fallow. It also provides the classification of the fallow area into  $A_9B_7C_7$  D categories in termsof bringing it under cultivation based on utility.

The necessary training in recording the survey number-wise fallow area in the prescribed schedules from revenue records and practical field demonstration was given to the field staff by the Assistant Statistition stationed at divisional head quarters.

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The schedules received from the selected villages were scrutinised by the greduate statistical Assistants appointed under the scheme. The supervision of the field work of the Agricultural Assistant was exercised by the graduate Statistical Assistant and Assistant Statistician. The scrutiny regealed that the information was generally recorded in accordance with the instructions.

#### Method of estimation:-

The information about the total fallow area as recorded by'Talati' and as furnished by the Agricultural Assistants was obtained for each survey number of the selected villages of Bulsar and Surat districts and the co-rrelation co-efficient between the village-wise fallow area, recorded by 'Talati' and those based on the inspection by assistants was worked out and it was found that there is a very high positive co-relation indicating that the ratio method of estimation will give an efficient estimate. Thus ratio method of estimation was employed for obtaining estimation of total fallow area using the official fallow area as an auxiliary variate. The procedure adopted for estimation in brief is explained below:-

The ratio of inspected fallow area and official fallow area for each stratum was worked out which is shown in column No.5 of Statement 1. The estimates of total area under fallow presented in Statement 1 were obtained by multiplying the ratio in column No.5, by the total of official figure of acreage under fallow in column No.6 District estimate of the total fallow area was obtained by summing of the taluka figures. For estimating variance following formula was used.

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-6-222V(YR) = N(N-n)(Sy + Rn Sx -2 Rn Sxy)

<u>Results of the Survey:</u> The survey was carried out in all the talukas of both the districts except Nizar taluka of Surat district as the fallow area in this taluka is rather negligible. The discussions below pertain to both the districts.

For giving a comparative idea of ratio estimate of total fallow area with that of corresponding official fallow area, the figures are shown in the following table.

Sr. : District : Official total fallow : Total fallow area : area in the district. : estimated in the No.: ; district. . Bulsar 66126 63642.130 1. (1965-66) 2. Surat 40708 38703.459 (1964.65) and the second second 

During the year 1964-65 the official total fallow area of Suret district was 41554 acres. Since Nizar taluka was not covered under the Survey and area of 846 acres is deducted from the total official fallow area in the district.

It can be seen from the above table that in case of Bulsar district the survey estimate of fallow area is less by 2484 acres which works out to be 3.76%. While in Surat district, the survey estimate of fallow area is less by 2005 acres which works out to be 4.93% only. Further, the total fallow area estimated for Bulsar district is 63642 acres with the sampling error of 0.71% on the basis of ratio of area recorded by the survey staff to that reported by Talatis under fallow. In case of Surat district, the estimated fallow area is '38703 acres with sampling error of 4.03% only. On the basis of ratio of area recorded by the survey starf to that reported by Talati under Tallow. It will also be seen that the official fallow area is excess to the extent of 3.90% in case of Bulsar district.While in case of Surat district, the official fallow area is larger to the extent of 5.18%. The probable reason for this might be the tendency of repeating the same area under fallow without actual inspection on the spot on the part of primary recording agencies. <u>Classification of total fallow area:</u> The estimated fallow area is further classified into three categories for comparision with corresponding official area.

	_	TABLE NO	<u>)</u> _			
District	Categories of A Tallow area.	According Survey	to	Official fallow area as per S.C.R.		
	, Ā	cres	70	Acres	10	
Bulsar	،	, <b>-</b> , <b>-</b> , <b>-</b> , -	- <u></u>	,	وسه ر مه و ه ر مه و سو	
(1965-66)	L.Current fallow	1359.975	30.05	14724	22.27	
	2.0ther fallow	1379.025	36.19	14968	22,63	
	3, Culturable Waste	1752.675	33,76	36434	55.10	
	Total:	5191.675	100.00	66126	100.00	
Surat			• • • •		_	
(1964-65)	L. Current fallow	680.800	15.31	10897	26.77	
r (Except Nizar Toluko )	2. Other fallow	924.200	20.78	19425	47,72	
te rure à	3, Culturable Wast	e 842.525;	63.91	10386	25.51	
	Total:	4447.525	100.00	40708* ••••	100.00	
• - • - • - • - • -	ں <i>ہ</i> ے وہ ہے وہ میں میں میں میں میں و	, w <sub>0</sub> <b></b> 0 <b></b> 0 <b></b> 0 <b></b> 0	• • • • • • • •			

The data in Table No.1 give a comparative idea of survey estimates and that of official area under fallow in Bulsar and Surat districts. It will be seen that as per survey estimates about 33.8% of the fallow area is under culturable waste in Bulsar district. In Surat district 63.9% of the fallow area is under category culturable waste while the official **srea** reported under this category is only 25.5%. Thus official area under culturable waste is 38.4% less than that of survey estimate.Such type of land though available for cultivation but is not cultivated for more than 5 years continuously for one reason of the other. Further, it can be seen that in Bulsar district the official area reported is 7.8% and 13.6% less than **su**rvey estimate under current fallow and other fallow respectively. While in Surat district official area reported is more by 26.9% in case of other fallow and by 11.5% in case of current fallow. Such reporting can be attributed towrong classification.Thus in Bulsar district the official area under current Iallow and other fallow appears low, while in case of Surat district the official area under other fallow and current Iallow appears to be exaggerated.

Classification of fallow area according to different types of <u>soil groups:</u> The estimated fallow are obtained is further classified according to different types of soil groups. viz. A,B,C,& D. These groups are the same as are used in waste land survey. The land under group "C' &'D' is considered unsuitable for cultivation being nighly eroded, and having a slope of more than & This land is suitable for a forestation and grazing purpose. While those with gentle slopes with sufficient depth of soil layers which could be brought under cultivation by soil conservation measures were grouped under class 'A'&'B'. The findings of the survey as 'far as soil group-wise fallow area is concerned are snown in the following table.

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·· · ·	TAI	<b>9</b> 2 315 No.2	
District :	Scil groups :	Area under fallo	v in acres. percentage
Bulsar		1987,425	38,28
f. 1	В	2384.550	45.93
	G	673,925	12,98
	D	145.775	2.81
-	Total:=	5191,675	100.00
Surat	K	998.750	22.46
	В	⊥487 <b></b> ,400	33,44
• •	С	1472.025	33,10
	D	489.350	11.00
· · ·	Total:-	4447,525	100.00

The survey has revealed that about 2.81% of the total fallow area in Bulsar district is classified as 'D' i.e. it can be used for grazing purpose, while in Surat district such type of land under group'D' is found to be 11% of the total fallow area. Such land is highly undulating with thin layer of soil and is not suitable for cultivation. In Bulsar district, about 12.98% of the fallow area is found to be of soil group 'C' i.e. suitable for alforestation in Bulsar district, while it is of the order of . 33.1% in Eurat district. It is rather surprising that about 38.28% of the fallow area is under soil group 'A' in Bulsar district and 22,46% in Surat district, which could be brought under cultivati--on without much difficulties. The reason for such a high proportion of area under soil group'A' might be either due to fact that the definition of soil groups does not cover the aspect of soil deptn, comprehensively and it is just possible that it may include large proportion of such fallow land which is less retentive in nature creating un-suitable situation for

cultivation. About 45.93% of the fallow area was classified under soil group 'B' in Bulsar district and 33.44% in case of Surat district, which could be brought under cultivation after adopting soil conservation measures. This finding is indicative of the possibility that much head way can be made in the activity of soil conservation measures in both the districts in years to come.

Classification of fallow land into different types of soils and different categories of fallow land: The classification shown in Statement 2 for both the districts indicate that land belongings to 'A 'B''C'&'D' groups is found under all categories of fallow land. The land under 'B' group cannot be put under plough unless necessary soil conservation measures are adopted. This shows that about 38,28% of the land belonging to 'A'group was under current fallow in case of Bulsar district and 22,46% of total fallow land in Surat district. The land belonging to 'C'&'D'groups in both the districts is also found to exist under all types of fallow land but most of the land is under culturable waste.

<u>Causes of land remaining fellow:-</u> The reasons for keeping land fallow were ascertained by interviewing the cultivators in the selected villages. These reasons are broadly grouped in Statement 3.

In Bulsar district the survey revealed that about 0.29% of the total rallow area was kept rallow due to high salinity.Where as 73.17% and 3.30% of the fallow land was kept rallow for grass land propose and due to uneven nature of land respectively. Out of the total rallow area kept for grass, about 74.2% of this area falls under other fallow and culturable waste. While 28.8%

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of this area falls under current fallow. About 19.2% of the total fallow due to uneven nature of land comes under the category of culturable waste, while 80.8% of this land falls under the categories of current and other fallows. If some suitable technique is available this land can be considered for reclamation. Likewise 3.54% of fallow which is due to poor fertility of soil and 0.93% of fallow which is due to so called river erosion can also be considered for reclamation. This shows the possibility of reclamation of waste land in the district.

In case of Surat district it will be seen that 21.04% of the area is kept fallow due to high salinity. Such type of land falls under culturable waste only. Where as 62.40% and 3.12% of fallow land is kept fallow for grass land propose and due to uneven nature of land respectively. It will be also seen that out of this area kept for grass about 87.6% of this area falls under other fallow and culturable waste. About 6.2% of the total fallow kept fallow due to uneven nature of land comes under the category current fallow while 93.8% of this land falls under category culturable waste and other fallow.

The fallow land recorded under survey is further classified according to types of soils and reasons for keeping them fallow. The details are given in Statement 4. On reviewing Statement 4 in respect of Bulsar district, it can be observed that about 73.17% and 1.48% of the total fallow area was found to be kept fallow for grass and rotational fallow respectively and fallow land due to these two reasons appear in all the four classes. Fallow due to grass land appears even under "A" and 'B' groups of soils. In case of Surat district 62.40% and 7.45 %

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fallow of the rallow area was due to grass and rotational fallow land due to these reasons appeared in all four classes. It can be seen that about 21.04% of the total fallow area under 'C' & 'D'. classes is fallow due to saltish nature of land. Fallow lands and ownership of land :- On reviewing Statement 5 which gives classification according to ownership and type of land in Bulsar district, it is revealed that about 6.47% of the total fallow area is under ownership of Government, out of which about 33.7% was found under culturable waste. The remaining . 93.5% of the total fallow land is under private ownership.Out of this fallow land 33.7% is found to be under culturable waste, whereas in Surat district 24.3% of the total fallow area is under ownership of Government. Out of which 99.1% is found to be under culturable waste. About 72.63 %1.97% and 1.09% of the total fallow land is under private ownership, panchayat and trust respectively. Even out of privately owned fallow land about 52.6% is found to be under culturable waste.

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<u>Summary:</u> On reviewing the information collected under the survey it appears that the official area reported under fallow land is exaggerated. Further, there seems to be a tendency to record the same area under fallow every year without actual inspection, it is also observed that in Bulsar district the official fallow area is exaggerated to the tune of 3.78% while this is of the order of 4.93% in case of Surat district. The recording of area of different categories (viz. current fallow, other fallow and culturable waste) also appears to be defective due to wrong classification. The tendency of classifying fallow areas under wrong categories i.e. actual area belonging to one category classified into other category needs some sort of

In Bulsar district about 0.29% or the total rallow area is fallow due to saline nature of soil and can be reclaimed if suitable techniques are known. About 3.30% of the total fallow area is reported to be uneven and kept under fallow on that account and can possibly be considered for soil conservation measures. Further about 6.47% of the total fallow area belongs to Government and almost the entire area is poor. This area classified in culturable waste and unsuitable for cultivation: while in case of Surat district about 21.04% of the fallow area is kept fallow due to saline nature of soil and 7.45% and 3.16% of fallow area are found to be fallow due to reasons of rotational fallow and other reasons respectively. Further about 24.3% of the total fallow area belongs to Government ownership and almost this entire area is under culturable waste and is unsuitable for cultivation.Where as 72.63%, 1.97% and 1.09% of the total fallow area belongs to private, panchayat and trust ownersnip respectively.

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### STATEMENT 1

The estimates of fallow area on the ratio of fallow land recorded by Agricultural Assistants and Talatis in the sample villages. (Figures in acres)

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District	Taluka	Area re	corded under	Ratio	Official	Estimated	Stand	Percentage	
		Tarrow Willozo	IN Sample		nor C ( R	area	arnon	standard	
		Talatis	Agri Asstts.		per geoena	2	GIIUI	OF COLP	
		X	Y						
I		3			6	7	8		
Bulsar									
(1965-66)	Bansda	230 <b>。</b> 675	211.825	0,9183	3242	2977,129	<b>2</b> 82 <b>.5</b> 1	9,49	
·	Bulsar	185.425	162.425	0.8760	3670	3214,920	143.15	4.61	
	Chikhali	147.575	147.425	0.9990	4014	4009,986	0.75	0.02	
	Dharampur	4462.600	4256,700	0.9539	42547	<b>40585,58</b> 3	134.27	0,33	
	Gandevi	101,975	101.975	1.0000	1897 .	1897.000		3	
	Navsari	101.200	106,225	1.0497	4719	49 <i>5</i> 3,534	300,14	6.06	
	Pardi	166.400	<b>165.7</b> 80	0.9961	3833	3818,051	50,24	1,32	
_`	<u>Umbargaon</u>	39_675	39350	_0 <u>.9918</u>	2204	2185.927	7,33	0.34	
	Total:	5435,525	5191.675	*0.9551	66126	63642,130	453.94	D 0.71	
Surat				•			,	, <u> </u>	
(1964-65)	Bardoli	247,800	246,300	0°8338	2003	1990.782	-16,72	0.84	
	Chorasi	1385,350	1371.750	0.9902	4497	4452,929	108.62	2,44	
	Kamrej	66,325	64.225	0,9683	1691	1637 <b>.</b> 395	37.48	2,29	
	Mahuva	216,700	212.750	0.9818	2701	2651,842	43.51	1,64	
,	Mandvi	1180.350	1135.700	0,9622	9210	8861.862	165.33	1.87	
	Mang <b>rol</b>	509,600	465.425	0.9133	4057	3705,258	249.34	6.73	
	Olpad	81,300	78.975	0.9714	2280	2214,792	37.83	1.71	
•	Palsana	33,500	33.475	0.9993	1026	1025,282	57.37	5.60	
	Songadh	546,300	496.650	0.9091	7987	7260,982	187.06	2,58	
	Vyara	238,975	229.300	0,9595	2636	2529,242	169.74	6.71	
	Valod	50°020	38 <b>°</b> 220	0.7702	676	520,655	25,82	4.96	
	<u>Uchnal</u>	78.100	74.425	0.9529	1944	1852,438	59.32	3.20	
	Totals_	4634.350	4447.525	F 0.9597	40708	38703 459	1558.19		
		* district	ratio estimate.	 ) .		مية <sup>-</sup> منه ×مه - منه منه			

• district standard error.

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District	Type /Classified of land land	4 4	B	Ç	D	Total	Percentage
Bulsar	Current fallow	861.150	592.700	98,775	7,350	1559,975	30.05
	Other fallow	520.950	1042.100	309.425	.6, 550	1879.025	36,19
	Culturable waste	605.325	749.750	265 <b>.2</b> 25	131.875	1752.675	33,76
	rotal :	1987.425	2384.550	673.925	145.775	5191.675	ده به و در و در و هم به و در و در و
	Percentage :	38.28	45.93	12,98	2.81		100.00
Surat	Current fallow	458.700	1.55.450	53,175	13,475	680.800	15.31
	Other fallow	282.600	460.500	114.950	66.150	924.200	20.78
	Culturable waste	257.450	871.450	1303.900	409.7?5	2842,525	63,91
	Total:	998.750	1487.400	1472.025	489,350	4447.525	
	Percentage	22.46	33,44	33,10	11.00	بي سو هو يون و هو و . م	100.00

B. This class of land requires intensive soil conservation measures to bring it under cultivation. Slope of such land should not be exceeding 8 percent.

C. This class of land is near the forest and not suitable for cultivation. Slope is more than 8 percent and highly eroded. This land is suitable only for afforestation.

D. This class of land is away from the forest and not suitable for cultivation, but it is suitable for vegetation. These land can give good yield of grass only.

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#### STATEMENT 3

Classification of ,fallow land according to reasons and different categories. (Figures in æres) Total Perce-A2 Type of <u>A</u>3 A4 **A**5 **A**6 A7 **A**8 District ntage land Rea sons. Current fallow 979,750 39,450 1,000 6,825 70,950 39,250 21.275 401.475 1559.975 30.05 Bulsar 1450,950 98,775 10,000 19,425 56,700 25,650 -Other fallow 217.525 1879.025 36.19 1367.975 32.875 3.975 22.075 56.325 12.300 18.025 239.125 1752.675 33.76 Culturable waste 3798.675 171.100 14.975 48.325 183.975 77.200 39.300 858.125 5191.675 -Total:-3.30 0.29 0.93 3.54 Percentage 73.17 1.48 0.76 16.53 100.00 Current fallow 343.725 8.625 17.050 3.175 216.775 21.875 Surat 69.575 680.800 15.31 727.500 46.025 -Other fallow l.925 17.650 105.800 2.750 22.550 924.200 20.78 1704.175 84.050 935.950 19.500 34.525 8.825 6.950 48.550 2842.525 63.91 Culturable waste 2775.400 138.700 935.950 38.475 55.350 331.400 31.575 140.675 4447.525 -Total 3-1.25 3,12 21.04 0.87 0.71 62<sub>é</sub>40 7.45 3,16 Percentage :-100.00 N.B. A1= Land kept fallow for grass. A2= Uneven condition of the land. 13= Saltish nature of land. A4= Brosion of land due to river. A5= Poor fertility of soil. A6= Rotational fallow kept by cultivators. A7= Poverty of cultivators.

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A8= Other reasons for keeping land fallow.

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<b>C</b> T as	sif:	ication	of f	allow	land	l accord	ling to :	reasons	and dif	ferent	elasse (Fig	es of l gures i	and n <sub>j</sub> acres	)	
Distric	st C	lassifi ed land	Rea son	Al S.		42 42	.43	A4	A5	A6 3	17	A8	Total	Per	centuge
Bulsar	c — o —	A B C D Tota	al 3= tage	<b>1490</b> 1962 343 2 3798	LOO L50 600 525 675	10,200 47,150 102,275 11,475 171,100 3,30	12,975 2,000 14,975 0,29	3,150 27,050 8,925 9,200 48,325 0,93	4.525 86.050 56.650 16.750 183.97 3.54	36,450 37,950 2,800 5 77,200	21,500 17.800 5 39,30	401.50 211.22 142.67 102.72 0 858.1	0 1987 5 2384 5 673 5 145 25 5191	425 550 925 775 675	38.23 45.23 12.93 2. <u>8</u> 1.
Surat		A B C D Tot		601,5 601,5 376.9 449.6 2775.4	25 25 50 00	1.125 1.9.275 103.775 14.525 138.700	930.050 5.900 935.950	12,425 11,825 ) 13,725 ) 0,500 ) 38,475	18,17 8,62 14.97 13,57 55,35	5 275 5 43 5 9.0 5 2.8 0 331.4	900 28, 625 0, 25 3, 50 50	200 61 375 56 000 20 575 14	400 998 350 148 526 147 400 48	3,750 37,400 22,025 39,350 147,52	22,46 33,44 33,10 11,00 5 -
N.B.	A1 A2 A3 A4 A5 A6 A7 A8	Percen Land ke Uneven Saltish Ercsior Poor fe Rotatic Poverty Other 1	tage pt f cond nat of ertil onal y of reaso	allow ition ure of lard d ity of fallow cultiv ns for	for of t the ue t sof kep rator	grass. he land land. o river l. ot by cu	21.04  ltivator and fallo	0.87 	1,25 	7.4	5 0.	71 : • = • = • = •	3.16 		100.00 

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Clas	ssification of fallow	land according to	o onwership &	class of 1	and (Figu	res in acre	es)
District	Class of Owners. land.	Government	Pfivate	Panchayat	 Trust	Total	Percen ta
Bulsar	Current fallow Other fallow Culturable waste	67.300 155.500 133.050	1492.675 1723.525 1639.625	an an 400 9 — 9 — 9 — 9 — 9 — 9 — 9 — 9 — 9 — 9		1559,975 1879,025 1752,675	30.05 36.19 33.76
⊕ <b>₽ e e e o </b> = 0 <b>=</b> 0	Total:-	335.850	4855.825	ت - ب - ب - ب - ب - ب - ب - ب - ب - ب -	. 0 m 6 6 0 0	5191.675	
• • • • • • • • • • • [ • • • • • • • •	Percentage <sub>8-2</sub>	6.47	93,53	·• - • - • - • - • - • - • - • - • - • -	,	· • • • • • • • • • • • • • • • • • • •	100.00
Jurat Cu	Current fallow Other fallow ulturable waste	9.575 1071.550	666.300 864.375 1699.325	14.325 50.250 23.400	0.175 48.250	680.800 924.200 2842.525	15.31 20.78 63.91
o <b>≠ •</b> − • − • − •	Total :-	1081.125	3230.000	87.975	48,425	4447.525	
•••••••• Pe	ercentage : :=	2,4,31	72.63	1.97	1.09		100.00

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# APPENDIX A

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Scheme for ascertaining the extent and causes of fallow areas in Gujarat State.

Distr:	ict		<u>TABLE A</u> Taluka		Circle	Vil	Lage
Name ( Head (	of Agricult quarter.	iral Assistant	Geographi _ <u>cultivab</u>	cal area of t le area of th	he village e village:	Date of visit Acre Guntha	
Sr. Noc	Survey number and pot-his	Name of Khatedar, sa	Details of ar <u>Classificatio</u> Total Cultiva	ea of survey column <u>n of fallow a</u> Fallow	number and No.2 rea of cur	pot-hissa num rent year	ber mentioned in
			area -ble ar A.G. A.G.	ea land as per VII XII-Villag record.	fallow (For one e year) A.G.	(For two to three years)	waste or Permanent fall <b>ow</b> (More than five years).
1	2	3	4 5	A.G. 6	7	8	A.G. 9
Fallo as pe	ow area Det er spot ection	ails of areas of	of survey numbe	er and pot his	sa number (For the	mentioned in d last five yea	••••••••••••••••••••••••••••••••••••••
A.G.	Bec one ye A.C	ofre Before ear two years A.G. 12	Before three years A.G. 13	Before four years. A.G. 14	Before five yea A.G. 15	rs	arks
, ش ہ س <sub>م</sub>	)ate:-	· ~ • ~ • - • ~ • ~ • ~ • - • - • -	- e — e — e — e — e — e — e — e — e — e	• • • • • • • • • • • • • • • • • • •	,	- e - e - e - e <b>-</b> e <b>-</b> e <b>-</b> e	<b> </b>
M/1:	3 <b>/3/</b> .					Signature \gr	icultural Assistant.

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## APPENDIX A

Scheme for ascertaining the extent and causes of fallow areas in Gujarat State.

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Reasons for fallow land in the selected survey and pot-hissa numbers.

## TABLE B

Dist	rict	Ta	luka		° <b>,</b> ⊨⊃					
Name	of Agricultu	ma/Assistant:	•	Date of visit:						
Head	quarter:-			• •	•	-				
Sr. No.	Survey No. & pot-hissa No.	Cultivable area	Name of Khatedar.	Details of a <u>mentioned in</u> Fallow area as per Talati's record.	rea of surve column No.2. Fallow area as per spot inspection.	y numbers Current fallow.	and pot Other fallow.	-hissa numbe Culturable waste or Permanent fallow	rs	
1	2.	3	4	5	6	7	8	9	. ,	
<u>Clas</u>	sification of	Fallow area	of survey num	bers and pot-	nissa number	s mention	ed in Co	<u>1.No.2.</u>	,	
A-Cla 10	ass ·	B-Class 11	C-Clas 12	s .	D-Class 13		Remark 14	S	·	
0-*-	• - • - • - • - • - • - • - •		,	• • • • • • • • • • • • • • • •		Signature	:		, m 0 6 cm	
M/13,	/ 3/				Agric	ulturalAs	sistant.			