

Code	CR005 (Post-Congress)
Title: <i>Glimpses Of The Deccan Volcanic Province: Characters And Landscapes</i>	
Geological Reference:	
<ul style="list-style-type: none"> • <i>The Deccan Volcanic Province (DVP) is one of the largest continental flood basalt provinces of the world. It is largely made of basaltic lava flows with subordinate volumes of intrusive bodies and trivial proportion of pyroclastics.</i> • <i>The lava flows are nearly horizontal over vast regions but they assume measurable dips in the western parts of the province (eg. Mumbai, Alibag, etc.) and in Satpura ranges. The thickness of the individual lava flows varies between < 10 m to ~ 80 m and the average thickness is about 20 m. The lava flows can be traced for few to many tens of kilometres.</i> • <i>On the basis of flow morphology, the Deccan lava pile can be fairly compared with the Hawaiian lava flows with most of them exhibiting pahoehoe character followed by transitional flows. The a'a flows have only a restricted occurrence in the Deccan Province.</i> • <i>The proposed field traverse essentially passes through the western part of the DVP . Here, the lava sequence has an appreciable thickness (>1km). Stratigraphically, it cuts across the lower and upper parts (Thakurvadi, Bhimashankar as well as Bushe, Poladpur, Ambenali, Mahabaleshwar formations) of the Western Deccan Province. It travels through all the three regional physiographic units namely the Western Ghat Crest zone, adjoining Main Deccan Plateau to its east and the coastal tract in the western Deccan.</i> 	
International appeal of the proposal:	
<ul style="list-style-type: none"> • <i>The DVP of central and western India is one of the Large Igneous Provinces (LIPs) of the world and is of great interest to the geoscientists especially because eruptions of enormous volumes of largely basaltic lava took place around 65 m.y. ago, coinciding with the Cretaceous- Tertiary boundary marked by mass extinctions on a global scale. It is therefore a unique opportunity to get introduced to this stupendous lava outburst that took place at the K-T boundary.</i> • <i>Opportunities to sample various geochemical types of the Western Deccan Province including the least contaminated part (Ambenali chemical type) of the Deccan lava sequence as well as the red interflow horizons that probably represent the pyroclastic component of the DVP. These geochemical types are the basis of the chemostratigraphic scheme of classification that has been developed for the western Deccan Province.</i> 	
No. of days	Seven
Maximum nos. of participants that can be accommodated- Min.25 max.30	

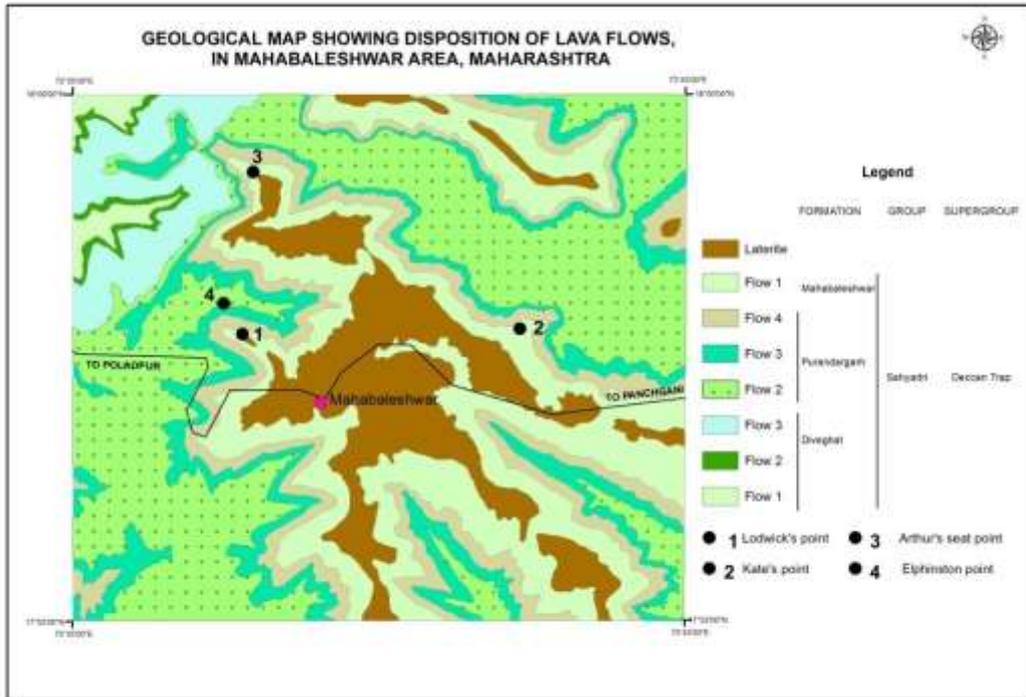


Figure 1: Geological Map of Mahabaleswar area

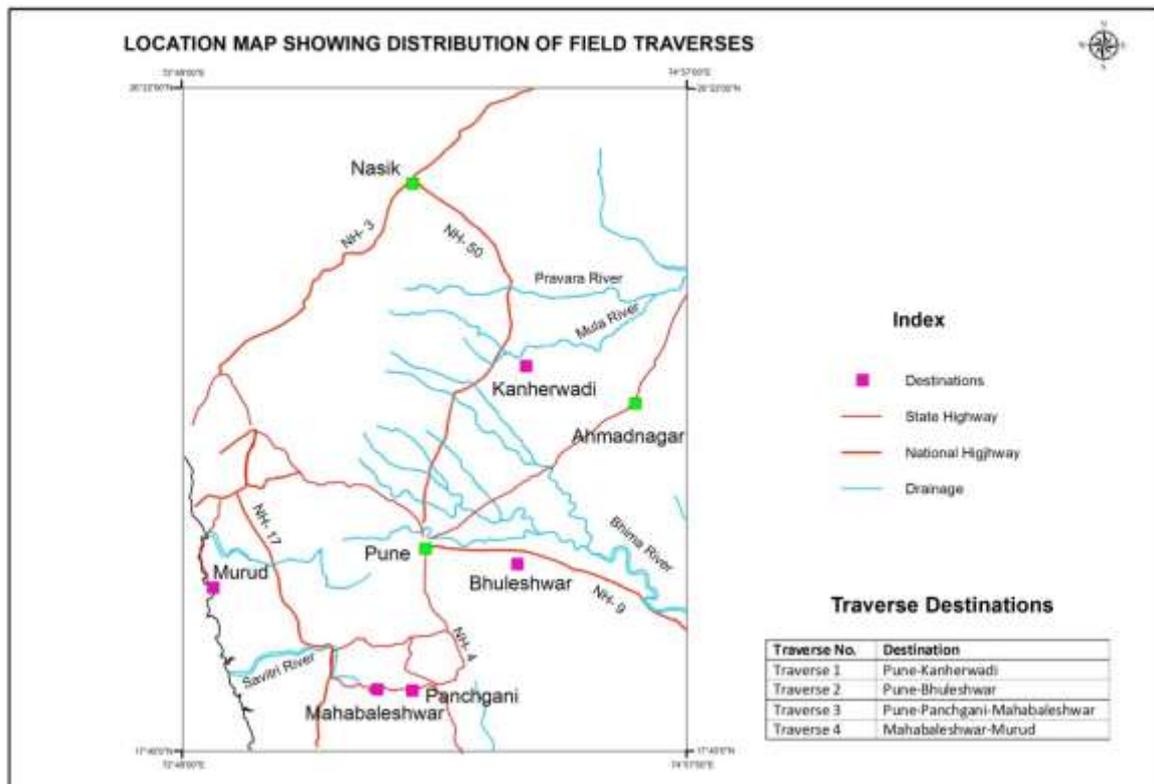


Figure 2: Field traverse Map



Figure 3: Elphinstone point, Mahabaleswar



Figure 4: Levees and channel fill