

Assessment of burnt area in UP (Hills)-Uttaranchal

In 1999 FSI carried out studies on forest fire in Uttaranchal (the then hill states of UP) based on satellite data from two different sensors of IRS-1C/1D viz; WiFS (Wide Field Sensor) with spatial resolution of 188m x 188m and LISS-III (Linear Imaging Self Scanning Sensor) with a spatial resolution of 23m x 23m.

Study based on digital interpretation of WiFS data (April 4, 1999) showed that, 5085.58 km² forest cover which constitute 22.42% of forest cover of the state was burnt due to forest fire during that period. The forest cover burnt was 22.42% of the forest cover of the State. Of this, 1252.70 km² was severely burnt and 3832.88 km² was moderately burnt (Fig.6).

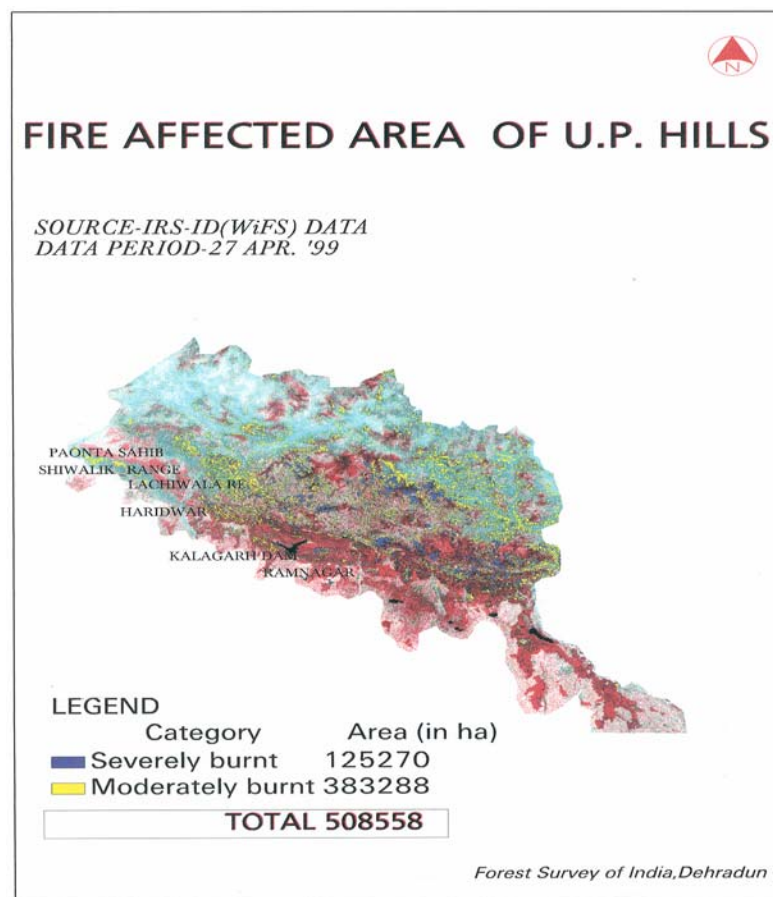


Fig. 6: Fire affected area of U.P.hills.

Study based on visual interpretation of LISS-III data (April 24 and April 27, 1999) revealed that 5263 km² of forest cover in Uttaranchal was affected by forest fire. This constituted 22.64% of forest cover of the State. Of this, 4108 km² had dense forest (with more than 40% canopy density) and 1156 km² had open forest (with 10-40% canopy density). Table 11 provides district wise information respectively.

Table 11: District wise information on burnt forest cover in Uttarakhand (Area in km²)

District	Total Forest Area	Fire-Affected Forest	
		Area	Percentage (%)
Almora	2537	858	33.82
Nainital	3568	374	10.48
Pithoragarh	2996	683	22.80
Chamoli	3152	526	16.69
Dehradun	1570	220	14.01
Pauhri Garhwal	3176	1073	33.78
Tehri	2560	681	26.60
Uttarkashi	3099	729	23.52
Hardwar	585	119	20.34
Total	23243	5263	22.64

The Table reveals that maximum forest cover was burnt in Pauhri Garhwal District, followed by Almora and Uttarkashi. Maximum dense forest was affected by fire in Almora district followed by Uttarkashi and Garwal. In terms of percent of total forest cover, Almora is followed by Garwal and Tehri. Burnt forest cover map for Dehradun District prepared under the study is shown in Fig 7.

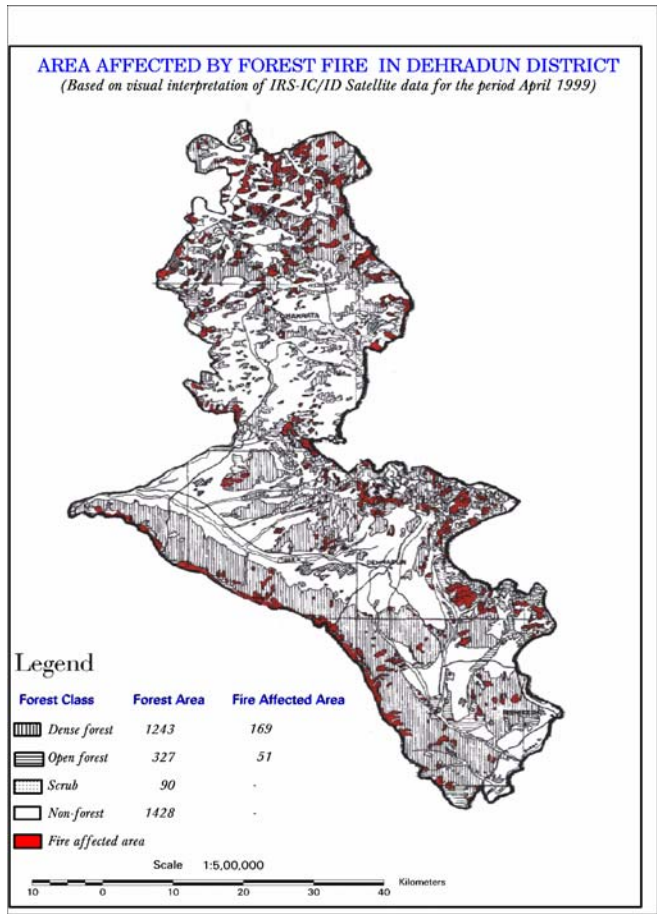


Fig.7: Fire affected area in Dehradun