### **DISTRICT PROFILE**

#### **INTRODUCITON -**

The district is segregated in three agro-climatic zones. The climatic parameters in all four *tehsils* favor the quality seed production of pulses. Moreover, the soils in district also have potential to harvest good yield of quality pulse seed. Apart from these factors, the small and medium scale irrigation project ensures the timely irrigation in pulse dominated remote villages in district. The remote villages on the foothills of Sahyadri towards Sakri and Dhule *tehsils* having favorable situation of quality pulse seed production, are approachable being good road connectivity. All these factors make the district a potential hub for quality pulse production. The data on area and production of major pulses in district further supports the statements and moreover confirms its importance in pulse production. The farmers in district are currently relying on the private companies and local races for sowing of pulses. The district currently fetches the need of quality seeds. Figures in Table - 6 portray current availability of seed in the district. The availability of quality seed produce from proposed seed hub could further enhance the total pulse production of district.

#### AGRO-CLIMATIC ZONES OF DISTRICT

The major part of the district falls under Scarcity and Assured rainfall zone. The distribution and the characteristic features of agroclimatic zone in district are as:

#### 1. Assured rainfall zone:

The assured rainfall zone comprises part of Shirpur Block with assured rainfall, which varies from 700 to 900 mm and having medium to heavy soils. Approx. 29.32 % District geographical area is under Assured rainfall Zone

### 2. Scarcity zone:

Scarcity Zone includes eastern part of Sakri, Dhule and Shindkheda blocks which receives erratic rainfall up to 500 mm and having light to medium soils. Approx. 50.27 % district geographical area is under Scarcity Zone.

#### 3. Transition II zone:

This zone includes Western part of Sakri `block having 700 to 1750 mm rainfall with light medium soil. Approx. 20.39 % District geographical area is under Transition II zone.

**CLIMATIC PARAMETER:** (Average values of climatic parameters last six years)

Year	Rainfall	Tempera	nture <sup>0</sup> C	Relative Humidity (%)	
i ear	(mm)	Maximum	Minimum	Maximum	Minimum
2011-12	745.7	34.25192	20.29423	67.59615	32.63462
2012-13	549.4	34.07692	20.44615	74.26923	44.88462
2013-14	958.29	32.85189	19.72453	77.64755	44.73491
2014-15	308.8	34.05192	19.58462	71.50962	36.48462
2015-16	512.6	35.08269	20.01923	67.54231	32.03462

Source – Department of Agriculture, DSAO Office, Dhule

#### SOIL CHARACTERISTICS OF DHULE DISTRICT

### 1 Light Soils 0 to 228.6 mm. (0"-9"):

Lighter soils are largely with in northern and southern areas flanking on both sides of the central Tapi valley. Soils are light loams to clay loams in texture with subangular blocky to angular blocky in structure in the lower zone. In general these are low in fertility and require judicious supply of manures and fertilizers.

### 2 Medium soils 228.6-457.2 mm. (9"-18"):

These soils are predominantly located in the southern and central zones of the district below, the Tapi valley in Dhule and Sakri areas with intervening narrow belts of fairly shallow soils. The soils are dark brown to dark reddish brown in color with fairly good drainage, granular to subangular, blocky in structure, loamy to clay loam in texture. The soils in general are deficient in nitrogen, organic matter and phosphate contents and therefore require adequate doses of the same for better harvest.

### 3 Medium deep soils 457.2 - 914.4 mm. (18"- 36"):,

These soils are fairly scattered in many smaller river valleys and local pockets, and largely in Tapi and Panzra river valleys on the outer side of the valleys. The soils are clay loam to clayey in texture with dark brown to very dark gray brown in color and sub angular blocky to angular blocky in structure. Application of manures and fertilizers is needed for these nutrients as per local conditions for better returns.

### 4 Deep soils more than 914.4 mm. (36"):

These soils are mostly in the valleys of Tapi and Panzara. Besides a few scattered local patches are sandy clay loam to clayey in texture with clay percentage upto 60.0 per cent at the highest and 40-55 per cent in general for most soils. Structure varies from sub angular blocky to angular blocky with dark gray brown to very dark gray brown color. The special characteristic is that the subsoil layers have diminishing clay percentage upto certain depth 1.219 to 1.524 meters (4 to 5 ft.) particularly in the Tapi valley. Organic matter contents are very low varying from

0.12 to 0.37 per cent. In general the soils are more deficient in nitrogen and organic matter contents and need more manures and fertilizers to supply the same.

Table - Types of Soils and its Percentage in District

S. No	Soil type	Characteristics	Area in ha
1.	Shallow	1. Less than 45cm depth	
		2. Less water holding capacity	65 %
		3. suitable for only one crop in kharif	
2.	Medium	1. 45 to 60 cm depth	
		2. Medium water holding capacity	25 %
		3. Suitable for to cropping in a season	
3.	Deep Black	1. More than 60 cm depth	
		2. High water holding capacity	10 %
		3. Suitable for more than 2 cropping in a season	

### IRRIGATION PROJECT AND AREA UNDER IRRIGATION

Out of total cultivated area of 4.64 Lakh ha 41892 hectare (9.01%) area is under gross irrigation. Net irrigated area is the district is 32952 ha (8.25%) out of which 83.68% area irrigates from well's and remaining 16.32% area from surface sources. Total number of irrigation well's in the district is 25729. The district has electrically operated irrigation pumps to the tune of 26835 and 1998 diesel engine are being operated to provide assured irrigation.

**Table -Source wise irrigated area (Area in hectares)** 

Talula	Canals	Open	Open Wells 7		Tube/Bore wells		Lift Irrigation	
Taluka	(Area)	Nos.	Area	Nos.	Area	Nos.	Area	Area
Dhule	4999	4983	6716	26	16	695	1300	13031
Sakri	2131	7670	10898	323	170	702	1400	14599
Shirpur	3561	5414	10936	2996	3735	44	82	18314
Shindkheda	229	4170	6620	147	156	644	1200	8205
	10920	22237	35170	3492	4077	2085	3982	54149

# 2. STATUS OF INFRASTRUCTURE AVAILABLE

### **GENERAL INFORMATION**

### Name and address of KVK with phone, fax and e-mail

A 4.1	Telep	hone	T	Sanction
Address	Office	FAX	E mail	Year
Krishi Vigyan Kendra				
College of Agriculture,	02562-	02562-	malayladhula@amail.aam	
Parola Road, Dhule	230362	230362	pckvkdhule@gmail.com	1983
Pin- 424 004 (M.S.)				

# Name and address of host organization with phone, fax and e-mail

A ddwogo	Telep	hone	E mail	
Address	Office	FAX	E mail	
Director of Extension Education Mahatma Phule Krishi Vidyapeeth, Rahuri Dist. Ahmednagar (M.S.)	02426- 243230	02426- 243230	deempkv@rediffmail.com	

### Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact			
Name	Residence	Mobile	Email	
Dr. M. C. Ahire		9850649868	pckvkdhule@rediffmail.com	

# Total land with KVK (in ha)

S. No.	Item	Area (ha)
1	Under Buildings	2.35
2.	Under Demonstration Units	0.35
3.	Under Crops	13.70
4.	Orchard/Agro-forestry	1.60
5.	Others (specify)	2.00`
	Total	20.00

# **Infrastructural Development:**

### Buildings

S. No.	Name of building	Source of funding	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)
1.	Administrative Building	ICAR	1995-96	550	17.23 Lakh
2.	Farmers Hostel	ICAR	1985-86	300	6.5 Lakh
3.	Staff Quarters (6)				
4.	Demonstration Units (2)	Host institute	1999-2000	200	2 Lakh
5	Fencing	ICAR	March-2001		35,000
6	Rain Water harvesting system	ICAR	March-2007	2 acre	414579

# 3. <u>CONVERGENCE WITH LINE DEPARTMENTS</u>:

# **LINKAGES**

# 1. Functional linkage with different organizations

Name of organization	Nature of linkage
1.ICAR,	Financial support and technical guidance to the KVK
2.MPKV, Rahuri	Technical guidance and infrastructure facilities
3.State Dept. of Agriculture	Collaborative training programme
4.ATMA,dhule	Joint organization of training programme, organization of
	exposure visit, development of demonstration unit at
	farmers field, literature
5.Anganwadi teachers training center, Dhule	Joint organization of training programme
6.NABARD	Jointly organization of training programme
7.Deshbandhu & Manju Gupta Foundation	Jointly organization of training programme
8. CENT- RSETI	Jointly organization of training programme
9. Agriculture college, Extension Block	Jointly organization of training & group discussion
	programme