

## **IRRIGATION AND GROUND WATER**

The under ground water of this district is brackish.. 28% of under ground water is totally unfit where as 42% is marginally fit. This poor quality under ground water affects the soil due to accumulation of salts in the upper layer turning the natural soil into saline and alkali soils as shown in map.90 % area of this districts is irrigated as shown in figure 2.3 Canals are the major source of irrigation as the 85% area is irrigated by canals where as tube- well irrigation is just in 15% of the net area irrigated as shown in figure 2.4

### **Sector wise Information**

#### **Agriculture**

Cotton-Wheat is major crop rotation followed by Paddy-Wheat. Total area under Wheat, Cotton and paddy is 45,26 and 18 % respectively of the total cropped area. Under the pulses moong and gram are sown in this distt. The area under these crops is only 1%.The oilseed, barley guara and groundnut are also sown under 2 % area. As per the data collected from villages the block wise area, yield and production of different crops are mentioned in tables 2.7.1 &2.7.2 During kharif, cotton and paddy are the major crops where as moong and guara are grown as minor crops. The average yield of cotton and paddy is higher in Mansa and Bhikhi because the soils of these blocks are fertile with good quality under ground water. The average yields of Budhlada, Jhunir and Sardulgarh are almost at par because the majority of areas of these blocks have poor quality of under ground water. During Rabi, wheat is the major crop where as gram, oil seed and barley are occupy small areas. The average yield of wheat is higher in Mansa and Bhikhi due to fertile soil as well as the early sowing because the majority of area of these blocks follow paddy – wheat rotation .The reason for lower yield of wheat in Budhlada, Jhunir and Sardulgarh is due to poor quality under ground water and the cotton- wheat rotation which result in delay in sowing .The average yield of minor crops is lower due to shifted to marginal soils because the fertile soils are brought under cotton ,paddy and wheat to get maximum profit

### **Figure No. 2.3 Information about Irrigation in district Mansa**



		gated		fed			gated		fed			gated	n fed	rage
Cotton	Mansa	24085	99.8	27	0.2	24112	101299	99.9	49	0.1	101348	715	310	714
Paddy		13744	100	--	---	13744	59237	100	-----	----	59237	4310	--	4310
Moong		38	93	3	07	41	35	96	1.5	04	36.5	910	490	890
Guara		207	55	168	45	375	244	72	96	28	340	1180	570	906
Cotton	Bhikhi	7648	99.6	29	0.4	7677	32257	99.8	53	0.2	32310	717	313	715
Paddy		21075	100	--	---	21075	92625	100	---	---	92625	4395	---	4395
Moong		24	80	6	20	30	21	91	2	09	23	890	385	767
Guara		300	81	70	19	370	327	90	35	10	362	1090	495	978
Cotton	Budh- -lada	24870	99.8	26	0.2	24896	101235	99.9	46	0.1	101281	692	302	692
Paddy		27510	100	--	----	27510	112516	100	---	---	112516	4090	--	4090
Moong		87	72	34	28	121	78	86	13	14	91	895	370	752
Guara		1243	58	911	42	2154	1330	76	424	24	1754	1070	465	814
Cotton	Sardulgar h	16471	100	--	---	16471	66368	100	---	--	66368	685	---	685
Paddy		2460	100	--	---	2460	9914	100	---	--	9914	4030	--	4030
Moong		65	84	12	16	77	53	94	3.5	06	56.5	815	295	734
Guara		773	77	229	23	1002	750	89	94	11	844	970	410	842
Cotton	Jhunir	18564	99.9	13	0.1	18577	75130	99.9	23	0.1	75153	688	295	688
Paddy		5922	100	--	---	5922	23658	100	-----	----	23658	3995	---	3995
Moong		57	93	4	07	61	44	98	1	0.2	45	775	285	737
Guara		999	79	267	21	1266	954	89	115	11	1069	955	430	844

### Annex.No.2.7.2 Block wise Area, Production and Yield of Major Crops in irrigated / Rainfed Conditions during Rabi Season

Crops	Block	Area (ha)					Production					Yield (q/ha)		
		Irri gated	%	Rain fed	%	Total	Irri gated	%	Rain fed	%	Total	Irri gated	Rain fed	Avera ge
Wheat	Mansa	31746	100	3	---	31749	149047	100	7.8	-----	149057	4695	2580	4695
Oilseed		214	81	51	19	265	323	91	33	09	356	1510	650	1343
Gram		26	93	2	07	28	37	96	1.5	04	38.5	1410	670	1375

Barley		179	93	13	07	192	643	95	33	05	676	3590	2540	3521
Wheat	Bhikhi	30047	100	---	--	30047	141371	100	-----	-----	141371	4705	----	4705
Oilseed		123	89	16	11	139	187	95	10	05	197	1520	630	1410
Gram		18	95	1	05	19	25	98	0.6	02	25.6	1390	610	1347
Barley		99	95	5	05	104	354	97	12	0.3	366	3580	2390	3519
Wheat	Budhlada	55703	100	--	--	55703	255788	100	---	---	255788	4592	-----	4592
Oilseed		478	80	120	20	598	626	90	71	10	697	1310	590	1165
Gram		19	59	13	41	32	26	77	08	23	34	1385	640	1063
Barley		356	97	13	03	369	1213	98	30	0.2	1243	3410	2270	3368
Wheat	SardulGarh	25279	100	--	---	25279	113426	100	---	----	113426	4487	--	4487
Oilseed		726	84	137	16	863	1013	93	80	07	1093	1395	585	1266
Gram		18	69	8	31	26	25		5		30	1410	630	1153
Barley		236	96	10	04	246	791		23		814	3350	2310	3310
Wheat	Jhumir	27417	99.9	8	0.1	27425	122937	100	20	---	122957	4484	2470	4483
Oilseed		245	65	132	35	377	339	81	78	19	417	1385	590	1106
Gram		30	59	21	41	51	44	75	15	25	59	1465	690	1157
Barley		305	98	7	02	312	1020		17		1037	3345	2370	3324