

## PHYSICAL CONDITION OF THE SOIL

The department has four soil testing laboratories in the district which are located at Malerkotla, Dhuri, Sangrur and Sunam and one laboratory is placed in the co-operative sector. These laboratories insist the farmer about the health of their soil by testing the samples. On the basis of these results the department advise some valuable suggestions to maintain the essential plant nutrients which are useful in planning to enhance their production.

**Table 4.3: Soil Testing Laboratories in the District**

Soil Testing Laboratories Under	Types of the Laboratories			Annual Analysing Capacity (No. of Samples)	No. of Samples Analysed
	Static	Mobile	Total		
Govt. Sector	4	0	4	35000	19161
Co- Operative	1	0	1	3600	942
Private Sector	0	0	0	0	0
Total	5	0	5	38600	20103

Table 4.4 shows the number of soil samples which were analysed and the results are as below:-

**Table 4.4: Soil Fertility Indices of the District**

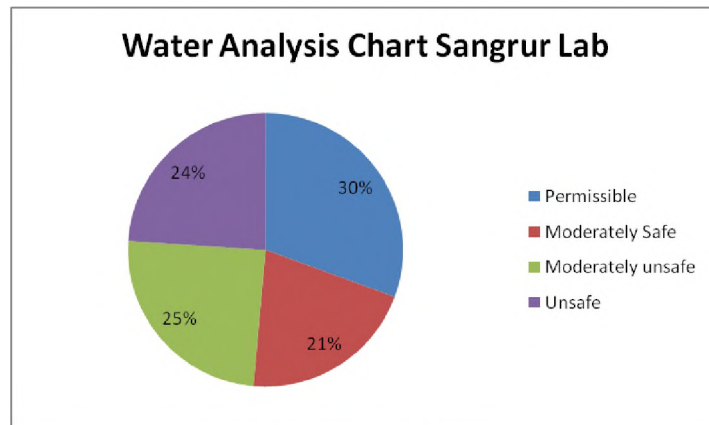
Name of the Laboratory	PH			EC (ds/m)			Organic Carbon (%)		
	Acidic	Netural	Alkaline	Low	Medium	High	Low	Medium	High
16917									
Sangrur	0	5040	590	110	4680	864	1840	2940	780
Malerkotla	0	5085	569	105	4800	802	1930	3013	730
Sunam	0	5038	595	142	4516	898	1880	3029	775
Total	0	15163	1754	357	13996	2564	5650	8982	2285
Name of the Laboratory	Available Nitrogen (Kg/ha)			Available Phosparus(Kg/ha)			Available Potash (Kg/ha)		
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Sangrur	0	0	0	1650	2630	1291	5	2185	3350
Malerkotla	0	0	0	1657	2669	1310	6	2350	3356
Sunam	0	0	0	1690	2690	1330	5	2270	3390
Total	0	0	0	4997	7989	3931	16	6805	10096

### Analysis of Water Samples:

These Soil Testing Laboratories are also analyzing the water samples. The farmers get more benefit by knowing their underground water condition which is an important determinant of the good crop. During 2008-09, 2911 water samples were analysed and the results are as under.

**Table 4.5: Water Samples Analysis Report**

Name of the Laboratories	No of Water samples analyzed	Permissible	Moderately Safe	Moderately unsafe	Unsafe
	Total	C-1	C-2	C-3	C-4
Sangrur	1510	462	314	372	362
Malerkotla	486	210	127	98	51
Dhuri	585	193	117	146	129
Sunam	330	83	99	82	66
Total	2911	948	657	698	608



**Figure: 4.2**

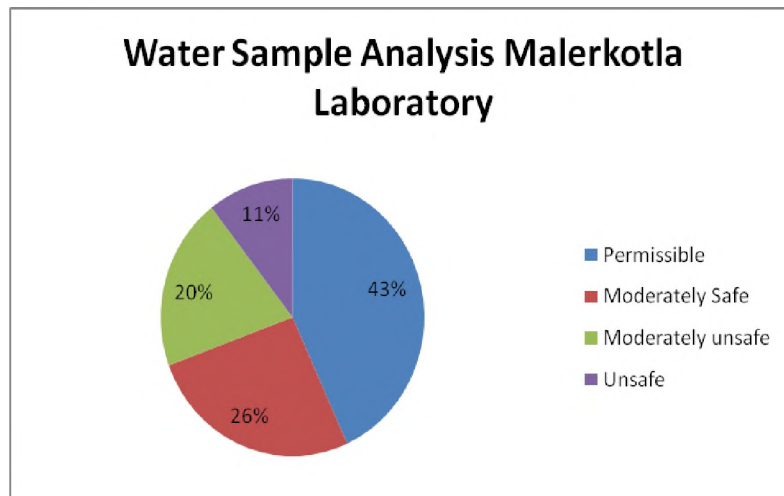


Figure: 4.3

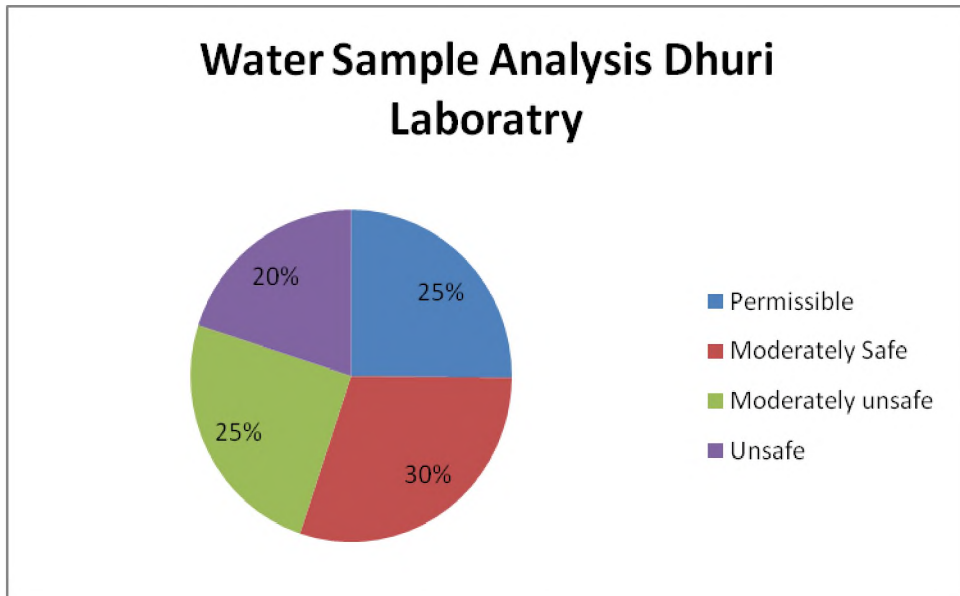


Figure 4.4

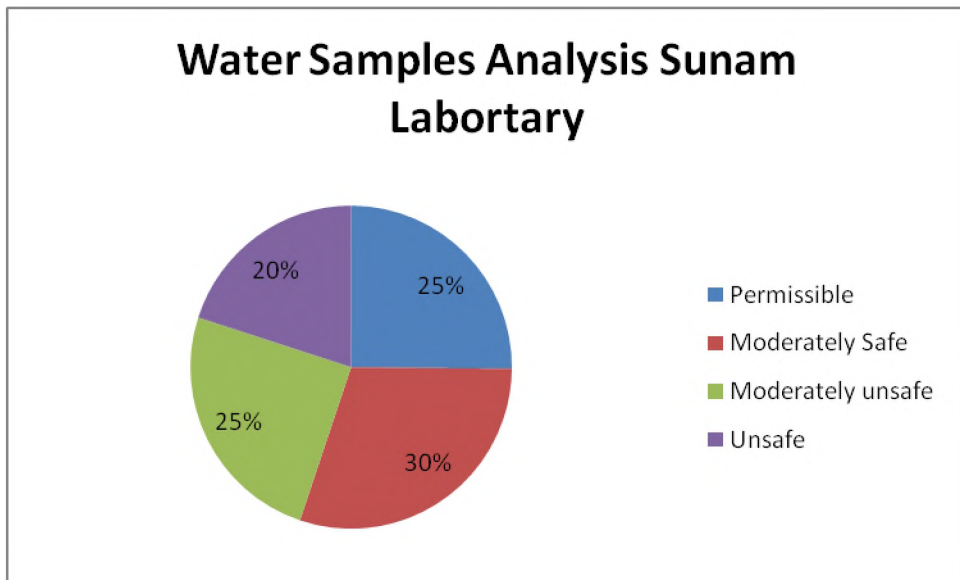


Figure: 4.5