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Dr T.S. Papola is a leading economist of the country with over four decades of experience in teaching, research and advisory assignments. He specialises in the areas of labour and employment, development planning, industrial economics, regional development and enterprise development.

Development of hill and mountain areas has been a subject of special interest to Dr Papola. He was born in a remote village in Bageshwar district of Uttarakhand; he had his school education in the village and then in a school 10 kilometres away, before proceeding to Lucknow for higher education. Following completion of education, Dr Papola taught in Universities of Lucknow and Bombay, Indian Institute of Management (Ahmedabad), and University of Cambridge, UK. He served as Director, Giri Institute of Development Studies, Lucknow (1977-1987) and Institute for Studies in Industrial Development, New Delhi (2004-2006). He was Senior Advisor with the Planning Commission, Government of India (1987-1995) and Head, Mountain Enterprises and Infrastructure Division at the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal (1996-2002). In ICIMOD he was responsible for developing a programme of studies and documentation, consultation and advisory services in enterprise development in the mountain areas of Bhutan, China, India, Nepal and Pakistan. Dr Papola also served in consultative and advisory capacities with several international organisations such as ILO, UNCTAD, UNIDO, UNICEF, UNDP and Asian Development and has been on advisory missions and assignments in Bangladesh, Indonesia, Gambia, Philippines and Vietnam.

Dr Papola has written extensively and published 14 books and over 80 research papers in reputed journals. Some of the books authored and edited by him include *Principles of Wage Determination; Rural Industrialisation; Wage Structure and Labour Mobility in a Local Labour Market; Informal Sector in a Developing Economy; Studies on Development of Uttar Pradesh; Gender and Employment in India, Employment in India's Development Strategy; Growth and Structural Changes in Indian Economy; and Labour Regulation in Indian Industry.*

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Development of the Indian Himalayan States

Economy and Environment in the Era of Globalisation

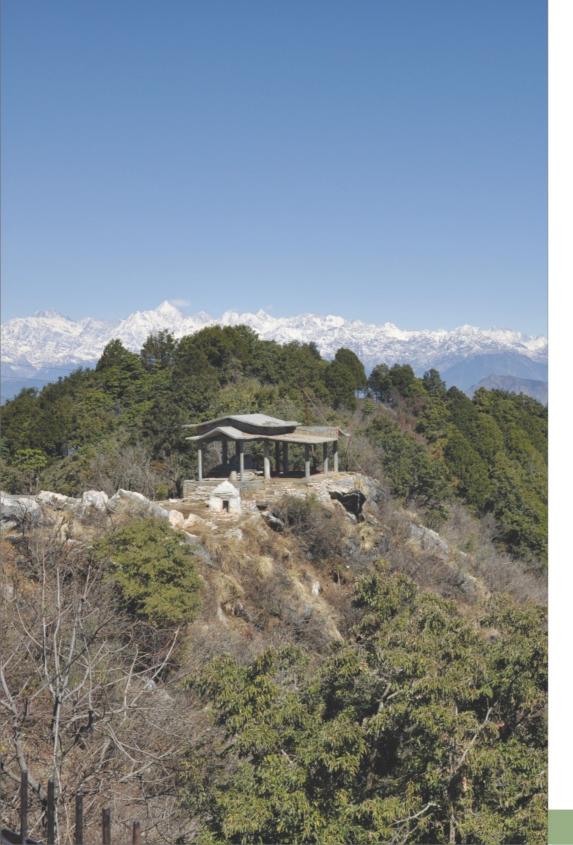
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20th Pt. Govind Ballabh Pant Memorial Lecture September 10, 2014



G.B. Pant Institute of Himalayan Environment & Development

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It is indeed a great honour and privilege to be invited to deliver Pandit Govind Ballabh Pant Memorial Lecture at G.B. Pant Institute of Himalayan Environment and Development. I am grateful to Dr. P.P. Dhyani, Director and the management of the Institute for giving me this honour. While feeling elated, I also feel humble in accepting this invitation. Delivering a lecture in memory of Pt. Pant, a great leader with very important contributions to national development in itself is a humbling exercise. In addition, unlike the past speakers most of whom were natural scientists of great eminence, I am a social scientist, that too from the discipline of Economics, not very much liked by those working in the area of environment! The tenor and contents of my lecture will, therefore, be different. I have endeavoured in my past work to argue that economic development and environmental conservation can happen together; and, I am trying to advance the argument further in my present lecture on "Development of the Indian Himalayan States: Economy and Environment in the Era of Globalisation".

Economic development of mountain areas poses special problems on account of their inaccessibility and environmental sensitivity of their resources. This is much more true in the case of the Himalayan region because of the relatively younger age of its

mountains and their consequent fragility leading to high

Development pattern following globalisation is becoming more and more uniform across the countries and regions. In the process there is a likelihood of local and regional specificities getting obliterated unless efforts are made to turn them into opportunities to reap comparative advantage. I propose to look at the development experience of the Indian Himalayan states during the last two decades in this perspective. Have they been able to keep up with the fast pace of economic growth that the country experienced during this period? What have been the main sources of their growth and how does that relate to their resource endowment and its sustainable use? Of course, the 11 Himalayan states are not uniform in their endowment, nor have they experienced similar pace and pattern of growth. How varied has their experience been and with what implications for their sustainable development? Attempt will also be made to answer these questions, at least in the case of some states, for which I had the opportunity to look at their development more closely.

I. Indian Himalayan Region: Hopes and Fears from Globalisation

Eleven Indian States, namely, Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttarakhand have entire, major or minor parts of their territory in the hilly and mountainous region of the Himalayas. They also happen to be on the geographical and political margins of the country. Each of them shares borders with one or more foreign nation(s). Seven of

them, located in the north eastern part of the country, are beyond another large country, namely Bangladesh, and are connected with the mainland India by only a narrow passage. The geopolitical marginality of these states is exacerbated by isolation caused by relatively low levels of transport and communication connectivity. Thus, the natural and man-made factors combine to marginalise these areas. And when they are inhabited by tribals and ethnic communities, as happens quite often, they also suffer from cultural marginalisation.

Globalisation is often seen as a secular and equalising process and as such is expected to bring marginalised areas and communities into the mainstream of economic and social activities by enabling them to link with other areas and wider markets through the use of the comparative advantage provided by their special resource endowments. Extent to which these areas can benefit from globalisation would depend on the availability and utilisability of unique resources, as they face distinct disadvantage in production of goods and services that are in competition with those produced in the mainstream plain land areas. If they continue to depend on the production of common goods, it is, in fact, likely to lead to further marginalisation of these areas in so far as globalisation, with opening up of these areas to the products from outside will put the local production at a disadvantage. Globalisation in such cases may lead to reduction in isolation, but at the same time, may make the local population highly dependent on other areas, both for income and products. Outmigration may increase and those left behind may have to subsist primarily on remittances. Large-scale commercial use of natural resources accompanying globalisation, on the other hand, would pose serious threat to environment.

II. The Resource Base

Indian Himalayan region, in which the eleven states as mentioned earlier lie fully or partially, is proverbially rich in resources. Low population density adds to this 'richness' as it leads to high per capita availability of these resources, particularly land. Most of them have large parts of their area 04

under forests, rich not only in wood but also in minor forest resources and flora and fauna and biodiversity. A large number of rivers flow in and from these states with high potential for hydro power generation. Some of them also have mineral resources of high value.

What, however, appears as richness of resources on the surface does not translate into actually useable potential for economic benefit. No doubt, population is thinly distributed across vast tracts of land. But most of this land is not fit for cultivation. Population density as per Census 2011 is as low as 17 in Arunachal Pradesh and 52 in Mizoram. It is more than 100 in Uttarakhand (189), Jammu & Kashmir (124), Nagaland (119), Himachal Pradesh (123) and Meghalaya (132) but still much lower than 382 for the country as a whole. It is, of course, high at 350 in Tripura, a predominantly plain land state. Similar is the case with Assam with a figure of 397, but it is much lower in the two hill districts, North Cachar and Karbi Anglong. In 2001, it was 65 for these districts as compared to 340 for the whole state.

Table 1: Population Density, Cultivable Area and Per Capita Net Shown Area in Indian Himalayan States (2011)

S. No.	States	Population Density	Cultivable Land	Per capita net sown area (hectares)	
		Persons per km² area	% Geographical Area		
1.	Arunachal Pradesh	17	5.0	0.16	
2.	Himachal Pradesh	123	14.6	0.07	
3.	Jammu & Kashmir	124	4.7	0.06	
4.	Manipur	122	10.8	0.09	
5.	Meghalaya	132	47.1	0.08	
6.	Mizoram	52	17.8	0.09	
7.	Nagaland	119	40.8	0.13	
8.	Sikkim	86	21.1	0.15	
9.	Tripura	350	29.5	0.07	
10.	Uttarakhand	189	28.2	0.07	
11.	Assam	397	40.9	0.13	
	Sa	65	15.2	0.09	
12.	India	382	55.5	0.12	

Source: Census of India, 2011: Provisional Population Tables, Table 1 Posted in the Census Website (www.censusindia.gov.in) on 31 March 2001 (for column 1) Directorate of Economics and Statistics, Ministry of Agriculture, Government of India for column 2, column 3 calculated by the author.

Low density of population, however, does not really mean larger availability of useable land. Only 5% of the geographical area in Arunachal Pradesh, 4.7% in Jammu & Kashmir, about 11% in Manipur, 15% in Himachal Pradesh, and 18% in Mizoram was cultivable, as against 56% in the country as a whole. As a result, the net sown area per person was only 0.06 hectare in Jammu & Kashmir, 0.07 hectare in Himachal Pradesh, Tripura and Uttarakhand and 0.08 hectare in Meghalaya, as against 0.12 hectare in the country as a whole (Table 1). Cultivable land that is available is also of poor quality: most of it being in slopes can only be used in small terraces, thus not permitting use of technology suitable for larger plots; and, is mostly unirrigated, as reaching water from rivers flowing in the valleys, often through deep gorges, to the cultivated fields mostly located in uplands is technologically difficult and economically non-viable. Thus of the net sown area, while about 47% is irrigated in the country as a whole, the extent is only 14% in Mizoram, 20% in Sikkim, Arunachal and Himachal Pradesh.

In view of the geological fragility of the Himalayan region and environmental sensitivity of its resources, the scope for carrying out the economic activity on a highly intensive basis and extensive scale is rather limited. Even cultivation of food grains, the mainstay of the mountain population, is not considered to be environmentally sound in lands with slopes beyond a certain degree. Area under forest accounts for a large part of the geographical area in most of the Himalayan states. As against only 21% for the country as a whole, it was as high as 90% in Mizoram, 80% in Arunachal Pradesh and Nagaland, between 70 to 80% in Manipur and Tripura in 2011 (Table 2). It was 45% in Uttarakhand and 26% in Himachal Pradesh, but low at 10% in Jammu & Kashmir. Exploitation of forests for economic purposes is, however, constrained by the environmental concerns: disastrous effects of deforestation through floods and other ecologically adverse impacts on lives and livelihoods of local, and more important, lowlands population, pose severe restrictions on the use of forests for improving the economic condition of the people in the mountain states. Construction of large dams for generation of hydro electricity on a sizeable scale

is also found to be environmentally unsafe in the geologically fragile Himalayas. Even construction of roads to improve connectivity of habitations among themselves and to the markets and the rest of the world are viewed with a serious frown by environment enthusiasts. And mining in hills and mountains is, of course, observed to lead to the greatest ecological disaster.

Table 2: Area under Forests: Indian Himalayan States (% of Geographical Area)

S. No.	States	Forest Cover (2011)
1.	Arunachal Pradesh	80.50
2.	Himachal Pradesh	26.37
3.	Jammu & Kashmir	10.14
4.	Manipur	76.54
5.	Meghalaya	77.02
6.	Mizoram	90.68
7.	Nagaland	80.33
8.	Sikkim	47.34
9.	Tripura	76.64
10.	Uttarakhand	45.80
11.	Assam	35.28
		(Assam Hill Districts - 67.89)
	India	21.05

Source: India: State of Forest Report, 2011, Forest Survey of India, Ministry of Environment and Forests, Government of India.

III. Levels of Economic Development

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Use of the local resources by the people of the Himalayan States for any substantive improvement of their economic conditions is, in any case, constrained due to the limitations of using modern, scale biased technologies, high cost of inputs, and inaccessibility to remunerative markets. This is reflected in relatively low per capita Gross State Domestic Product (GSDP) in most of these states (Table 3). In 1999-2000 all hill states, except Himachal Pradesh and Mizoram, had a lower per capita GSDP than the national average. In 2009-10, four states, namely, Sikkim, Uttarakhand, Arunachal Pradesh and Himachal Pradesh, had a higher per capita GSDP than all-India average of Rs. 46,500; but three states, namely, Assam, Jammu & Kashmir and Manipur had per capita GSDP that was less than two thirds of the national average. In 2013-14, the same four states continue to be above average. Sikkim's per capita income now is more than double and Uttarakhand's more than one and a half times the national

average. Other Himalayan states have more or less maintained their relative position below the national average.

Two points need to be kept in mind while comparing GSDP figures of these states with plain land states or national average. One, the price levels in these states are much, at least about 30%, higher and therefore, the real value of a rupee is much lower, in these states than elsewhere. Second, GSDP figures, as measured, need not necessarily reflect the income at the disposal of the local people as it represents the income produced or originating in the state and not the one accruing to the people in the state. The latter may be significantly smaller than the former in states where the overall process of extracting, harvesting and collecting natural resources is an important source of GSDP. Forestry, which makes an important contribution to GSDP in most of these states, is an example of such activity, in which it is mostly the wages of those engaged in cutting and logging of wood accrue to the local people while most of the income from forestry leaks out elsewhere through contractors and traders. The actual income that accrues to the local people could thus be much lower than what the GSDP figures indicate.

Table 3: Per Capita Gross State Domestic Product (GSDP): Indian Himalayan States (at current prices)

				(In Rs.
S. No.	State	1999-2000	2009-10	2013-14
1.	Arunachal Pradesh	14052 (88.72)	51405 (110.56)	78145 (104.30)
2.	Assam	12269 (77.46)	27197 (58.50)	40475 (54.00)
3.	Himachal Pradesh	20808 (131.37)	50365 (108.33)	92300 (123.20)
4.	Jammu & Kashmir	13745 (86.78)	30582 (65.78)	50125 (66.92)
5.	Manipur	13260 (85.89)	27332 (58.79)	36474 (53.82)
6.	Meghalaya	14811 (93.51)	43555 (93.68)	67515 (90.17)
7.	Mizoram	16443 (103.81)	45982 (98.90)	60836 (89.75)
8.	Nagaland	13819 (87.25)	45680 (98.25)	65908 (97.22)
9.	Sikkim	14890 (94.00)	68731 (147.83)	142625(201.02)
10.	Tripura	14119 (89.14)	35799 (77.00)	60963 (89,90)
11.	Uttarakhand	13872 (87.58)	59684 (128.37)	112478 (150,41
	India	15839 (100.00)	46492 (100.00)	74920 (100)

Source: Economic Survey, 2007-08 & 2011-12, Table A-13, 2013-14, Table A.8) Note: Figures in parentheses indicate states' position with India = 100.

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IV. Incidence of Poverty: Official Estimates and Problems of Measurement

Estimates of poverty, however, do not suggest that the income at the disposal of people in these states is less than the national average. As is well known, poverty estimates are based on private consumption expenditure. For example, for the latest estimates that relate to the year 2011-12, households with a per capita monthly expenditure of less than Rs. 888 in rural and Rs. 1154 in urban areas were considered to be below poverty line, in Meghalaya. Corresponding estimates for Uttarakhand were Rs. 880 and Rs. 1082. The poverty lines for country as a whole were Rs. 816 for rural and Rs. 1000 for urban areas. In that year, except Manipur, with 37% and Assam with 32% of the people estimated to be below poverty line, the other nine hill states had lower incidence of poverty than the national average of 21.92% (Table 4). Jammu & Kashmir which had the second lowest per capita GSDP among the eleven Himalayan States had the lowest, and, in fact, very low incidence of poverty at 10%, only a little higher than that in Himachal Pradesh (8%), with relatively high per capita GSDP. It is rather intriguing to find that people in most of these states have much lower income than the national average, but have much higher expenditure that often places them in the nonpoor category. These estimates would strongly suggest that

Table 4: Percentage of Population below Poverty Line (Tendulkar Method): Indian Himalayan States

S. No.	State	2004-05	2009-10	2011-12
1.	Arunachal Pradesh	31.4	25.9	9.20
2.	Assam	34.4	37.9	31.98
3.	Himachal Pradesh	22.9	9.5	8.06
4.	Jammu & Kashmir	13.1	9.4	10.35
5.	Manipur	37.9	47.1	36.89
6.	Meghalaya	16.1	17.1	11.87
7.	Mizoram	15.4	21.1	20.46
8.	Nagaland	8.8	20.9	18.88
9.	Sikkim	30.9	13.1	8.19
10.	Tripura	40.0	17.4	14.05
11.	Uttarakhand	32.7	18.0	11.26
	India	37.2	29.8	21.92

Source: Planning Commission, Government of India, *Poverty Estimates for* 2004-05, PIB, Press Release, March 2007 (for 2004-05)

remittances play a significant role in meeting the excess of expenditure over income in the case of large part of the population in these states. In other words, their own incomegenerating capacity is not enough to sustain their livelihoods and they are vulnerable to the risk of falling in poverty any time the flow of remittances stops or becomes uncertain and irregular.

An important point that needs to be noted here is that of the application of the common poverty line for the measurement of the extent of poverty in the hilly and mountain areas. As is well known, the poverty line was set at the average level of total consumption expenditure of households that met the caloric requirement of 2400 in rural and 2100 in urban areas, in their food basket in 1978. Since then, it is periodically adjusted for change in prices. Fixing poverty line for the hilly and mountain states on this basis is fraught with following limitations:

- a) The effort required and, therefore, energy spent for similar physical tasks are significantly higher in the hill areas than in the plains. And physical tasks constitute much larger proportion of work in these areas than in the plains. One has to often walk to reach a destination whereas most of the travel in the plains is undertaken by some means of transport, either animal driven or mechanised. And walking in the hills for the same distance involves use of much more energy than in the plains. Productive or household activities in the hills are performed manually more often than in the plains, due to the non-availability and non-applicability of mechanised technology (e.g. use of tractor and threshers in farming). As a result, the minimum calorie norms for the inhabitants of these areas have to be much higher (may be about 3000 calories sometimes prescribed for the manual work in the factories).
- b) Besides food energy requirements, the minimum required in the case of other basic needs is also higher in these areas. For example, the cold climate in most of these areas requires a higher minimum amount of clothing, including woollens, besides the requirements of heating, for mere survival. Similarly essential is the shelter of a minimum quality for protection against cold.

⁻⁻⁻⁻Press Note on Poverty Estimates, 2009-10, March 2012 (for 2009-10).

⁻⁻⁻⁻⁻Press Note on poverty estimates, 2011-12, July 2013 (for 2011-12

c) Prices in these areas are significantly higher due to non-availability of most of the consumption items locally and high transport costs.

The price factor has now been taken into account in recent years as the poverty lines are computed for each state, applying the state-specific price indices. The poverty line applying the state-specific price indices is generally much higher in case of Himalayan States than the all-India figure. For example, for rural areas, it was estimated to be Rs. 1270 for Nagaland, Rs. 1118 for Manipur, Rs. 1066 for Mizoram and Rs. 860 for Arunachal Pradesh and Rs. 891 for Jammu & Kashmir and Rs. 880 for Uttarakhand, against the all-India estimate of Rs. 816, in 2011-2012. But these figures still under-estimate the minimum consumption expenditure required for subsistence, in so far as they do not take into account the higher food energy requirements and the minimum clothing, shelter and heating requirements as mentioned earlier. Once these factors are taken into account, incidence of poverty in the Himalayan states would turn out to be significantly higher than officially estimated.

V. Infrastructure: The Case of Transport Connectivity

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Besides the technical problems of measurement which place limitations on the estimates of income and poverty, there are real disadvantages that the hilly and mountain areas face in pursuit of economic growth and improvement in livelihoods. Their physical disadvantages lie in inaccessibility, isolation, thin spread of resources and ecological fragility. Partly because of these reasons and partly for economic and political reasons (high cost and small number of voters), these areas also tend to get limited administrative and political attention for building infrastructure to improve their connectivity and reduce inaccessibility and isolation. Thus, five (Arunachal Pradesh, Manipur, Meghalaya, Mizoram and Nagaland) of the 11 hill states have virtually no railway line. Jammu & Kashmir despite a good part of the state being in the plains has only 1.08 km of railway line per 100 km² of geographical area; the figure for Himachal is 5.12 km; and for Uttarakhand, again with a large part in the plains, only 6.45 km. Assam, of course, with only a small part in the hills, has better railway density (29.12 km) than for the country as a whole (19.47) (Table 5). Road networks are, however, better. In some states, they are even better than the national average, often built due to strategic reasons. Thus, Assam had 308 km of road for 100 km² of area in 2011. The figure for Nagaland is 206 km. Uttarakhand (92 km), Himachal Pradesh (86 km) and Manipur (86 km) are also reasonably well endowed. Arunachal Pradesh (26 km), Jammu & Kashmir (12 km), Mizoram (47 km) and Sikkim (65 km) have, of course, much lower road density than for the country as a whole (143 km).

Table 5: Transport Density in Indian Himalayan States

S. No.	States	Railway Density (kms. of railway line per 100 km² of area), as on March 31		Road Density (kms. of road length per 100 km² of area) , as on March 31	
		2001	2009	2001	2011
1.	Arunachal Pradesh	0.01	0.01	21.92	25.74
2.	Assam	32.08	29.12	111.13	308.26
3.	Himachal Pradesh	4.83	5.12	43.28	86.15
4.	Jammu & Kashmir	0.43	1.08	10.49	12.14
5.	Manipur	0.04	0.04	51.27	85.70
6.	Meghalaya	0.00	0.00	42.34	53.43
7.	Mizoram	0.09	0.09	23.58	46.53
8.	Nagaland	0.78	0.78	126.79	205.96
9.	Sikkim	0.00	0.00	28.06	65.25
10.	Tripura	4.29	14.39	133.76	322.07
11.	Uttarakhand	6.66	6.45	59.61	92.14
	India	19.17	19.47	74.49	142.68

Source: India Economic portal: basic road statistics of India, Ministry of Road Transport & Highways, 2012

VI. Economic Growth in Recent Years: Impact of Globalisation

How have the Himalayan states performed in respect of economic growth over the period following economic reforms in 1991? Has globalisation helped them to grow faster? As is well known, the Indian economy has seen accelerated growth rates in the post-reform period, from an average of 5.5% during 1981-91 to 6.1% during 1991-2001 and 8.2% during 2001-2010. For the period 2004-05/2013-14, the growth rate has been still higher at 9.2%. Barring Arunachal Pradesh and Assam which experienced a low growth, and Himachal Pradesh with an average growth,

the other six states (Uttarakhand was not then formed and data are not available for J&K) in the Himalayan region recorded significantly higher growth than the national average, during 1991-2001. Significantly, all these six states belong to the northeastern region. In the period 2001-10, only the new state Uttarakhand and Arunachal Pradesh registered a growth rate higher than the national average and Sikkim, Tripura and Himachal Pradesh were almost at par with the average. The rest six Himalayan states performed relatively poorly. In the high growth period of 2005-2014, Arunachal Pradesh, Meghalaya, Sikkim, Uttarakhand and Himachal Pradesh exceeded the national average. Sikkim has grown the fastest 12.53% per annum followed by Uttarakhand (11.63%), Arunachal Pradesh (11.52%) and Meghalaya (10.22%) (Table 6).

Table 6: Growth Rates of GSDP in Indian Himalayan States (% per annum)

S. No.	States	1990-91/2000-01	2000-01/2009-10	2000-01/2004-05	2004-05/2013-14
1.	Arunachal Pradesh	3.67	9.79	9.83	11.52
2.	Assam	2.40	5.40	5.31	8.51
3.	Himachal Pradesh	6.35	7.74	6.56	9.52
4.	Jammu & Kashmir	NA	5.16	4.73	8.75
5.	Manipur	9.98	5.43	6.13	7.42
6.	Meghalaya	10.48	6.70	5.97	10.22
7.	Mizoram	17.89	4.97	6.18	7.55
8.	Nagaland	8.81	6.36	7.63	5.65
9.	Sikkim	9.85	8.36	8.32	12.53
10.	Tripura	12.76	8.03	7.87	8.63
11.	Uttarakhand	NA	9.04	9.08	11.63
	India	6.12	8.26	6.52	9.23

Source: CSO, www.mospi.gov.in

Arunachal Pradesh, Uttarakhand and Sikkim had sustained a high growth even during 2001-05, the period of low growth at national level. Himachal Pradesh and Meghalaya with low growth during 2001-05 attained a much higher growth during 2005-14. Tripura has also maintained a reasonably high growth rate. Other Himalayan states have performed poorly both in the longer and shorter periods. What inferences can be drawn from these patterns of growth regarding the impact of globalisation on

the mainstreaming or further marginalisation of the Indian Himalayan states? Some states are able to reduce the gap in per capita income with the national average while others are receding to farther economic distance. During the period since 2000, Sikkim, Arunachal Pradesh and Uttarakhand have made big leap forward. Himachal Pradesh has suffered a loss, but still retains its above average position. Nagaland has somewhat reduced its gap and is closing in on the national average. Meghalaya retains its relative position at somewhat lower than the average. Mizoram has slightly lost, moving from above to below national average. Other hill states, especially Assam, Jammu & Kashmir and Manipur have suffered significant losses in their relative positions: all of them were below average in 2000 and have receded further down in 2014 (Table 7).

Table 7: Changes in Relative Position of States Per Capita GSDP in Relation to Indian Average (=100)

Slink.	State	% Higher (+)	or Lower (-)
		1999-2000	2013-2014
1.	Arunachal Pradesh	-11.28	+4.30
2.	Assam	-22.54	-46.00
3.	Himachal Pradesh	+31.37	+26.20
4.	Jammu & Kashmir	-17.22	-33.08
5.	Manipur	-14.11	-46.18
6.	Meghalaya	-6.49	-9.87
7.	Mizoram	+3.81	-10.25
8.	Nagaland	-12.75	-2.78
9.	Sikkim	-6.00	+101.02
10.	Tripura	-10.86	-10.10
11.	Uttarakhand	-22.42	+50.41

Source: Based on Figures in Table 3.

Has globalisation anything to do with the differential performance of the Indian Himalayan states? The major outcomes of globalisation, namely, increased external trade and foreign investment, may not have made any significant contribution in most of these states as they are far flung from the centres of globalisation–induced economic upsurge. Some measures of liberalisation of border trade with neighbouring countries, especially in the North East, have been undertaken, but information on the extent to which they have led to enhancement of trade is not available. Faster growth of Arunachal Pradesh and

Meghalaya could perhaps be attributed to some extent to this development. Measures of domestic deregulation, following economic reforms and globalisation, could have made an impact on the economies of these states, particularly in their industrial sector. Himachal Pradesh has always followed a policy of comparative advantage by focussing on horticulture and has diversified into new products - off-season vegetables and spices with a view to offsetting the loss of its advantage in its traditional product - apple, in recent years in the domestic and international markets. Uttarakhand has achieved its high growth mainly on the basis of industrial growth in the plains of the state, taking advantage of domestic deregulation and offering incentives available to special category hill states. Besides, a few other sectors with comparative advantage – such as medicinal plants and tourism - have attracted special focus for growth. Sikkim seems to have utilised its traditional comparative advantage in large cardamom and further developed and utilised its tourism potential. States like Meghalaya and Mizoram have not yet been able to fully reap special advantage they had in horticulture, particularly in certain fruits like citrus, pineapple and ginger, nor do they appear to have significantly gained from border trade with Bangladesh and Myanmar.

VII. Sustainability of Development: Use of Comparative Advantage and Eco-Friendly Approaches and Technologies

These inferences on the rates and sources of growth of the economies of Himalayan states are, of course, tentative and require further investigation to draw definite conclusions and policy implications. But it appears that globalisation can benefit even these areas which stand on the geographical, political and often cultural margins of the country, provided they are able to identify their comparative and unique advantages, including for different locations within each state and utilise them for their growth. Some examples of such efforts are seen in the faster growing states like Himachal Pradesh, Uttarakhand and Sikkim. But use of unique advantages, for example, in eco-tourism, small hydro electricity generation and medicinal herbs and plants, has not been made on a wide scale in these and other Himalayan states due to the continued dominance of development ideas

based on the "plains model" and the consequent lack of efforts on the part of the states to innovate towards mountain-specific development strategies. National policies have also often discouraged local resource-based development. These states need to be facilitated in their quest for benefitting from globalisation, by providing access to markets, domestic and international, to sell their products. This is particularly necessary for the states in the north east, for whom the neighbouring countries are closer than the mainland India, and liberalisation and promotion of border trade will immensely benefit them. In the absence of conscious efforts to identify and utilise their respective special advantage and without the government, both central and state, providing policy support to access markets, domestic and external, the states in the Indian Himalayan region face the danger of further economic marginalisation.

It is, however, of paramount importance that the development strategy for these states, while recognising their niche and comparative advantage, on the one hand, and their locational disadvantage, on the other, also look for approaches and technologies that minimise the damage to fragile ecology, environment and biodiversity. For example, tourism could be seen as a niche activity with a comparative advantage, but encouraging or allowing it beyond the carrying capacity of the area and region concerned could be disastrous. Similarly, hydropower generation may carry a large potential with comparative advantage, but large dam-based technology may not be the most suitable way to realise it. Location of productive activities and human settlement need to be planned in such a way that they do not lead to undue pressure on natural environment; and technologies used in production of goods and services and building infrastructure are environment-friendly and not destructive to ecology. Livelihoods have to be secured for the local population, but it is necessary to achieve it through approaches, activities and technologies that ensure both economic and environmental sustainability. A neglect of these considerations may lead to the kinds of disaster experienced following flash floods in Uttarakhand last year.

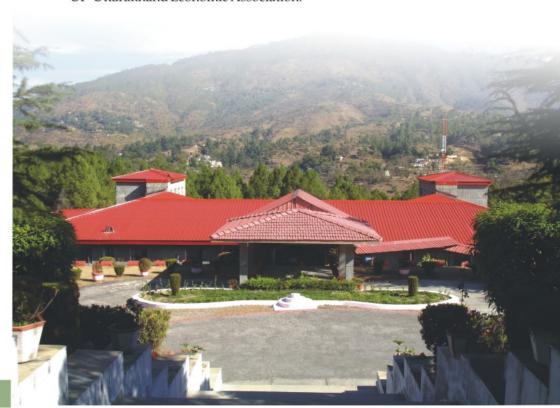
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His publications in the area of hill and mountain development include three major books: *Development of Hill Areas* (1982); *Growth, Poverty Alleviation and Sustainable Resource Management in the Mountain Areas of South Asia* (2000); and *Enterprise Development in Mountain Areas* (2005).

Dr Papola has been Chairman/Member of several State and national level bodies including Chairman of U.P. Taxation Enquiry Committee (1983-84); Member, State Planning Board, U.P. (1980-86); and Member, Indian Council for Social Science Research, New Delhi (1982-1988). He was Member of the National Commission on Enterprises in Unorganised Sector (NCEUS), appointed by Govt. of India (2005-2009) and that of the Prime Minister's Council on Micro, Small and Medium Enterprises (MSMEs). Dr. Papola served as Presidents of the Indian Society of Labour Economics (1994-2008) and the Indian Economic Association (2005-2006). He is currently Chairman Board of Governors, Giri Institute of Development Studies, Lucknow and the Governing Council, Central Himalayan Environment Association, Nainital.

Dr Papola was awarded VKRV Rao Young Social Scientist Prize for outstanding contribution in Economics in 1984. He is also the recipient of VKRV Rao Lifetime Achievement Award for his significant contribution to Social Science by Indian Social Science Association and Kautilya Award by UP-Uttarakhand Economic Association.



Design & Print : APNA JANMAT, D.Dun Ph. : 0135-2653420, 2655174

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Prof. Vinod K. Gaur, Distinguished Professor, IIA, Bangalore – 1998

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Prof. J.S. Singh, Emeritus Professor, BHU, Varanasi – 2004

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