

**Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)**  
**Agro-climatic Zones of Pune district under KVK, Narayangaon Jurisdiction**

Sr. No	Agro-climatic Zone	Characteristics			
		Climatic conditions	Average annual rainfall	Soil type	Crop and cropping pattern
1.	Ghat zone  Part of Maval, Mulashi	Maximum temp. ranges from 29-39 C. Minimum temp ranges from 13-20 C.	3000 to 6000 mm	'Warkas ' i.e. light laterite & reddish brown. Distinctly acidic, poor fertility, low phosphorous & potash content	25% area is under forest. Principal crops- rice/ragi/kodra & other cereals. Rabi jowar, gram, groundnut, niger. Sugarcane are major crops. Area under spices 353 ha. Fruits & vegetables 2933ha. Well suited conditions for rainfed crops. Fruits-mango, cashew, jackfruit, jamun and karwanda
2	Sub Mountain Mulshi, Khed and Maval Junnar and Ambegaon	Average maximum temperature is between 28-35 C and minimum 14-19 C	700-2500 mm. Rains received mostly from S-W monsoon.	Soils are reddish brown to black tending to lateritic. pH 6-7. Soils rich in nitrogen but low in phosphorous & potash	Mainly dominated by kharif cereals, groundnut & sugarcane. Rabi crops are taken where there are deep soils with good moisture holding capacity. Vegetables-potato, onion, chillies, tomato & brinjal. Fruits-mango, banana, guava cashew & grapes.
3	Plain Zone Junnar and Ambegaon	Water availability ranges from 120-150 days. Maximum temperature 40 C & minimum 5 C.	Well distributed rainfall 700 to 1200 mm	Topography is plain. Soils grayish black .Moderately alkaline pH 7.4-8.4 , lowest layer is 'Murum' strata .Fair in NPK content. Well drained & good for irrigation.	The zone is predominantly a kharif tract suitable for single rainfed crop. Principal crops grown -kharif & rabi jowar, bajra, groundnut ,wheat , sugarcane,udid,tur gram & ragi.
4	Scarcity Zone shirur	Very low rainfall with uncertainty & ill distribution. Occurrence of drought is noted once in three years. Dry spell varies from 2-10 weeks. Water availability 60-140 days Which is due to 1) delayed onset of monsoon 2) early ceasation of monsoon. Maximum temperature 41 C minimum -14-15 C	Less than 750mm in 45 days. Two peaks of rainfall, 1)June/July2)September .Bimodal pattern of rainfall.	General topography is having slope between 1-2%. Infiltration rate is 6-7 mm/hr. The soils are vertisol Soils have Montmorilonite clay. Poor in nitrogen , low to medium in phosphate & rich in potash. Problematic soils are predominant	Based on bimodal distribution of rainfall hence two cropping systems are noticed. During kharif shallow & poor moisture retentive soils are cultivated. Medium deep soils with good moisture holding capacity are diverted to rabi cropping. Kharif cropping 25-30%. Crops -bajra,jowar ,groundnut, sunflower ,pulses etc. Productivity is rather low in both the seasons.