CONCLUSION

With broad perspective of the ridge and valley patterns in Himalayan landscape, district Doda has some peculiar characteristics of its relief. Chenab is the mightiest river which forms major river system in the study area that is why Doda district is also called as Chenab valley. It has its source in the glaciers of middle Himalayas. At the source, the river has streams, Chandra and Bhaaga at an elevation of about 4900 mts in Himachal Pradesh. After the confluence, the river flows between the Himalayas and Pir-Panjal range and then takes a turn to the south through Gorge, crossing Pir-panjal range. The river is about 1180 kms long in J&K and its basin sprawls out 26,755 sq kms. The rivers of the state have enormous potential for the generation of hydroelectricity. It is also used for transportation of timber logs. River Wadwan, Reny, Kyurd, Nath, Pinjari, Chatru, Neeru are the main tributaries of the Chenab River and almost all the tributaries of Chenab are glacial fed.

Glaciers receded in past geological times from different parts of the valley, which left their significant imprints upon topography. The extreme northern and eastern parts of the district are still under active glacial erosion. The stream action had sufficient time to modify or destroy the former glacial features. In the northern and eastern parts of valley from where glaciers receded in very recent geological times, the glaciated features are found still well preserved. The stream action had played a vital role in altering the prior scenario of the region which forms the physiogrpahy of area more complex. High relief, steep slopes, morianic
deposits and highly dissected topography are the important features of the physiography of the region.

Doda district has varying altitudinal variation ranging from 2000 feet to 15500 feet which have resulted in large variety of climatic and vegetational types in this part. Climatic conditions range in the district from subtropical in the western and southern part to alpine in the extreme north and eastern parts. Due to the altitudinal variations, the vegetational types also change from subtropical pine forests in the lower parts to Alpine forests comprising deodar and chir varieties in the middle and upper parts of the district. The district is rich in forest and mineral wealth as rich deposits of limestone and gypsum are found in Assar, Jathi and Thathri. Iron ores, Quartzite and slate are found in Bhaderwah (Thanala and Chinta) and zinc, nickel, mica and copper are found in Doda. Inspite of the fact that the area has rich deposits of minerals and precious stones, the infrastructure for substantial work of mining and exploitation has yet to develop primarily because of difficult terrain, rugged topography and less means of communication. Gneisses, basalt, schist and granite are found in the upper part of the district while slate and sand stone are common in the lower and middle parts. Alluvial soils are found on river terraces. On gently sloping spurs, soils vary in texture in vertical dimensions from fine in the lower parts to stony in the upper parts. In some localities, forest and glacial soils are also found in the valley.

Subsistence agriculture is the foundation of people in the district. About 77.7% of workers of the district are engaged in agricultural pursuits. Metalled roads in the whole valley are the main artery of the pilgrimage and tourist to different parts of the district. The construction of Bhaderwah-Chamba national highway will be proved as backbone of tourism and
pilgrimage in the district. Bhaderwah, Doda, thathri have developed as rural service centers. Maximum villages of the study area are electrified and almost connected by road links under various governmental schemes like “Pradhan Mantri Gram Nirman Yojna and Pradhan Mantri Sadak Nirman Yojna” which will be proved as important factor in the developmental processes of the study area.

The population of the district reduced from 691,929 persons to 339397 persons after the trifurcation of district into Doda, Ramban and Kishtwar in 2006. The growth rate from the year 1981 to 2001 is +71.98%. The average size of village population is 750 persons with average family size of six persons. The average agriculture density of the district is about 328 persons to the total cultivated land and the average arithmetic density is 223 with rural density of 211 persons and urban density of 1105 persons per square kms. The average rural sex ratio is 918 persons with urban sex ratio of 727 persons. In some blocks sex ratio is higher than the average. The average literacy rate of the district is about 43.0%. About 2.50% of the total area is under permanent snow cover and glaciers. The total forested area of the district is about 44 percent.

In the lower valley, the river terraces provide mainly the cultivated area, while in middle valley the man made terraces are the site of cultivation. There are three cultivated land types viz., lower valley land (irrigated land), upper areas land (un-irrigated land) and undulating land (un-terraced land). The incidence of lower valley land is much higher in the lower valley than that of middle valley. Maize is the dominant crop which covers about 52.3% of total cropped area followed by wheat, vegetables, oil seeds, pulses and rice covering 9.1%, 5.8%, 5.7%, 4.1% and 3.5% of the total cropped area respectively. In the lower parts of the district maize,
wheat and rice stands as first, a second and third ranking crop. In middle part of the district maize is the first ranking crop in some pockets while rice ranks first in other tracts. In upper and middle parts of the district beside these three crops barley and potato are also important crops. About three out of six blocks have mono-culture or single crop domination.

The average cropping intensity of the district is about 159% which decreases with increasing altitude in the district. Annual crop rotation dominates in the district and in its eastern parts mono-cropping pattern is dominant. Only 7.6% of the total cropped area is irrigated. Subsistence agriculture is found in the region as all agricultural activities are performed manually and with the help of animals. Terracing of land is most needed and annoying activity. Green manuring is found everywhere in the district in which the use of cow dung and leaf manuring is common. Chemical fertilizers are also used in some pockets. The village forested area is quite high as about 145 villages out of 423 inhabited villages comprise village forested area.

About 34.1% area of the valley is under wasteland category which is concentrated almost in all parts but the major portion is found in the upper part of the district due to glacial and fluvio-galcial conditions. The villages found in the upper part of the district comprise glacial soils on gentle slopes which increases the percentage of cultivable waste lands.

The district has rich mythological background as many pilgrimages including many temples and Ziyarat are found in the study area. The district is also famous for many “Yatra” and festivals of both Muslim and Hindu’s as majority of the population in the district belongs to these two communities. The district comprises many fascinating and beauteous tourist spots which resembles with that of Kashmir valley. With
government intervention, mythology and tourism have played a vital role in the development of the region. It has been observed that climate, roads, mythology and tourism have affected the functions of settlements in the district upto a large extent. Landforms, slopes, sites for cultivation and mythology have affected the sites of settlement in the district. Thus there is large variety of functional types among settlements in the district.

The houses found in the district mostly comprise two storied dwellings in which lower storey is used as store room and cattle shed and upper storey is used for residential purposes. Single storied temporary and permanent houses are also found in the region. Stones and mud are used for erecting walls with rough masonry in temporary houses, while bricks and cement is used for erecting walls in the pakka permanent houses. The roofs are flat in subtropical areas and slanting in temperate regions. There is a large variety of settlement types in Doda district as the settlements found in upper parts of the district are dispersed and temporary, while lower parts comprise clustered settlements. Compact Clustered-Hamlet type of settlement is found in the lower and middle parts of the District.

Six villages and an urban fringe area is selected on the basis of stratified case study sampling to verify and establish sub-regional characteristics emerged from mapping of secondary data and field study traverses. Due to large altitudinal variations Assar village is selected to represent agriculturally rich villages with favourable climate and soils. It is situated in the south-western side of the district at an altitude of 2340 feet over the left bank of river Chenab. It is known for vegetable production that is why it is also called as “wedge of vegetables”.

Village Shewa is situated at an altitude of 4300 feet over the right bank of “Neeru River”. The village is located in the western part of the
district. The village faces a lot of water problem for both irrigation and domestic purposes. The village comprises fertile soils with a lot of agricultural potential if irrigated properly.

Village Malothi is situated in the southern part of the district having valley topography at an altitude of 4430 feet. It represents the terraced villages with single crop domination. The village has lot of agricultural potential and is known for rice production.

Village Thanala is situated in the extreme southern part of the district at an altitude of 8100 feet. It represents the high altitudinal backward villages where agriculture is a tough and tedious job. The upper parts of the village are snow covered or under active glacial action.

Village Bari is situated in the south-western part at an altitude of 4150 feet, which represent the villages which concentrate on cash crops. The village is located at foot hill where people remain busy throughout the year in agricultural pursuits.

Village Gando is located in north-eastern part at an altitude of 6600 feet which represents agriculturally rich villages where transhumance is practiced. It represents the villages of the district which make a proper use of land for agricultural pursuits at both sites i.e., forest as well as in village. Both temporary (seasonal) and permanent houses are found in the village.

Pull Doda is situated over the left bank of Chenab River at an elevation of 2416 feet. It is an Urban-fringe area which represents the adverse impact of Baglihar Dam on land use and settlement of the District.

The change in the population number affects the land use and settlement of the district. The forested area of the district shows a slight positive growth of +0.13% from 1981 to 2001. Again a positive growth of +2.82% is observed in cultivated area and a huge growth of +70.2% is seen
CONCLUSION

in culturable wastelands. A negative change i.e., – 22.44% is observed in non-cultivable area which is due to cultivation of fallow lands and expansion of settlements.

The district lies in the area of high altitudes, where altitudinal variations are varying. Maximum portion of the district is under forests and wastelands. Active glaciers are present in southern, south-western and north-western parts. About 145 villages of the district comprise forested areas which mean forest conditions are good in the district. Most of the village areas are under cultivation but irrigation facilities are not available in maximum parts. Average density of population is about 223 persons per sq km. There are number of settlements having cultural and functional diversity. Doda and Bhaderwah are the main towns/urban centers of the district having high cultural significance. Doda town is districts headquarter which is important from administrative point of view and Bhaderwah town is important from tourism point of view which is an important tourist destination visited by large number of domestic and foreign tourists every year. Almost all the villages of the study area are agricultural and have a lot of agricultural potential. The district has a good resource and tourism potential, but it needs proper attention from governmental agencies which can be proved an important asset to generate the economy of the region which inturn helps in developmental processes upto a great extent.