

Dimensions of Socio-Economic Development in Jammu & Kashmir*

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SUMMARY

The level of development of different districts of Jammu & Kashmir was obtained with the help of composite index based on optimum combination of twenty nine developmental indicators. The district-wise data on these indicators for the year 2001-02 were used for obtaining the level of development of all the fourteen districts of the State. The level of development was estimated separately for agricultural sector, infrastructural facilities and overall socio-economic sector. The district of Kathua was ranked first and the district of Kargil was ranked last in the socio-economic development. Wide disparities were observed in the level of development between different districts of the State. Infrastructural facilities and literacy status of the people were found to be positively associated with the socio-economic development.

For bringing out uniform regional development, potential targets of various developmental indicators have been estimated in respect of low developed districts. These districts require improvement of various dimensions in some of the indicators for enhancing the level of development.

Key-words : Composite index, Socio-economic development, Developmental indicators, Model districts, Potential target.

1. INTRODUCTION

Development has been appropriately conceptualized as a process which improves the quality of life. Developmental programmes are undertaken in the country in a planned way through various Five Year Plans with the main objective of enhancing the quality of life of general masses by providing basic necessities as well as effecting improvement of their social and economic well-being. The green revolution in agricultural sector and the commendable progress on industrial front have increased the total crop production and manufactured goods, but there is no indication that these achievements have been able to reduce substantially the inequality in regional development. In a large sized federal country like India, there is likely to

exist wide disparities in the levels of development in different regions. Social development, by definition, is not a predetermined state but it is a continuous process of improvement of level of living. It implies the availability to maximum number of people of goods and services in an adequate measure, the existence of an agricultural, technological infrastructure which produces these goods and services and the existence of human related services of education and health which provides the trained manpower and also protect its health.

For focusing the attention of planners, policy makers, scientists and administrators towards the levels of disparities in socio-economic development of various states in the country, a seminar was organized jointly by Planning Commission, Government of India and State Planning Institute, Government of Uttar Pradesh during 1982. Realizing the seriousness and importance of the problems of estimation of level of development, the Indian Society of Agricultural Statistics conducted a series of research studies in this direction. The data on socio-economic variables of major 17 states of the country had been analyzed for the year 1971-72 and

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1981-82 (1991) and wide disparities in the level of development were observed between different states. It was, therefore, felt necessary to make a deeper analysis for evaluating the level of development by analyzing the data on socio-economic variables at district level.

Studies for estimating the level of development at district level had so far been made for the states of Orissa (1992, 1993), Andhra Pradesh (1994), Kerala (1994, 2005), Uttar Pradesh (1995, 2001), Maharashtra (1996), Karnataka (1997, 2003), Tamil Nadu (2000), States of Southern region (1999), Madhya Pradesh (2003), Assam (2004) and Hilly states (2004). It was found that the entire part of the low developed districts is not low developed but some parts are high or middle level developed. This year, the study is conducted for evaluating the status of development at district level separately for agricultural sector, infrastructural facilities and overall socio-economic sector in the state of Jammu & Kashmir by analyzing the data on economic variables for the year 2001-02. It would be of interest to estimate the status of development at district level, since there has been growing consensus about the need of district level planning in the country. Knowledge of level of development at district level will help in identifying where a given district stands in relation to others. The study throws light on the association of development between agricultural sector, infrastructural facilities and overall socio-economic sector. The improvements in different indicators required for enhancing the level of development of low developed districts are also suggested.

The State of Jammu & Kashmir is situated in north-western part of the country. The boundaries of the State are Russian Turkistan in north, Tibet in east, Punjab in south and Pakistan in west. Geographically the State can be divided into four zones. First, the sub-montane and semi montane plain commonly known as Kandi belt, the second, hills including Siwalik range, the third, mountains of Kashmir valley and Punjab range and the fourth, Tibetan track of Laddakh, Kargil, Gilgit and Skardu. About 75 per cent people of the State depend on agriculture. Paddy, wheat and maize are the major food crops of the State. About 15 per cent of the area of the State is covered by forest. According to 2001 population census, the population of the State is more than one crore. Literacy rate in the State is about 54.5 per cent as against 65.4 per cent at all India level. Handicrafts being the traditional industry of the State,

has been receiving top priority in view of its large employment potential and also demand of handicraft goods both within and outside the country.

2. DEVELOPMENTAL INDICATORS

Development is a multi-dimensional process and its impact can not be fully captured by any single indicator. A number of indicators when analyzed individually, do not provide an integrated and easily comprehensible picture of reality. Hence, there is a need for building up of a composite index of development based on optimum combination of various developmental indicators. Each district faces situational factors of development unique to it as well as common administrative and financial factors. Indicators common to all the districts have been included in the analysis for evaluating the level of development. Composite indices of development have been obtained for different districts by using the data on the following developmental indicators.

1. Area under forest
2. Cultivators as percentage of total workers
3. Agricultural labourers as percentage of total workers
4. Cultivable area as percentage of reported area
5. Cultivable area per cultivator
6. Gross area sown
7. Gross area irrigated as percentage of gross area sown
8. Net area sown
9. Net area irrigated as percentage of net area sown
10. Double cropped area as percentage of net area sown
11. Area under total food crops
12. Area under commercial crops as percentage of gross area sown
13. Area under fruits & vegetables as percentage of gross area sown
14. Culturable waste land per cultivator
15. Average holding size

16. Average livestock per household
17. Cattle/buffaloes per '000 ha. of cultivable area
18. Percentage of workers engaged in household industries
19. Number of small scale industrial units per lakh of population
20. Density of population per sq. km. area
21. Percentage of urban population
22. Decadal growth rate of population (1991-2001)
23. Average bank advances as percentage of deposits
24. % of villages electrified
25. Road length per 100 sq. km. area
26. Number of workers per lakh of population
27. Literacy rate
28. Average population per medical institution
29. Average population covered per post office

A total of twenty nine developmental indicators have been included in the analysis. These indicators may not form an all inclusive list but these are the major interacting components of development. Out of twenty nine indicators, seventeen indicators are directly concerned with the development in agricultural sector and the rest twelve indicators describe the availability of infrastructural and social facilities in the district.

3. ESTIMATION OF LEVEL OF DEVELOPMENT AND FIXATION OF POTENTIAL TARGETS

Variables in respect of developmental indicators come from different population distributions and they may be recorded in different levels of measurements. Hence, the values of these indicators are not quite suitable for simple addition in the combined analysis. For obtaining the composite index of development, the values of the indicators are transformed by subtracting the mean from the individual observations and dividing it by the standard deviation. The best value of the transformed variables for each indicator (with maximum/minimum

value depending upon the direction of the impact of indicator on development) is identified and the squares of the deviations of the transformed variable from the best value are obtained. The inverse of the coefficient of variation is used as weight for obtaining the pattern of development. The statistical technique given by Narain *et al* (1991). is applied to construct the composite index of development for different districts. The composite indices have been calculated separately for agricultural sector, infrastructural facilities and overall socio-economic sector. The values of the composite indices are non-negative and their smaller values indicate high level of development and larger values indicate low level of development. The developmental distances based on all the indicators have been obtained for each pair of districts and the best value of different indicators is taken as potential target for low developed districts.

4. RESULTS AND DISCUSSION

4.1 The Level of Development

The composite indices of development have been worked out for different districts in respect of agricultural sector, infrastructural facilities and overall socio-economic sector. The districts have been ranked on the basis of composite indices. The values of composite indices along with the rank of the districts are given in Table 1.

It may be seen from Table 1 that in case of agricultural development, the district of Kathua was ranked first and the district of Srinagar was ranked last. Here, it may be pointed out that only 20 per cent people of the district of Srinagar live in rural areas and depend on agriculture. The composite indices varied from 0.72 to 0.95. Infrastructural facilities play a very important role in enhancing the level of development in the State. With respect to these facilities, the district of Kathua was ranked first and the district of Kargil was ranked last. The composite indices varied from 0.37 to 0.86. In overall socio-economic development, the district of Kathua was placed on the first position and the district of Kargil occupied the last position. The composite indices varied from 0.55 to 0.89.

Table 1. Composite index (CI) and rank of districts

S. No.	District	Agricultural Development		Infrastructural Development		Socio-economic Development	
		C.I.	Rank	C.I.	Rank	C.I.	Rank
1.	Jammu	0.72	2	0.44	2	0.59	2
2.	Srinagar	0.95	14	0.46	3	0.72	7
3.	Anantnag	0.76	4	0.64	10	0.73	8
4.	Baramulla	0.77	5	0.64	9	0.73	9
5.	Udhampur	0.73	3	0.55	4	0.66	3
6.	Doda	0.77	7	0.68	12	0.76	10
7.	Pulwama	0.77	6	0.56	6	0.68	4
8.	Kupwara	0.84	12	0.81	13	0.87	13
9.	Budgam	0.81	9	0.65	11	0.76	11
10.	Kathua	0.72	1	0.37	1	0.55	1
11.	Rajouri	0.81	10	0.57	7	0.71	5
12.	Poonch	0.84	11	0.56	5	0.71	6
13.	Leh	0.90	13	0.61	8	0.77	12
14.	Kargil	0.79	8	0.86	14	0.89	14

4.2 Different Stages of Development

For relative comparison of districts with respect to level of development, it appears quite appropriate to assume that the districts having composite indices less than or equal to $(\text{Mean} - \text{SD})$ are high level developed. These districts may be classified in category I of developed districts. Districts having composite indices greater than $(\text{Mean} + \text{SD})$ are low developed districts. These districts might be classified as low level developed and put in category IV in the State. In the same way, the districts having composite indices between (Mean) and $(\text{Mean} - \text{SD})$ are high middle level developed and put in category II of districts in the State and the districts having composite indices between (Mean) and $(\text{Mean} + \text{SD})$ are low middle level developed districts. These districts are put in category III in the State. On the basis of above classification, the districts are put in four stages of development as high, high middle, low middle and low.

Table 2 presents the name of the districts along with the percentage population in different stages of development.

It may be seen that in case of agricultural development, three districts are found to be highly developed. About 28 per cent population of the State belongs to these districts. Five districts covering the population of about 38 per cent are high middle level developed. Four districts are low middle level developed. These districts cover the population of about 21 per cent. Two districts are observed to be low level developed. The population covered by these districts is about 13 per cent.

With respect to infrastructural facilities, three districts having the population of about 33 per cent are found to be better developed in comparison to other districts. Four districts with the population of about 22 per cent are found to be highly middle level developed. Five districts are observed to be low middle level developed. These districts cover the population of about

Table 2. Population under different stages of development

Stage of Development	District	Population (%)
AGRICULTURAL DEVELOPMENT		
High	Jammu, Udhampur, Kathua	28
High Middle	Anantnag, Baramulla, Doda, Pulwama, Kargil	38
Low Middle	Kupwara, Poonch, Budgam, Rajouri	21
Low	Srinagar, Leh	13
INFRASTRUCTURAL DEVELOPMENT		
High	Jammu, Srinagar, Kathua	33
High Middle	Udhampur, Pulwama, Rajouri, Poonch	22
Low Middle	Anantnag, Baramulla, Doda, Budgam, Leh	37
Low	Kupwara, Kargil	08
SOCIO-ECONOMIC DEVELOPMENT		
High	Jammu, Kathua	21
High Middle	Srinagar, Udhampur, Pulwama, Rajouri, Poonch	34
Low Middle	Anantnag, Baramulla, Doda, Budgam, Leh	38
Low	Kupwara, Kargil	07

37 per cent. Two districts having the population of about 8 per cent are low level developed.

In overall socio-economic field, two districts having the population of about 21 per cent are found to be better developed. Five districts are high middle level developed. These districts cover the population of about 34 per cent. Five districts having the population of about 38 per cent are found to be low middle level developed. Two districts are observed to be low level developed. These districts cover about 7 per cent population of the State.

4.3 Inter-relationship among Different Sectors of Economy

For proper development, it is essential that all the sectors of economy should flourish together. System of education envisages all round development of manpower and human resources required for socio-economic activities. A large population below an acceptable economic level poses serious problems and characterizes its economy. The association between the level of development of different sectors of economy and literacy level is worked out and presented in Table 3.

Table 3. Correlation coefficients

Factors	Agricultural Development	Infrastructural Development	Socio-economic Development	Literacy Level
Agricultural Development	1.00	0.12	0.45	-0.08
Infrastructural Development		1.00	0.94**	-0.58*
Socio-economic Development			1.00	-0.53*
Literacy Level				1.00

* Correlation is significant at the 0.05 level.

** Correlation is significant at the 0.01 level.

It may be seen from the above table that agricultural development is not significantly associated with infrastructural facilities but infrastructural facilities are having very high significant positive association with socio-economic development. The level of literacy in the State is also influenced by the infrastructural facilities. The literacy rate is having significant association with the socio-economic development. Levels of development in agricultural sector are not found to be associated with the socio-economic development and literacy level of the people. This fact may be verified by studying the status of development at a smaller level in the State.

4.4 Potential Targets of Developmental Indicators for Low Developed Districts

It is observed that there are wide disparities in the level of development of different districts. It would be quite useful to examine the extent of improvement required in developmental indicators for enhancing the level of development of low developed districts. This information will help the planners and administrators to

readjust the resources for bringing out uniform regional development. Two districts namely Kupwara and Kargil are found to be low developed in overall socio-economic field. These districts cover about 7 per cent population of the State. The best value of the developmental indicators is taken as potential target of the low developed districts. The present values of the developmental indicators along with the potential target for the low developed districts are given in Table 4.

It may be seen that the potential targets of most of the indicators are quite high. Suitable action is required to be taken to achieve the potential target and enhance the level of development. Specific recommendations for each of the low developed districts are given below.

1. Kupwara : This district is low developed in infrastructural facilities and socio-economic sector. The district is observed to be in low middle category in respect of agricultural development. Improvements are required to be made in road transport and medical facilities in the district. Literacy level of the people of the district is very poor. Only 41 per cent people are literate whereas the literacy rate at the State level is about

Table 4 : Value of developmental indicators and potential target of low developed districts

S.No.	Developmental Indicators	Low Developed Districts		Potential Target
		Kupwara	Kargil	
1.	Cultivable area as percentage of reported area	67.00	47.00	73.00
2.	Cultivable area per cultivator	0.52	0.35	1.04
3.	Net area irrigated (%)	40.00	99.00	99.00
4.	Double cropped area as percentage of net area sown	2.00	0.80	98.00
5.	Area under commercial crops (%)	18.00	0.10	46.00
6.	Area under fruits and vegetables (%)	19.00	2.00	22.00
7.	Cultivable wasteland per cultivator	0.05	0.14	0.02
8.	Average holding size	0.55	0.78	1.19
9.	Percentage of workers engaged in household industries	4.06	1.89	21.88
10.	Number of SSI units per lakh population	212	446	784
11.	Decadal growth rate of population	39	31	24
12.	Villages electrified (%)	94	81	100
13.	Road length per 100 sq. km. area (km.)	36	5	91
14.	Number of workers per lakh population	3550	6255	9772
15.	Literacy rate	41	58	77

54 per cent. Steps should be taken to enhance the level of literacy in the district. In agricultural sector, irrigation facilities in the district require immediate improvement. Facilities should also be created to enhance the small scale industrial units in the district.

2. Kargil : This district is low developed in infrastructural facilities and overall socio-economic field. This is high middle level developed in agricultural sector. The district has low order transport, education and medical facilities. Steps should be taken to popularize the small scale industrial units in the district. Literacy level needs improvement. It should be enhanced by encouraging the educational activities in the district. Developmental programmes suitable for hilly areas should be undertaken in the district. The present transport and medical facilities require improvement in the district.

5. CONCLUSIONS

The broad conclusions emerging from the study are as follows:

- i. With respect to socio-economic development, the districts of Jammu and Kathua are found to be better developed in comparison to other districts of the State. The districts of Kupwara and Kargil are low developed. Special care should be taken for implementing the developmental programmes in these districts.
- ii. Three districts namely Jammu, Udhampur, and Kathua are better developed in agricultural sector. The districts of Srinagar and Leh are found to be low developed in agricultural field. More than 75 per cent people of Srinagar district come from urban areas and they are not much affected by agricultural development. Most of the area of district Leh is covered by hills and forest.
- iii. Infrastructural facilities in respect of road transport, medical, educational and communication etc. are better in the districts of Jammu, Srinagar and Kathua. These facilities are poor in the districts of Kupwara and Kargil.
- iv. Infrastructural facilities are highly associated with socio-economic development. These facilities are also found to be positively influencing the literacy level. Literacy status of the people has a positive association with the

socio-economic development. Agricultural development is not found to be associated with socio-economic development. Literacy level of the people and other infrastructural facilities are not influencing the level of development in agricultural sector. These points should be verified by studying the status of development at a smaller level (say tehsil or block) in the State.

- v. Entire parts of the low developed districts are not low developed but some parts are high middle or low middle level developed.
- vi. Wide disparities in the level of development have been observed between different districts.
- vii. For enhancing the level of development of low developed districts, potential targets of developmental indicators have been obtained. The low developed districts require improvement of various dimensions in the developmental indicators.

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