

PART - I
SUMMARY OF FACTS ON WHICH THE PROPOSALS ARE BASED
CHAPTER - I
THE TRACT DEALT WITH

SECTION-1 : NAME AND SITUATION

1.1.1 The area dealt with under this plan comprises of the Reserved Forest area 547.45 sq.km and 27.23 sq.km of Unclassed Forest area of Ghod Project Division with headquarter at Junnar. The forest area of this division spreads over that part of Pune District, which lies to the north of river Bhima and covers Khed, Ambegaon, Junnar and Shirur Talukas. The total forest area dealt under this plan is 574.68 sq.km. The forest areas are quite scattered and are distributed in eight ranges, namely Otur, Junnar, Narayangaon, Ghodegaon, Rajgurunagar, Sirur, Chakan (MAP), and Manchar(MAP).

1.1.2 The forest area spreads between 73 31' to 74 30' East Longitudes and 18 20' to 19 31' north Latitudes. The area is bounded by on :-

North : Ahmednagar district

East : Ahmednagar district

South : Maval, Haveli and Daund talukas of Pune district.

West : Thana district.

SECTION 2 : CONFIGURATION OF THE GROUND

1.2.1 The tract in general is undulating and hilly. The main range of Sahyadri stretching over about sixty kilometers from north to south forms the western boundry of the tract. Ranges originating from the Sahyadrian complex run in the south-east direction and divide the tract into three segments covered by the basins of major river namely Kukdi, Ghod and Bhima. The main line of the Sahyadris is inaccessible in major area except near the saddle at Khirashwar from where the Ane-Kalyan road passes over the Malsej Ghat. The top of the Sahyadris and some of its spurs look like a succession of fortresses raised on a series of plateaus. From the high tableland on the east the Sahyadris seem somewhat low and tame, but the western edge of their crest stands out from the Konkan with bold wild outline and cliffs which at places have a sheer drop of over 1000 meters. Manjarmai hill which is the highest point is approximately 1600 metres above mean sea level. Average elevation of the tract is 400 metres.

1.2.2 The physiography of this area has given rise to 4 major characteristic land forms viz (1) the hill and ghat section (2) the foot hill zones (3) the plateau and (4) the plains and almost 70% area is covered by hills and the foot hills. The talukawise area extent of such features, are as under: (Area in sq.kms)

Sr.No.	Taluka	Hills Ghats	Foot Hills	Plains	Plateau	Total
1	Junnar	625.00	558.00	226.00	00	1409.00
2	Ambegaon	770.50	226.00	19.50	00	1587.00
3	Shirur	80.00	259.00	914.00	334.00	1587.00
4	Khed	432.00	922.50	46.50	00	1401.00
	Total	1907.50	1965.50	1206.00	334.00	5413.00

Drainage:

1.2.4 The area is drained by the three main rivers viz. Kukadi, Ghod and Bhima, dividing the tract into definite basins. Pushpavati, Meena and Bhama are the principle tributaries. It rises from the Bhimashankar hills and running in South-east direction joins the Krishna.

Ghod and Kukadi rivers have acquired economic importance on account of the dams constructed on them and support an extensive network of canals for irrigation.

SECTION 3 : GEOLOGY, ROCK AND SOIL

1.3.1 The main geological formation in the tract is Deccan trap. The Deccan lava flows are found mostly in the form of horizontally bedded sheets. The flows usually form flat topped hills which is the major characteristic of the trappean country. Deccan trap is distinguished into two varieties viz. vesicular and non vesicular. The vesicular type is soft, friable and breaks easily. The non vasicular type is hard, tough, compact, medium to fine-grained and breaks with a conchoidal fracture. The rock consists mainly of basalt and is dark grey or dark greenish grey in colour, the soil is grey, silty-clayloam to clayloam and moderately deep to deep in undulating and flat area, whereas on hill slopes, it is grey to red, loam to loamysand, shallow, impoverished and often mixed with loose stones and/or boulders. The soil variation is mainly due to landform and erosion-intensity.

Soils:

1.3.2 Soil constitutes the physical basis of all the plantation and afforestation practices. The capacity of soil to retain and transmit moisture depends upon its structure and texture, three major nutrients mainly Nitrogen, Phosphorus and Potassium account for soil fertility. Based upon the phisical characteristics of soil, they can be divided into five major groups viz. (1) Lateritic soil (2) Reddish brown light soil (3) Coarse shallow soil (4) Medium black soil and (5) Deep black soil.

1.3.3 The deep black soil zone generally develops along the lowest reaches of the valleys and is found along the banks of important drainage systems. These are developed in the form of narrow strips. The total area occupied by such soil type in this division is round about 154 sq.km and constitutes about 2.8 percent of the total Ghod Project Division's soil cover which is 5411 Sq.km. out of this, a negligible portion is covered by forest.

1.3.4 The medium black soils have developed along the secondary minor drainage system of the area and also along the intermediate gradients areas. They are also developed in localized isolated patches on the plateau regions. The capacity of internal drainage of such soil is fairly good. Total area occupied by such soils is 1248 sq.kms. and constitutes about 23 percent of the total soil cover.

1.3.5 The shallow soils have developed along the foothills and the ridges. Total area covered us about 777 sq.kms and constitutes 14.37 percent.

1.3.6 The reddish brown soils have developed all along the slopes of Sayhadri hills covering an area of about 3170 sq. kms. Which constitute about 58.8% of the soil cover.

1.3.7 Lateritic soils are met with along the foothills of Sahyadri ranges in Western part of Khed ranges. They are poorly sorted and reddish brown in co lour. Their fertility is also low. The area covered is about 61 sq.kms and constitute about 1.12 percent.

1.3.8 The soil in general is clayey loam in texture and fairly high in the content of calcium carbonate. The soils are generally well supplied with nitrogen but are low in available potassium and phosphates.

1.3.9 The above classification of soil types in this tract is highly broad based and it is certain that there can be intricate variations in the physical and chemical characteristics of the soil type in every village depending upon a number of variable factors. It is therefore,

extremely necessary to test the soil samples of the areas taken up for plantations and afforestation to decide the doses of manure and basic elements to be supplied.

1.3.10 Distribution of different types of soils in Ghod Project Division is as given below:
(Area in Sq.Km)

Sr No	Soils	Khed	Junnar	Ambegaon	Sirur	Total
1	Lateritic soil	61	-	-	-	61
2	Reddish brown soil along hill slopes	1214	983	894	80	3171
3	Coarse shallow soil	126	106	46	499	777
4	Medium black soil	-	306	76	866	1248
5	Deep black soil	-	13	-	141	154
	Total	1401	1408	1016	1586	5411

SECTION 4 : CLIMATE AND RAINFALL

1.4.1 The climate is equable and bracing, in general, except in summer when it becomes hot. Especially, Shirur tahsils has a hot and dry climate. No extremes of temperatures are experienced. Details are given in Appendix No- I .The climate of the tract can be classified into three distinct seasons, as under:

- Monsoon, commencing from the middle of June and lasting up to the end of September.
- Winter, commencing from October and lasting up to the middle of March. Winter is severe during December and January.
- Summer, starting from the middle of March and lasting up to mid June. Summer is hot. The highest maximum temperature in May rises to 40C.while during winter the temperature drops down to 7C.

1.4.2 The area covered by this Division shows a wide variation of rainfall patterns, primarily due to the peculiar physiographic configurations. The mean average rainfall varies from about 3000 mm at Taleghar in West to about 1000 mm at Junnar in the central region, to less than 500 mm in Shirur in the east. The mid central zone shows a sharp break from the Western zone in the rainfall pattern due to the orographic influence of the Western Ghats. The area receives rainfall mainly from South-West monsoon which sets in during the mid June and gradually recedes in the month of October. An important feature of the rainfall pattern in this area is that very heavy rainfall takes place towards the hill ranges of Sahyadri near Bhimashankar region followed suddenly by a low rainfall in the lee-ward side including the central and eastern regions. The figures of the average rainfall by months for the last 20 years for various stations in Pune District have been tabulated in Appendix No- II.

1.4.3 It is seen that the degree of reliability of rainfall is more in the Western part than in the eastern part covering Shirur taluka. The failure of rainfall is common in Shirur taluka. On the basis of mean annual rainfall the area can be broadly divided into three major zones:

- Zone 1:- Areas where the rainfall exceeds 1500 mm per annum.
- Zone 2:- Insufficient rainfall tract wilk annual rainfall from 1500 mm to750mm.
- Zone 3:- Poor rainfall areas where rainfall is less than 750 mm per annum.

1.4.4 The monthly distribution of rainfall is more important than the total annual rainfall. Moisture deficiency during the major part of year prevails in the central and eastern part of

the area. In such areas the potential evapotranspiration exceeds precipitation, thereby resulting in arid and semi arid conditions.

1.4.5 It is apparent that suitable choice of species would have to be made during plantation and afforestation programme based upon the rainfall variation pattern. The area falling under the third zone is incidentally the chronic drought prone area of this division. The fact finding committee of Government of Maharashtra in their report in 1973 identified the chronic drought prone areas of Pune District. The following table indicates the details of drought prone areas falling within the jurisdiction of this division.

Sr No	Taluka	Total area of Taluka	Drought affected area	Percentage
1	Junnar	1408	864	61.30
2	Ambegaon	1016	362	35.60
3	Shirur	1586	1349	85.10
4	Khed	1401	560	40.00
	Total	5411	3155	57.93

1.4.6 In the south-West monsoon months the climate is highly humid but in the summer and the cold season the climate is dry particularly in the afternoon. Dryness is more marked in the plains than in the hills.

1.4.7 Winds are strong particularly in the South-West monsoon season in the hills. For the rest of the year they are light to moderate.

1.4.8 Thunderstorms occur in the post monsoon months and the hot season. The hills are generally covered with clouds in the monsoon season. The main range of Sahyadris remains covered under fog for a long period during the rainy season. Fog also occurs occasionally in the valleys in the cold season. Occurrence of frost is not recorded.

SECTION 5 : WATER SUPPLY

1.5.1 The water table is generally low and its depth varies from place to place. However, the depth varies from 6 to 15 metres from the ground level. The tract contains rivers, streams and few reservoirs. Bhima and Ghod are the major rivers flowing through the tract. Important tributaries are Kukadi, Pushpavati, Bhima and Meena rivers. These rivers provide perennial source of water. There are very few reservoirs such as Ghod, Kukadi and Pushpavati in the tract. Most of the streams dry up during the summer. The position of water supply is not generally satisfactory in places away from riverbanks and reservoirs. It is expected that the position will improve in future as lot of major and minor irrigation projects are being taken up in this area.

SECTION 6: DISTRIBUTION OF AREA

1.6.1 The forest area is unevenly distributed in the tract. Total forest area in charge of Forest Department is 574.68 sq.km, which is about 12.32 percent of total geographical area. The distribution of the gazetted area of the forests in charge of the Forest Department is as under:- Details are given in Appendix No- III.

Sr No	Range	No. of villages	Forest Area in (ha)		Total (ha.)
			Reserved	Unclassed	
1	Otur	25	6970.515	14.135	6984.650
2	Junnar	67	7871.125	20.555	7891.680
3	Narayangaon	31	4817.070	800.550	5617.620

4	Godegaon	50	8262.250	1091.675	9353.925
5	Manchar	28	6126.775	82.38	6209.155
6	Rajgurunagar	46	7608.205	269.740	7877.945
7	Chakan	47	7940.725	144.340	8085.065
8	Shirur	49	5148.940	299.78	5448.72
	Grand Total	343	54745.605	2723.155	57468.760

1.6.2. The Bhimashanker Wildlife Sanctuary has been excluded from the area dealt with under the current plan. The area of the sanctuary as per notification no-WLP.1085/CR-588/(III)F-5 Dated 16 Sept 1985 and Gazette Dated 10-10-1985 is 8389.59 ha. Details are given in Appendix No- IV.

SECTION 7: STATE OF BOUNDARIES

1.7.1 The boundaries of the forests are demarcated by the Cairns of loose stones, erected at suitable intervals. The direction of the boundary line is also indicated by whitewashing the top stones; pointer-stone and white wash strips on the cairns. The condition of the boundaries is fairly satisfactory. Details of natural and artificial boundary are given in Appendix No- V.

SECTION 8 : LEGAL POSITION

1.8.1 The forest of the tract were constituted into the Reserved Forests under notifications, issued from time to time. Details are given in Appendix No- VI.

1.8.2 A small portion of the forest are unclassed Forests. There are no protected forests in the tract. Appendix No- VII.

1.8.3. The projectwise forest area allotted under Forest Conservation Act 1980 against various projects is given in Appendix No- VIII.

SECTION 9 : RIGHTS AND CONCESSIONS

1.9.1 The forest are not burdened with any rights excepts that of "the right of way and water". The privileges, granted to the villagers consist of collection of small deadwood, thorns, grass, grazing, leaves, fruits, Moha (*Madhuca indica*) flowers etc.. the details of which are given in part V (vide articles Nos. 132 and 137) of the Bombay Forest Manual volume-III. Special privileges for Pune district are as under.

1. Removal of Karvi (*strobilanthus callosus*) by head loads for agricultural purposes.
2. Removal of Moha (*Madhuca indica*) fruit for the gatherer's own use or for sale.
3. Removal by the inhabitants of the undermentioned 31 villages in Ambegaon Peta (Ghod range), of dead wood and raw material for their own domestic or agricultural use.

(1) Jambori (2) Digad (3) Pokhari (4) Megholi (5) Rajewadi (6) Adivre (7) Made (8) Ambde (9) Aghane (10) Asane (11) Kushire Bk (12) Kushire Kd (13) Kondhare (14) Kondhawal (15) Taleghar (16) Don (17) Tripad (18) Chikhali (19) Terungan (20) Nhaved (21) Nigdale (22) Nanwde (23) Patan (24) Pimpri (25) Pimpargane (26) Phalode (27) Malin (28) Mhalunge Tr. Ambegaon (29) Rajpur (30) Sakeri (31) Sawarli.

The removal will be permitted in the manner indicated below:

- a) The area to be given out for rab will be fixed by the forest department annually in rotation, according to the needs of each village and the area of forest within the village.
- b) The rab cutting will be permitted in the area fixed for each village and will, if necessary be conducted under the supervision of the forest department.
- c) No other shrubs except these mentioned below should be removed or damaged viz.

1.Tarwad	6.Kharmati	11.Karvi	16.Lohtol
2.Dhaiti	7.Dawaka	12.Dhomal	17.Chingac
3.Ramati	8.Rangal	13.Bhogade	18.Taran
4.Dhasai	9.Tipna	14.Aswala	19.Chilar
5.Kekai	10.Chimati	15.Kudali	20.Nirgudi
			21.Lantana.

- d) No axe should be carried into the forest.
- e) Only deadwood and fallen twigs and branch wood should be removed as fuel for domestic purposes only.
- f) No damage should be done to any forest growth.
- g) The forest of each village shall be divided into areas by the forest department for the collection of deadwood each year.

The grant of the above concession will be controlled by the issue of individual permits which will be subject to the conditions that:

- i) The licensee must help the forest department in the prevention and detection of forest offences and
- ii) That the villagers will be held responsible for any damage done to the forest of the villages.

Failure to observe any of these conditions will entail forfeiture of these privileges and will in addition make the privilege holder liable to punishment.

Even though the concessions are conditional and are to be controlled by issue of individual permits, due to extensive and fast developing tendency of lawbreaking amongst the villagers, it has pressure extremely difficult to control the removal of the privileged produce. This has resulted into further deterioration of the standing growth. It is therefore, very necessary to forfeit all such concessions in the current settlement. Due to sparse to very sparse tree growth the coupes are deleted from working and no felling of any types is being carried out. As such the question of "Nistar distribution" does not arise.

1.9.2 The G.R. of April 2003 regarding J.F.M. issued by Government of Maharashtra assigns the listed forest produce for the J.F.M. committee members. In scheduled areas, however, the ownerlist of M.F.P. is given to the Gram Panchayat in accordance with 73rd ammendment provisions.