

**"Regional Dimensions of the Process of
Commercial Banking and Economic
Development in India 1969 to 1986".**

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RAJVEER

**CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI—110067**



जवाहरलाल नेहरू विश्वविद्यालय
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067

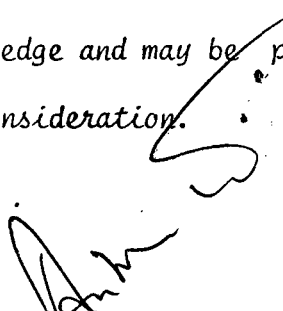
CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT,
SCHOOL OF SOCIAL SCIENCES




4th Jan. 1989

C E R T I F I C A T E

Certified that the dissertation entitled "REGIONAL DIMENSIONS OF THE PROCESS OF COMMERCIAL BANKING AND ECONOMIC DEVELOPMENT in INDIA 1969 - 1986" Submitted by RAJVEER in partial fulfilment of the requirement for the degree of MASTER OF PHILOSOPHY is a bonafide work to the best of my knowledge and may be placed before the examiners for their consideration.


PROF. A.K. MATHUR
Supervisor


Prof. A.K. MATHUR
Chairman

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Rajveer
RAJVEER

PREFACE

The role of Commercial Banks as an instrument of balanced regional development has been a matter of debate particularly after nationalization of major Commercial Banks in 1969. The present study intends to analyse the role of commercial Banks in economic development of different states.

The whole study has been divided into five chapters. Chapter I deals with theoretical background of the problem, objective, data base, methodology and literature survey. In the second chapter, the spread of Banking has been measured with help of selected indicators of banking development. In the third chapter the level of Economic Development has been measured by taking selected indicators of economic development. Chapter II and Chapter III are linked in Chapter IV through statistical tools of economic analysis namely the Regression analysis and co-relation analysis of Banking development and economic development. And finally Chapter V on conclusions gives Major findings.

Rajveer

RAJVEER

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CHAPTER - I

INTRODUCTION

I THE PROBLEM

After independence the concept of development was synonymous with increasing gross national product. Later on, it was realized that mere increase in G.N.P. was not enough. There has to be an equitable distribution. The fruits of development should reach all. For some time it was felt that question of distribution should be taken up after the success on production front. It was soon realized that increase in production without equitable distribution would not promote welfare and besides, if problem of distribution is ignored, there would be no incentive to a large majority of the people to produce more. Thus, both increase in production and its equitable distribution must be attended at the same time.

There are three different schools of thought on the role of banks as development agencies. At one extreme, there is a view that banks should take on a fullfledged development role. At the other extreme, there is view that banks being primary credit agencies cannot be expected to take on such a role and their function is to make credit available for bankable projects. Beyond this, it is for the other agencies concerned in the extension, marketing, input supplies etc. to play their relative roles. There is another view in between these two extremes. While granting the developmental responsibilities to commercial banks, particu-

larly in the context of the nationalisation of large sized ones among them, it should at the same time take cognizance of the complementary role to be played by other agencies. This seems to be the golden mean. Credit can only catalyse the development process and it cannot by itself bring about development. In this sense, banks are partners in development with other agencies. At the same time, banks should not be mere passive observers, but take the initiative in getting such activities started wherever they are not already in operation.

Although planned approach to development started in India in the early 50's the First Plan did not assign any specific responsibility that commercial banks could discharge in overall development. At that time the concept of commercial banking was merely as purveyors of short term credit. In fact the earlier Committees set up by the Government unequivocally stated that commercial banks are not suited for lending to agricultural and related activities. However, since the social control of commercial banks and subsequent nationalisation of major commercial banks in 1969, there has been a significant transformation in the role of commercial banks in accelerating development by providing credit and also other extension services through their wide net work of branches. At the time of nationalisation it was emphasised that the objective of nationalised banks was to actively foster the growth of banking and to create sufficient opportunities for hitherto neglected and backward areas of the

country. It was also stated that the primary concern of nationalisation has been to accelerate development and thus make a significant impact on the twin problems of poverty and unemployment and thereby bring about progressive reduction in disparities between rich and poor and also between relatively advanced and backward areas of the country.

One popular theory on the causes of under-development relates to the vicious circle of poverty so profoundly put forward by Prof. Nurske (1953). Thus low income leads to low savings which in turn results in low capital formation. This means low capital per worker and consequent low productivity which leads back to low income thus completing the circle. This is typical of a poor agriculture based economy. A secondary consequence is the lack of demand for industrial goods which means low level of industrialization resulting in over population in the agricultural sector which again reinforces the vicious circle referred to above.

That is where Banks come in as suppliers of credit for investment and credit operations and thus break the chain of vicious circle.

Prof. Joseph Schumpeter spoke of credit as a phenomenon of development and regarded the Banking system alongwith the entrepreneurship as being the key agent in the process of development. While Prof. Schumpeter provided the basic theoretical framework, Gerschenkron's seminal work provided basic insight on the role of banking system played in develop-

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ment. Although Gerschenkron's analysis may be questioned in terms of its universal applicability there can be little doubt that the role of Banking system in the economic development is not a passive one. Whether the banking system makes a positive contribution in igniting the process of growth, largely depends on how the banking policies are pursued and on the pattern and evolution of banking structure. It was Gurley and Shaw who pointed out that one of the hall marks of development was the dichotomy between the savings and investment functions. Related to this was the increasing importance of financial savings in the total of the community's savings and the share of funds borrowed from institutions to finance investment and productive activities. In this sense, though basic determinants of economic development may be outside the financial system, the latter influences the pace of development by the manner and extent to which it performs the role of intermediation between savings and investments.

Historically speaking development of Commercial Banks in India followed the growth of trade and industry. It inherited the traditions of Anglo-Saxon merchant banking rather than German trading of development banking. The modus-operandi of Indian Commercial banking system was to mop up the surplus generated in the form of absolute rents through the conveyor belt of townships spread over vast rural sector (Basu-1979). Under such circumstances it is but natural that banking system should operate in such a fashion in which it can favour the growth of mercantile capital and concentrate

in regions where it can best do so. That is why a high degree of urbanization in a state carries with it a high ratio of credit to deposit for Commercial Banking system. It is clear from Table 1 given below that C.D. ratio is comparatively high in case of Karnataka, Maharashtra, Tamil Nadu and West Bengal.

LEVELS OF URBANIZATION AND CREDIT-DEPOSIT RATIO 1970-81

T A B L E - 1

<u>States</u>	<u>Level of Urbanization</u>		<u>Credit deposite ratio</u>	
	<u>1971</u>	<u>1981</u>	<u>1969</u>	<u>1986</u>
Andhra Pradesh	19.3	23.3	100	80
Assam	8.8	10.3	37	51
Bihar	10.5	12.5	31	38
Gujarat	28.0	31.1	4	56
Haryana	17.7	21.4	48	66
Himachal Pradesh	7.0	7.6	28	40
J & K	18.6	21.0	9	43
Karnataka	24.3	28.9	76	85
Kerala	16.2	18.8	66	61
M.P.	16.3	20.3	59	61
Maharashtra	31.2	35	101	81
Orissa	88.4	11.8	50	83
Punjab	23.7	27.7	27	44
Rajasthan	17.6	20.9	52	65
Tamil Nadu	30.3	33.0	193	94
Uttar Pradesh	14.0	18.0	45	43
West Bengal	24.7	26.7	115	50
All India	19.9	23.3	78	63

Correction of these disparities in banking development was one of the major objectives of nationalising major Commercial Banks in July-1969. Thus with the nationalization of major Commercial Banks government intend to change the role of banking from growth to development. Economic growth is a process of simple increase implying more of same,

while economic development is a process of structural changes implying economic growth and something more. Banking system expected to work as an instrument of qualitative change in the society by channalizing the banking resources in the most desired directions. Thus at the time of introduction of 'Lead Bank Scheme' the following main objectives were put forward :

1. Removal of unemployment of underemployment.
2. To raise the standard of living of the poorest section of the population.
3. Provision of some of the basic needs of the people belonging in the poorest section of the society.

Thus the role of Banking concerned not only ^{with} the quantum of aggregate and sectoral allocation but also ^{with the} allocation of credit in its qualitative and directional aspect *and also to* expand the base of entrepreneurship and reducing income disparities.

Another important grievance and which was also one of reasons for nationalization of major Commercial Banks was that, the Banks mobilize resources in the form of deposits from backward states and utilize these resources in metropolitan cities and developed states, thereby aggravating regional imbalances in the development of the economy. Therefore, it is one of the objectives of present work to look into the aspects of regional development at Inter-State Level viz-a-viz banking development.

The performance of Commercial Banks since 1969 improved significantly. There was major shift towards lendings to the priority sectors of the economy. Government has come out with clear cut policy measures and set national goals to be attained by banks. These goals were ;

1. A level of 40 percent of net bank credit should go the priority sector only.
2. A level ^{of} 16 percent of net bank credit was to be achieved by March 1987.
3. Advances to weaker sections was to reach 10% of net bank credit by 1985.
4. Credit-deposit ratio should be 60% in semi-urban and rural branches seperately.

It has been observed that even after setting up National goals the focus of attention of major Commercial Banks has remained the financing of large and medium industry and of trade. The objective of all nationalized banks was to secure as much of business emanating from the metropolitan areas and other big cities as possible. Keeping these facts in mind, the present study ^{also} concentrate on ^{the} sectoral aspect of banks credit and its impact on sectoral development of different states.

In a developing economy wedded to democratic ideals there are bound to be gaps between what ought to happen and what

actually happens. Regional disparities are bound to remain even in ^{the} most affluent countries but these disparities need to be narrowed down to tolerable limits. It is therefore necessary to review the impact of bank activities on development process to take corrective measures and to give a new direction to development oriented policies.

1.2 DATA BASE & METHODOLOGY -

The whole data taken for this study can be divided into four categories

- (i) Agricultural data
- (ii) Industrial data
- (iii) Data pertaining to other services
- (iv) Banking data

"AGRICULTURAL ASPECT"

Agricultural development can be looked at through the following indicators for early 1970's and ^{early} 1980's.

1. Output per hectare (land productivity)
2. Output per worker (worker productivity)
3. Percent ^{age} area irrigated
4. Cropping intensity
5. Fertilizer consumption per hectare of cropped area.
6. No. of tube-well per 1000 hectare of cropped area.
7. No. of tractors per 1000 hectare of cropped area.
8. Power used per hectare of net sown area.

The statewise average figures for 1971-73 and 1982-84 for net area sown and total cropped area were obtained from the Indian Agricultural Statistics published by "Directorate of Economics and Statics, Ministry of Agriculture".

Data on the consumption of chemical fertilizer (NKP) have been obtained from different issues of Fertilizer Statistics in India published by Fertilizer Association of India New Delhi. Besides, data on Agricultural productivity, power used per hectare of net sown areas and area under irrigation have taken from different issues of Statistical Abstract of India published by Central Statistical Organization (CSO) Ministry of Finance, Govt. of India.

INDUSTRIAL ASPECT

Industrial aspect of this study deals with the following indicators :-

1. Percentage of employment in industry to total (1971-81)
2. Industrial production per worker (1971-73 to 1982 and 1982 - 84).
3. Percentage of net domestic product originating from industry (1971-73 and 1982 - 84).
4. Percentage of Non Household workers to Non Household workers plus household workers.
5. Power used per worker (industrial power at low and medium voltage only)

In order to derive the above indicators, data have been collected from different issues of "Statistical Abstract of India" "General Economic Tables IIIB(i)," and different issues of the "Year book of India Railways"

SERVICES SECTOR

Indicators in services sector are as follows :-

1. Percentage of work force in services to total (1971-81)
2. Production per worker in services (1971-81)
3. No. of insurance companies (1971-73 and 1982-84)
per lakh of population.
4. No. of joining stock companies (1971-73 and 1982 - 84)
per lakh of population.
5. No. of policeman per 100 Sq.K.M. (1971-81)
6. Percentage of urbanization to total population (1971-81)

Data for the above mentioned indicators were collected from different issues of The "Statistical Abstract of India".

BANKING INDICATORS

The following indicators of the banking development have been used

1. Percentage of credit-deposit ratio (1969 and 1986)
2. Branches per lakh of population (1969 and 1986)
3. Per capita Advances (1969 and 1986).
4. Per capita deposit (1969 and 1986)
5. Share of priority sector to total Advances (1969 and 1986).
6. Percentage share of rural deposit to total deposits
(1969 and 1986).
7. Percentage share of rural advances to total advances
(1969 ^{and} 1986).

8. Percentage share of Agriculture's advances Total advances (1972 - 74) and 1982 - 84) of commercial banks
9. Percentage share of industrial advances to total advances (1972 - 74) and 1982-84) of commercial banks.
10. Percentage of tertiary sector advances to total advances (1972-74 and 1982-84) of Commercial banks.

Data for the above mentioned indicators are collected from the different issues of "Statistical Tables relating to Banks" and "Banking Statistical Returns" published by Reserve Bank of India.

Share of Priority Sector Advances and percentage of rural deposit/credit to total have been taken as indicator of banking development because of the recent shift in the major objective of banks from growth to development as mentioned in the earlier discussion of the present chapter.

For the purpose of analysis "composite indices"¹ of degree of development of agriculture, industry and services have been constructed (statewise) for 1971-73 and 1982-84 by assigning weightage to different indicators. The weightages were given by modified principal component Analysis. In the same way composite index of Banking development is also constructed statewise.

1.3 OBJECTIVES AND EARLIER STUDIES

The preceding analysis highlighted the frame within which the present work is to be carried out. The objectives of the present study are as under :-

1. To study the inter-state disparities in economic development at two point of time (1971-73) & (1982-84).
2. To study the inter-state disparities in sectoral development i.e. Agriculture, Industries and Services at two point of time (1971-73 & 1982-84).
3. To study the specific impact of outstanding credit of scheduled commercial Banks on iter-state levels of development at two point of time (1971-73) & 1982-84).
4. To study the role of outstanding credit of scheduled Commercial Banks in different sectors of the economy at two point of time (1971-73 & 1982 - 84).

Subject matter of this study is based on the problem of inter-state variation in outstanding credit of commercial Banks. To a great extent this resulted in increasing the inter-state variation in economic development. Moreover, Banking commission 1972 recommended that scheduled commercial Banks should work as a specialized channel for flow of funds from organised sector to rural sector. They were asked to give financial support to various facets of economic programme for the uplift of the masses living below the poverty line. This is a well recognised fact that in India not only there are interpersonal disparities, but at the same time interregional disparities are also there. This may have been partly due to lack of resource endowment but mainly due to the tendency to locate new investment in the easy

areas where rate of return on investment are high and comparatively less risky. It has ^{also} been observed that the purpose of commercial Bank's Schemes is to reduce inter-personal disparities rather than inter-regional disparities, but one cannot reach the target unless inter-regional disparities are reduced. In order to reduce inter-personal disparities inter-regional disparities should also be reduced.

The purpose of this study, therefore, is to look into the impact of commercial bank's lendings on level of economic development in different states and also to study the impact of bank's credit on different sectors of the economy. In 1969 RBI initiated a study of "Financing of Agriculture" by Commercial Banks. This study looked into the inter-district variations in ^{the} spread of Banking and agricultural development. The RBI study uses banking data of 1966 and agricultural data for various periods between 1961 and 1965 for different states to construct composite index for (a) agricultural development (b) spread of banking facilities (c) extent of deposit mobilisation. Thus the districts were ranked within each states as per the three indicators. Main finding of this study was that variation in per - capita credit at district level was due to per capita deposits, number of workers in manufacturing per 1000 of population and intensity of cultivation. These three indicators ^{alone} explained 63% of variation in per capita credit.

Another district level study is done by Shetty (1979). He analysed inter-district variations in credit deposit ratio to know the extent of deposit derived from a particular region and how much of it was reinvested in the form of credit, which to a great extent responsible for the development of a particular region. Rangrajan (1982) analysed the percapita availability of credit and deposit. The argument advanced by Rangrajan is that the credit deposit ratio based on percapita data reveals more appropriately the gap in availability of credit. In other words it helps in the deployment of more credit in respective state making population a weight.

The main objective of most of these studies was to explain variation in ^{commercial} banks credit deployment. Frankly speaking there is very limited material available on the role of banks credit as an instrument of economic development.

NOTES

1. CONSTRUCTION OF COMPOSITE INDEX

Composite index is constructed by giving specific weightage to the variables.

$$I = W_1 X_1 + W_2 X_2 + \dots + W_n X_n$$

Where I is composite index and W is weightage given to variables X. There are four steps involved in the construction of first principal component.

1. To eliminate the bias of scale in Original data matrix to get the standarized matrix. This is necessary because, the value of any composite index are highly sensitive to the units of measurement of the Original Variable. Secondly variables may have different scales of measurement. This can be done by any of the following methods :-
 - (i) Ranking
 - (ii) Standardization
 - (iii) Normalization
 - (iv) Division by mean
 - (v) Division by standard deviation
 - (vi) Equal range method
 - (vii) Division by some ideal normal value.
2. To prepare an inter-correlation matrix 'R' from the X variables given in the data matrix.
3. To find out the eigen value and eigen vector of this correlation matrix 'R'.
4. Now the elements given in first eigen vector as weights we get the weighted sum of the standarized scores for each observation. The value so obtained are the scores of first Principal component. Similarly using the other eigen vectors the scores of 2nd 3rd 4th principal components can be worked out.

Thus composite index is weighted sum of the standarized scores of the given variables given the eigen values as weights.

CHAPTER - II

'SPREAD OF BANKING IN RECENT YEARS'

II.1 INTRODUCTION

The period since independence saw multi-dimensional changes in the banking system of India. There are changes in character and magnitude of over all banking development specially after nationalization of major commercial Banks. Traditionally commercial Banks of India were urban based profit oriented business enterprises and generally were not responsive to the requirements of community. The branch net work had a strong urban bias with consequent inadequate coverage in the rural areas. Increase in deposit was confined to developed states. At the same time bank lendings were urban oriented and concerned mostly with the organized industry and trade with the result that other sectors of ^{the} economy were dependent upon non-institutional agencies for their requirement of finance. The banking facilities were also beyond the reach of vast number of economically weaker sections of the society. The nationalization of commercial Banks in 1969 was to rectify this type of lop-sided development. Moreover, compulsions of financing the credit needs of agriculture in wake of the Green Revolution was a very material factor which made the nationalization of Banks possible. In order to mobilize savings of the economy by taking banks to a large number of areas not served by banks it was essential that geographical coverage of banks must be greatly expanded.

II-1A BRANCH EXPANSION

There has been manifold increase in Branch expansion. Between July, 1969 and June 1986 the number of bank offices in country increased from about 8260 to 52940.

The average size of population per bank branch improved from 65000 in 1969 to 14000 in 1986. Further, the number of rural branches to the total number of bank branches is now 60 percentage compared to 22 percent in 1969. Earlier there were on average 1.56 branches per lakh population in 1969 while in 1986 there were 7.8 branches per lakh of population.

TABLE II-1 SELECTED BANKING INDICATORS INDIA-1969-1986

	<u>1969</u>	<u>1986</u>
1. Branch per lakh of population	1.56	1.8
2. Percentage of credit deposit ratio	78	63
3. Per capital Advances	68	744
4. Per Capita Deposits	88	1194
5. Share of priority Sector total%	15	45
6. Share of rural deposit to total deposit%	6	14
7. Share of rural credit to total credit %	4	14
8. Share of Agr. Advances %	9	15
9. Share of Ind. Advances%	62	51

II.1B DEPOSIT AND CREDIT :

Deposits with commercial Banks as a percentage of national income rose from 15% in 1969 to 40% in 1986. The share of rural deposits to total deposits moved up from 6% to 14% in 1986. While per capita deposits moved from 88 rupees in 1969 to 1194 rupees in 1986.

Total credit extend by commercial Banks showed an increase of 12 times between 1969 to 1986. The credit-deposit ratio however declined from 78% to 63%, i.e. 15 percentage point from 1969 to 1986. This fall reflected mainly the deployment of resources in increasing measures to meet the statutory liquidity ratio and cash reserve ratio. Over the years however there is marginal decline in the rural-urban disparities. The share of rural sector in total advances was only 4% which increased to 14% in 1986. More over per capita average of advances has increased from 68 rupees in 1969 to 744 rupees in 1986. while the share of priority sector advances increased from 15% in 1969 to 45% in 1986.

Another important aspect of banking development is change in the pattern of bank advances. The share of agriculture advances in 1971 was 9% of the total advances which increased to 15% in 1984. While the share of industrial advances declined from 62% in 1971 to 51% in 1984.

II 2 'INTER STATE VARIATIONS IN BANKING DEVELOPMENT -1969-1986.

II 2 A DISTRIBUTION OF BANK OFFICE :

Table II - 2 gives statewise number of branches at per lakh of population. In 1969 seven states had ^{more} branches than national average. The national average in 1969 was 1.56 branches per lakh of population. In Bihar and Orissa branches per lakh of population were just one third of the national average and one fifth in case of Karnataka, Kerala, Tamilnadu and Maharashtra. Between 1969 and 1986 the national average of bank branches per lakh of population increased to 7.8. But in 1986 there were only six states having branches more than the national average against the seven in 1969. There has been a significant increase in the number of bank branches in case of Himachal Pradesh and Jammu and Kashmir. In order to quantify inter-state disparity in the distribution of bank offices co-efficient of variation of branches per lakh of population was worked out. The co-efficient of variation declined 17 percentage points. It stood at 37.45 in June , 1969. Thus the regional disparities relating to banks branches per lakh of population declined considerably during 1969 to 1984. The main factor responsible for this even growth of branch expansion was the licensing policy adopted by Reserve Bank of India.

Gadgali working group (1969) on the expansion of banks branches observed that the progress was deficient of ^{branch} expansion

In certain aspect The benefits did not percolate to wider areas of the economy. Hence, the study group recommended the introduction of 'Lead Bank Scheme' with a view of enabling banks to adopt^a/systematic area approach for the development of Banking and credit

T A B L E II - 2

INTER STATE VARIATION IN BRANCHES PER LAKH OF POPULATION

<u>State</u>	<u>1969</u>	<u>1986</u>
Andhra Pradesh	1.33	9.1
Assam	.49	3.3
Bihar	.48	4.35
Gujarat	2.94	7.69
Haryana	1.75	7.69
Himachal	1.79	11
J & K	.87	10
Karnataka	2.63	9.30
Kerala	2.85	10
M.P.	.86	5.7
Maharashtra	2.27	6.8
Orissa	.47	5.2
Punjab	2.38	10
Rajasthan	1.45	5.7
Tamilnadu	2.56	7.2
U.P.	.84	5
West Bengal	1.14	4.9
All India	1.56	7.8
Co-Efficient of variation	54.53	37.45

structure. Nariman Committee appointed by the Reserve Bank of India (A Committee of Bankers) in 1969 also endorsed this view. Subsequently, "District Consultative Committees" were set up and banking development aspect was viewed in a wider perspective of economic development of each region.

Although the Lead Bank Scheme played a useful role, the thrust of the commercial Banks into the rural areas has hampered due to (a) high cost structure of operation (b) general-urban oriented environment as explained in the earlier sections. Moreover, Reserve Bank of India adopted a liberal policy in opening of branches in hilly regions and tribal areas.



The decline in the inter-state disparity in banking development during 1969 to 1986 could be traced to rural bias in opening of new branches. The percentage of rural branches increased from 22.4 percent at the end of June 1969 to 53% at the end of July, 1986. Particularly the number of rural branches in states like Bihar, Rajasthan and Orissa increased significantly.

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II 2 B DISTRIBUTION OF DEPOSITS :

The Indian experience of massive extension of commercial banks into rural and other unbanked non-serviced areas since 1969 is of great significance. IN 1969 the ratio of Bank deposits to national income stood at 15 percent. In 1986 this ratio went up 40%. A large mobilization of deposits and change in pattern of credit were achieved particularly after nationalization of major commercial Banks. The share of rural branches in total deposits was 6% which rose to 14% in 1986. There were as many as 6 states having less than national average of rural deposits, these states

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were Gujarat, J & K , M.P., Maharashtra, Orissa and West Bengal. This number declined to 4 in 1986.

Though the share of rural deposit increased from 6% to 14% from 1969 to 1986, yet the co-efficient of variation of ratio of rural deposits to total deposits declined only marginally. It declined from 56.13 in 1969 to 53.43 in 1986 as shown in table II - 3.

It is clear from table II-4 that there are considerable variations in per capita deposits from state to state. The co-efficient of variation of per capita deposit declined from 77.20% in 1969 to 53.69% in 1986. Although less developed states have experienced a higher increase in the share of bank offices yet their share in total deposits have not improved much. In 1969 Andhra, Assam, Bihar, M.P., Orissa, Rajasthan and U.P. were among the most backward states in terms of per-capita deposit. The situation of Andhra Pradesh and U.P., improved significantly till July, 1986 but in case of Bihar, M.P., Orissa and Rajasthan there was no significant improvement,

INTER-STATE VARIATION IN PER-CAPITA DEPOSIT

T A B L E - II-4

<u>STATE</u>	<u>Total 1969</u>	<u>Total 1986</u>	<u>Percentage increase from 1969 to 1986</u>
A.P.	32	973	2940
Assam	24	518	2058
Bihar	27	597	2111
Gujarat	135	1627	1105

<u>State</u>	<u>1969</u>	<u>1986</u>	<u>Percentage increase</u>
Haryana	50	1244	2388
H.P.	43	1389	3230
J & K	46	1442	3034
Karnataka	69	1207	1649
Kerala	60	1472	2033
M.P.	24	631	2529
Maharashtra	105	2685	1276
Orissa	13	439	3276
Punjab	137	2893	2011
Rajasthan	27	647	2296
Tamil Nadu	72	1216	1588
U.P.	22	853	3731
West Bengal	130	1710	1215
All India	88	1194	1256
Co-efficient of variation	77.2	53.69	

INTER STATE VARIATION IN RURAL DEPOSITS

T A B L E - II-3

<u>State</u>	<u>%to total deposits 1969</u>	<u>% to total deposit 1986</u>
A.P.	11	25
Assam	12	27
Bihar	10	41
Gujarat	5	14
Haryana	8	25
H.P.	30	52
J & K	2	21
Karnataka	10	20
Kerala	11	10
M.P.	4	23
Maharashtra	1	4
Orissa	5	32
Punjab	6	20
Rajasthan	8	23
Tamil Nadu	4	12
U.P.	10	27
West Bengal	1	7
All India	6	14
Co-efficient of variation	56.13	53.43

II 2 C DISTRIBUTION OF CREDIT :

The distribution of credit among different states indicates

a great degree of concentration.

However, there had been qualitative change in the allocation of Bank credit since 1969. The share of rural branches in total credit increased from 4% to 14% as shown by table II.6.

It is clear from table II-5 that inter-state disparities in per-capita credit showed a declining trend. The co-efficient of variation declined from 101.67% in 1969 to 60.62% in 1986. ^{The} Growth of per-capita advances in case of developed states was between 10-20 times from 1969 to 1986, while in case of backward states like, J & K it was 125 times, in case of Orissa it was 40 times, in case of Himachal Pradesh it was 50 times of 1969. Increase in per capita credit in case of Maharashtra, Gujarat, Tamil-Nadu ^{was} limited up to 5 - 10 times of 1969.

INTER STATE VARIATIONS IN PER CAPITA ADVANCES (Rs.)

T A B L E - II.5

<u>State</u>	<u>1969</u>	<u>1986</u>	<u>Percentage increase</u>
A.P.	37	774	1991
Assam	13	266	1946
Bihar	9	227	2400
Gujarat	89	908	920
Haryana	30	822	2640
H.P.	11	565	5036
J & K	4	621	15425
Karnataka	63	1035	1542
Kerala	49	899	1734
M.P.	17	384	1864
Maharashtra	220	2176	888
Orissa	8	366	4475
Punjab	50	1280	2460
Rajasthan	17	426	2405

<u>State</u>	<u>1969</u>	<u>1986</u>	<u>Percentage increase</u>
Tamil Nadu	101	1137	1036
U.P.	21	365	1638
West Bengal	162	859	430
All India	68	744	944
Co-efficient of variation	107.6	60.62	

The disparities in the share of rural advances to total advances also showed a declining trend. The co-efficient of variation declined 25 percentage point from 91.43 in 1969 to 66.24% in 1986. Most of the increase in rural advances observed in case of backward states like Assam, Bihar, H.P., J & K, as shown in table II-6. The increase in rural advances in relation to total advances in case of developed states like Gujarat, Kerala, Maharashtra and West Bengal remained very low. In case of Kerala percentage of rural advance declined from 14% in 1969 to 10% in 1986. While the increase in case of Gujarat was only marginal from 12% in 1969 to 16% in 1986.

INTER STATE VARIATION IN SHARE OF RURAL ADVANCES.(percentage)

T A B L E - II.6

<u>State</u>	<u>1969</u>	<u>1986</u>
A.P.	7	18
Assam	9	23
Bihar	3	23
Gujarat	12	16
Haryana	7	22
H.P.	43	65
J & K	7	25
Karnataka	13	17
Kerala	14	10

<u>State</u>	<u>1969</u>	<u>1986</u>
M.P.	6	17
Maharashtra	1	9
Orissa	10	10
Punjab	20	27
Rajasthan	10	18
Tamil Nadu	5	12
U.P.	8	21
West Bengal	3	9
All India	4	14
Co-efficient of variation	91.43	66.24

In general, the distribution of deposit depends upon different economic indicators like income asset preferences and to some extent the initiative taken by the banking system to mobilize more deposits, but the distribution of credit is a policy variable. Thus the difference in credit deposit ratio is an important policy variable. As mentioned in Chapter - I that bank mobilize deposit from one area and utilize these else where. This is justified only when deposit from developed areas are utilized for the development of backward areas. But it was observed that deposit from backwards areas were being utilized in developed areas. Table II-7 shows credit-deposit ratio (CD ratio) of different states for 1969 and 1986. It has been observed that there were considerable variations in ^{the} CD ratio of different states. The co-efficient of variation in case of CD ratio among different states was 49.89% ^{in 1969.} Again what is more significant is that developed states like Maharashtra, Tamil Nadu, West Bengal and Andhra Pradesh had very high CD ratio.

INTER - STATE VARIATIONS IN CD RATIO (percentage)T A B L E - II-7

<u>State</u>	<u>1969</u>	<u>1986</u>
A.P.	100	80
Assam	37	51
Bihar	31	38
Gujarat	48	56
Haryana	48	66
H.P.	28	40
J & K	9	43
Karnataka	76	85
Kerala	66	61
M.P.	59	61
Maharashtra	101	81
Orissa	50	83
Punjab	27	44
Rajasthan	52	65
Tamil Nadu	93	94
U.P.	45	43
West Bengal	115	50
All India	78	63
Co-efficient of variation	49.89	28.25

On the other hand backward states like Bihar, Orissa, Himachal Pradesh and J & K had very low CD ratio. In 1986 there was improvement in CD Ratio of backward states like Assam, Bihar Orissa, Himachal Pradesh and J&K. While on the other hand CD ratio of West Bengal, Maharashtra, Tamil Nadu and Andhra Pradesh either observed decline or only marginal improvement. Thus there was a decline in inter- state disparities of CD ratio. The co-efficient of variation declined from 49.89 percentage in 1969 to 28.25% in 1986 which is a significant decline.

A new concept was introduced in banking lending on the recommendation of Gadgil Committee. This was known

as 'Priority Sector Advances' . This new scheme located some high priority areas and under Lead Bank Scheme special efforts were made to finance these activities.

INTER STATE VARIATION IN SHARE OF PRIORITY SECTOR ADVANCES (Percentage)

T A B L E - II-8

<u>State</u>	<u>1972</u>	<u>1986</u>
A.P.	24	56
Assam	10	51
Bihar	9	65
Gujarat	15	45
Haryana	28	68
H.P.	3	68
J & K	30	70
Karnataka	25	51
Kerala	28	54
M.P.	22	59
Maharashtra	12	21
Orissa	11	59
Punjab	28	66
Rajasthan	17	61
Tamil Nadu	26	43
U.P.	17	59
West Bengal	4	31
All India	15	45
Co-efficient of variation	47.55	24.32

Table II-8 shows the percentage of priority sector lendings to total lendings. In fact 'Priority Sector Lendings' was a new concept, which changed the role of banking from development to growth. It is clear from the table that there were wide variation in financing under priority sector. The co-efficient of variation worked out for 1972 was 47.55%. The states whose priority sector lending were less than national average were Assam, Bihar, Himachal Pradesh, Maharashtra and West Bengal in 1972.

The industrially backward states like M.P., J & K, Bihar, Assam and Orissa were amongst the lowest in the index values. This supports the view that the concentration of banking in our country was largely a reflection of the pattern of industrial development

Secondly, the base of banking activities was low in backward states in 1969 due to spread of banking activities in developed states. Even financing in agriculture and services sector was confined to few developed states. But situation in 1986 changed drastically. The most backward states like Assam, Bihar, Himachal Pradesh and U.P. were ^{the} most developed states in terms of banking development. The reasons responsible for it were the RBI branch expansion policy in early 70s, starting of Lead Bank Scheme and priority Sector lending etc. Moreover, in developed states the working of schedule commercial Banks confined to the traditional areas due to which their position in term of banking development indicator lag behind ^{most} the backward states. Maharashtra which was number one in 1969, came down to the last position in 1986, same thing happen with Tamil Nadu, West Bengal, Punjab and Gujarat. States those improved their ranks in terms of banking development from 1969 to 1986 were Assam, Bihar, Himachal Pradesh J & K, M.P., and Uttar Pradesh.

In 1986 there were only three states having below national level share of priority sector lendings. Most of the states observed increase in the share of priority sector lendings but this increase was higher in case of backward states like Assam from 10% in 1972 to 65% in 1986 Himachal Pradesh from 3% in 1972 to 68% in 1986, Orissa 11% In 1972 to 59% in 1986, and UP from 17% in 1972 to 59% in 1986. The co-efficient of variation also declined from 47.55% in 1972 to 24.32 in 1986 which shows the inter state variation in Priority Sector lendings declined significantly from 1972 to 1986.

II 3 'INTER STATE VARIATIONS IN OVER ALL BANKING DEVELOPMENT'

In the earlier discussion, regional disparities in banking development were analysed separately through branches per lakh of population, distribution of credit and deposits. Regional disparities are measured with the help of co-efficient of variation, but the development of banking is result of working of all the indicators. Hence, one would like to know an index which consider all the above mentioned indicators simultaneously. In this context principal component analysis is a well known technique, with the help of this regional development is measured by working out of weighted index which is constructed by combining various indicators, whose weights are determined by principal component analysis. To develop a composite index we have used following seven indicators of banking development.

1. Branch per lakh of population.
2. Credit-deposit ratio.
3. Per-Capita Advances.
4. Per-Capita Deposits.
5. Percentage share of priority sector to total advances
6. Percentage share of rural deposit to total deposit
7. Percentage share of rural credit to total credit

With the help of these indicators state wise weighted index are calculated (Table II-9). An important feature that emerges from this table in 1969, was that industrially developed states like Maharashtra, West Bengal, Gujarat and Tamil Nadu were on the top ranking in 1969.

INTER STATE VARIATION IN OVERALL BANKING DEVELOPMENT

T A B L E - II-9

<u>State</u>	<u>1969</u>	<u>Rank</u>	<u>1986</u>	<u>Rank</u>
A.P.	- .67265	8	-.71783	10
Assam	-3.53663	17	+3.19251	3
Bihar	-3.17898	16	+5.235446	2
Gujarat	+2.66418	4	-1.98154	12
Haryana	-1.00556	9	+ .71595	9
Himachal Pradesh	-2.85350	15	+8.14914	1
J & K	-2.16274	12	+1.08101	8
Karnataka	+ .68638	6	-2.3304	13
Kerala	- .00052	7	-2.68004	14
M.P.	-1.35023	10	+1.74214	5
Maharashtra	+7.76926	1	-8.71553	17
Orissa	-2.44381	13	+1.62185	7
Punjab	+ .74914	5	-1.64497	11
Rajasthan	-1.77855	11	+1.68578	6
Tamil Nadu	+3.01591	3	-3.71738	16
U.P.	-2.66985	14	+2.9164	4
West Bengal	+5.16684	2	-2.86712	15
All India	+1.62132		-1.68229	
Standard deviation	3.08588		3.78307	

II. 4 CONCLUSIONS

In this chapter we have attempted to analyse the interstate disparities in banking development with help of seven selected indicators. The main results of the present chapter are ^{as} follows;

1. The ranking of backward states improved for the period 1969-86 which reveal that there were substantial reduction in regional disparities of banking development.
2. The RBI branch expansion policy found to be very effective as the co-efficient of variations of branch per lakh of population reduced to 17 percentage point and inter state disparities in percapita deposit has come down. The Co-efficient of variation of per capita deposit reduced by 24 percentage point. Though the percentage of rural deposits to total deposits does not show any change at inter state level.
3. There was drastic cut down in regional disparities of per capita credit reduced by 47 (Table- II.5) percentage point from 1969-1986. Same trend was observed in case of priority sector lendings and rural advances to total advances, which shows that Lead Bank Scheme found instrumental in changing the traditional role of banking from growth to development.

CHAPTER - III

INTER-STATE VARIATIONS IN ECONOMIC DEVELOPMENT

1. INTRODUCTION

In a political set up like that of India it is imperative to have balanced regional development for political integration and national unifications. There is growing evidence to show that inter-state disparities in various dimensions of development have remained inspite of overall development over the last three decades. There is serious concern expressed about the traditional

theories of development which are based on trickle down, spread effects and convergence hypotheses. Myrdal questioned the validity of these theories. Raj Krishna (1980) explained this in United Nations terminology by saying that a serious North-South problem was emerging within the country. Planning Commission also observed this phenomenon and suggested that "Development of regions and the national economy as a whole have to be viewed as parts of a single process. The progress of the national economy will be reflected in the rate of growth realized by different regions, and in turn greater development of resources in the region must contribute towards accelerating the rate of progress of the country as a whole" (Third five year plan page 153).

The problem of regional imbalances in India is of peculiar type. It is not typical "North-South" like problem as in U.S.A. and Italy. The problem in India

cannot be explained with reference to endowment of national resources (UPPAL, J.S. 1983). There are poor regions possessing rich resources such as Orissa and rich regions poor in resources such as Maharashtra. Thus the question arises as to what are important factors in regional economic development of India.

III.2

CAUSES OF REGIONAL IMBALANCES IN INDIA

Historically, the existence of backward regions started from the British rule in India: The British helped the development of only those regions which possessed facilities for prosperous manufacturing and trading activities. Maharashtra and West Bengal were the states preferred by the British industrialists. In rural areas, the absence of effective land reforms allowed the structure in most of rural India to remain inimical to economic growth. Investment made by British rule in selected areas particularly in Northern part of India also increased the regional imbalances.

After independence serious imbalances resulted during the period of planned economic development the planning mechanism itself accentuated the disparity among the states.

PERCAPITA PLAN OUTLAYS : FOURTH PLAN TO SIXTH PLAN

T A B L E - III-IA

	IV	V	VI
Haryana	358	481	1385
Punjab	316	531	1179

	IY	Y	VI
Gujarat	204	376	1037
Maharashtra	199	372	983
Madhya Pradesh	114	254	687
Tamil Nadu	134	201	651
Karnataka	128	276	614
West Bengal	82	200	600
Andhra Pradesh	98	236	584
Kerala	156	224	578
Rajasthan	120	237	577
Orissa	113	207	536
U.P.	132	237	535
Assam	136	190	526
Bihar	85	155	456
All States	142	262	687

Source : Centre for Monetary Indian Economy.

Basic Statistics Related to Indian Economy Vol. 2, States 1982. It is clear from the table III-1A that by and large the more developed states were favoured and less developed states were neglected in the planned outlay.

The adoption of new technology in agriculture during 1960's has also aggravated regional economic disparities. Government concentrated its resources on farmers of heavily irrigated tracts in different part of the country. This has led to widening of the gap of the income disparities

between irrigated areas and dry areas

III.3 INDICATORS OF REGIONAL DEVELOPMENT

Several studies have been conducted to identify variables that determine relative regional development in India. An early attempt to determine backward areas was made by Committee on Dispersal of industries set up by small scale industrial Board in 1960 (Govt India Report on Dispersal of Industries, Small Scale Industry Board, New Delhi - 1960).

Committee found the following indicators of backwardness :-

1. Low per-capita income.
2. High ratio of population to cultivable land.
3. Low percentage engaged in secondary and tertiary activities.
4. Low ratio of urban to rural population.
5. Low percentage of factory employment.
6. Small length of Railways and metalled road.
7. Low consumption of electric power etc.

Another study was undertaken by Planning Commission (pre - draft papers fourth five year plan 1966-71) which divided backward areas in five categories namely :-

1. Desert areas.
2. Chronical drought effected areas.
3. Hill areas including boarder areas.
4. Area with high concentration of tribal population.
5. Area with high density of population.

A working group was set up by Planning Commission (Report of the working group on Identification of Backward areas, Planning Commission New Delhi, 1969) which recommended the following criteria for identification of backward areas.

1. Total per capita income.
2. Per capita income from industry and mining.
3. Number of workers in registered factories.
4. Length of surfaced road in relation to population and area.
5. Per capita annual consumption of electricity.
6. Railways mileage in relation to population and area of state.

While preparing draft of the six~~th~~ five year plan (1978-83) Planning Commission recommended 17 crucial variables for assessing regional development in respect to various states. These indicators pertain to Agricultural and Industrial productivity, Degree of commercialization, level of social development and availability of infrastructure. Besides these government sponsored studies there are numerous studies undertaken by others. Ashok Mitra (1961) classified different districts according to level of development by using 35 indicators Das Gupta (1971) examined 24 indicators to study the degree of development in 294 districts. Uppal (1973) ranked the states on the basis of the growth of different sectors of the economy.

M.N. Paul (1975) applied statistical analysis to classify 340 districts. Paul also computed the growth of incomes in different regions. O.P. Mathur (1978) computed multiple correlations between 18 indicators of development his results shows that per capita NDP is significantly correlated with percentage of urban to total population, percentage of gross irrigated area to gross cropped area net sown area per agricultural worker, per capita Bank deposits, per capita Bank advances and number of workers in registered factories per 1000 of population.

On the basis of the above mentioned studies, in the present work indicators of development have been selected for Agricultural; Industrial and Services development in different states of India. Composite index of three sectors (Agriculture, Industry and Services) have been calculated by principle component Analysis and at the last stage an overall composite index of development has been calculated for different states.

III.4 AGRICULTURE :

It is the most important sector of the economy since it is a major source of income and employment generation. The spatial structure of Indian Agriculture is not developed uniformly in all parts of the country. The differentiation in agricultural production at different places lies in the use of modern inputs. These inputs generate different forces of production. For instance Punjab and Haryana have

experienced substantial development in the productive forces. As a result these states are characterized as agriculturally developed states.

For the purpose of analysis of variation in agricultural development among different states the following eight indicators have been used:

1. Agriculture productivity (Kg./Hect)
2. Ratio of area irrigated to net cropped area.
3. Cropping intensity.
4. Agricultural production per worker.
5. Fertilizer consumption (Kg./hect.)
6. No. of tubewells per 1000 hectare.
7. Power used per hect. of net sown area.
8. Number of tractors per 1000 hect.

III.4A "AGRICULTURAL PRODUCTIVITY"

Land productivity is one of the important indicators of agricultural development. With increasing demand for food, it is necessary to increase the productivity of land by multiple cropping. The land productivity of any region/ State has been expressed in terms of per unit of land.

From Table - III-1 which gives land productivity of 1971-73 and 1982-84, it is revealed that in almost all the states the land productivity is different during these periods. The land productivity of as many as six states declined from 1971-73 to 1982-84 namely Assam, Bihar, Himachal,

Karnataka, Orissa and West Bengal. There were five states in 1971-73 below the national average of land productivity. These states were Maharashtra, Gujarat, M.P. Orissa and Rajasthan.

AGRICULTURE PRODUCTION PER HECT.

T A B L E - III-B

<u>States</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	862	1233
Assam	1373	1070
Bihar	1065	981
Gujarat	820	1030
Haryana	1210	1667
Himachal	1250	1133
J & K	1330	1451
Karnataka	970	947
Kerala	1550	1613
M.P.	680	740
Maharashtra	530	707
Orissa	868	861
Punjab	1980	2707
Rajasthan	510	649
Tamil Nadu	1630	1299
Uttar Pradesh	1070	1314
West Bengal	1660	1294
All India	872	1140
Co-efficient of Variation	36.72	38.90

During 1982-84 the number of states below the national average increased from five in 1971-73 to nine in 1982-84 which means the inter-state disparities have been increased in agricultural productivity from 1971-73 to 1982-84. This is again revealed by increase in coefficient of variation from 36.72 in 1971-73 to 38.90 in 1982-84. The major increase in agriculture productivity was confined to four states namely Andhra Pradesh, Haryana, Punjab and to some extent Utter Pradesh. The highest land productivity was in Punjab in 1971-73 as well as in 1982-84 while the lowest productivity was in case of Rajasthan in both the time periods.

III. 4B CROPPING INTENSITY

With the passage of time it has been observed that it is not economical to reclaim new land for cultivation. Thus the gross cropped area under cultivation can only be increased by increasing the intensity of cultivation. With the better facilities of irrigation it was observed that cropping intensity of different states has increased. Apart from better irrigation the suitable system of crop rotation and fertilizer cropping intensity has increased tremendously.

It was observed that there were variations in cropping intensity at inter-state level. In 1971-73 the highest intensity was observed in case of Himachal followed by Punjab, Haryana and Kerala. While in 1982-84 highest intensity of cropping was observed in case of Punjab

followed by Himachal and Orissa. Variations in cropping intensity observed during 1971-73 were 13.24% which more or less remain, unchanged in 1982 - 84 with 13.62%. Thus change in case of cropping intensity was of moderate nature and remained more or less same from 1971-73 to 1982-84.

CROPPING INTENSITY

T A B L E - III-2

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	1.12	1.16
Assam	1.27	1.29
Bihar	1.29	1.35
Gujarat	1.06	1.10
Haryana	1.42	1.50
Himachal	1.66	1.64
J & K	1.24	1.32
Karnataka	1.06	1.08
Kerala	1.35	1.34
M.P.	1.12	1.16
Maharashtra	1.05	1.13
Orissa	1.17	1.51
Punjab	1.42	1.65
Rajasthan	1.02	1.17
Tamil Nadu	1.20	1.19
U.P.	1.33	1.44

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
West Bengal	1.26	1.38
All India	1.17	1.21
Co-efficient of variation	13.24	13.62

III.4 IRRIGATION

Agricultural efficiency and production depends largely upon the inputs and investment in agriculture and the methods of production used. Water is indispensable to agricultural production. In 1971-73 total irrigated was 22% of NSA which increased to 29% in 1982-84. There were as many as 8 states below the National average in 1971-73 which remained same in 1982-84 as shown in table III-3.

AREA IRRIGATED TO NET CROPPED AREA

T A B L E - III-3

<u>States</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	28	33
Assam	23	24
Bihar	14	35
Gujarat	24	23
Haryana	44	61
H.P.	17	16
J & K	39	44
Karnataka	12.5	13
Kerala	20	11

<u>States</u>	<u>1971-73</u>	<u>1982-84</u>
M.P.	8	13
Maharashtra	8	11
Orissa	18	23
Punjab	74	84
Rajasthan	14.5	10
Tamil Nadu	40	45
U.P.	40	56
West Bengal	24	32
All India	22	29
Co-efficient of variation	61.98	62.28

There were wide fluctuation in area irrigated in different states in 1971-73. Punjab had as high as 74% of area irrigated while Maharashtra had only 8% area irrigated. The coefficient variation in 1971-73 and 1982-84 almost remained unchanged with about 62%. States in which the area under irrigation ^{increased} from 1971-73 to 1982-84 were Bihar from 14% in 1971-73 to 35% in 1982-84, Haryana 44% in 1971-73 to 61% in 1982-84. All other states observed very marginal increase except Kerala in irrigated area. Thus variation in terms of area irrigated remained same in 1971-73 as well as 1982-84.

III. 4D AGRICULTURAL PRODUCTION PER WORKER

Land productivity does not consider the growing size of labour force involved in agriculture. Since labour produc-

<u>States</u>	<u>1971-73</u>	<u>1982-84</u>
M.P.	8	13
Maharashtra	8	11
Orissa	18	23
Punjab	74	84
Rajasthan	14.5	10
Tamil Nadu	40	45
U.P.	40	56
West Bengal	24	32
All India	22	29
Co-efficient of variation	61.98	62.28

There were wide fluctuation in area irrigated in different states in 1971-73. Punjab had as high as 74% of area irrigated while Maharashtra had only 8% area irrigated. The coefficient variation in 1971-73 and 1982-84 almost remained unchanged with about 62%. States in which the area under irrigation^{increased} from 1971-73 to 1982-84 were Bihar from 14% in 1971-73 to 35% in 1982-84, Haryana 44% in 1971-73 to 61% in 1982-84. All other states observed very marginal increase except Kerala in irrigated area. Thus variation in terms of area irrigated remained same in 1971-73 as well as 1982-84.

III. 4D AGRICULTURAL PRODUCTION PER WORKER

Land productivity does not consider the growing size of labour force involved in agriculture. Since labour produc-

tivity is worked out in terms of the total output per unit of labour it expresses the level of productive capacity of each labour. Table III-4 shows the per labour output in Agriculture at constant prices (1970-71).

AGRICULTURE PRODUCTION PER WORKER (Rs.)

T A B L E - III-4

<u>State</u>	<u>1971</u>	<u>1981</u>
Andhra Pradesh	1099	1251
Assam	770	889
Bihar	884	860
Gujarat	1878	1673
Haryana	3292	3175
Himachal	1604	1274
J & K	881	932
Karnataka	1425	1232
Kerala	1933	2146
M.P.	915	801
Maharashtra	876	1067
Orissa	1237	1314
Punjab	3402	3406
Rajasthan	1680	1256
Tamil Nadu	994	665
U.P.	1170	1264
West Bengal	1817	2025
All India	1297	1303
Co-efficient of variation	50.77	56.33

It is clear from the above table that there were disparities in the labour productivity among states in 1971 and 1981. In 1971 Assam had lowest labour productivity. There are as many as 7 states below the national average in 1971. In 1981 the number of states below national average increased to 9 which^{is} also shown by the increase in co-efficient of variation from 50.77 in 1971 to 56.33 in 1981. Highest productivity of labour observed in case of Punjab during both the periods.

III. 4E FERTILIZER CONSUMPTION

Indian agriculture is based on traditional method of cultivation where the cultivators have been using animal, dung, compost, bones and other organic manures from ancient time. The land was also frequently left fallow to enable it to rebuild its nutrient strength. The recently growing need of more food has compelled the Indian cultivators to make use of more and more chemical fertilizers.

Table III-5 gives fertilizer consumption Kg./Hect. of land for period 1971-73 to 1982-84 for 17 states in India. It is observed that inspite of good progress in recent years the use of fertilizer was much below the desired national level. Though per hectare of fertilizer consumption increased from 14 K.G. in 1971-73 to 48 K.g. 1982-84,

yet the variation at inter-state level were very wide. In 1982-84 and 1971-73 it was highest in case of Punjab (52 k.g/hect.).

On the other hand U.P. was on the bottom in 1971-73. It increased from just 2 Kg. in 1971-73 to 60 Kg. in 1982-84 in case of U.P. Situation, in case of Assam, Rajasthan and Orissa could not improve much. There was marginal decline in variations of fertilizer use at inter-state level. This is also shown by decline in co-efficient of variation from 80.14% in 1971-73 to 76.12% in 1982-84.

FERTILIZER CONSUMPTION

Kg./Hect

T A B L E - III-5

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	21	57
Assam	3.2	4
Bihar	10	21
Gujarat	16.5	41
Haryana	18.5	47
Himachal	16	20
J & K	9	30
Karnataka	16.5	39
Kerala	23	12
M.P.	6	12
Maharashtra	10	28
Orissa	3.5	11
Punjab	52	133

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Rajasthan	4	10
Tamil Nadu	10	70
U.P.	2	60
West Bengal	14	37
All India	14	48
Co-efficient of variation	80.14	76.12

III. 4F MACHANIZATION OF INDIA AGRICULTURE

After late 60s there has been a tremendous increase in the pace of machnization of Indian agriculture. The new seed varieties not only increased the cropping intensity but also increased the demand for the inputs like water, tractors etc. Table III-5 shows the inter-state variation in the development farm mechanization in India. In 1971-73 there were wide variation in the availability of tubewell per thousand of hectares. Tamil Nadu was on the top of the list with 140 tubewells per thousand of hectares while on the other extreme Assam, Himachal, J & K, Orissa and West Bengal have only very small numbers of tubewells. The co-efficient of variation in 1971-73 was as high as 142.85% which reveals that interestate inequalities in terms of tubewells were significantly high. There was some decline in the co-efficient of variation from 142.85% in 1971-73 to 109% in 1982-84. Number of tube-well remained high in case of Tamil Nadu (184) followed by Punjab (91) and Haryana (74). While Orissa, Assam, Himachal

J & K and West Bengal again remained in the lowest slab.

MACHANIZATION OF INDIAN AGRICULTURE

T A B L E - III-6

States	1971-73			1982-84		
	Tubewell	Power Kwh.	Tractor	Tubewell	Power Kwh	Tractor
Andhra	23	42.00	6	55	142	10
Assam	-	.22	2	1	3.8	2
Bihar	11	6.74	7	23	85	12
Gujrat	24	45.80	8	29	148	11
Haryana	32	104.71	52	74	361	93
H.P.	-	1.85	7	4	20	8
J & K	-	15.50	7	2	46	11
Karnataka	19	19.72	6	41	53	8
Kerala	33	30.84	7	55	42.53	8
M.P.	6	4.77	3	24	29	8
Maharashtra	21	24.82	3	48	138	6
Orissa	1	1.44	3	5	13	2
Punjab	80	36.36	104	91	521	137
Rajasthan	5	10.09	8	17	80	16
Tamil Nadu	140	222.67	9	184	381	12
U.P.	18	40.68	16	28	204	41
West Bengal	1	3.48	1	6	553	1
All India	23	35	11	38	125	19
Co-efficient of variation	142.85	147.63	173.28	109	105	158

Use of power agriculture in 1971-73 was again highest in Tamil Nadu followed by Haryana while it was lowest in

case of Assam followed by Orissa. The co-efficient of variation calculated is 147.63% which shows a very high degree of variation at inter - state level.

In the year 1982-84 there was decline in co-efficient of variation to 105% from 147.63% in 1971-73 in case of power consumed. Consumption of power increased significantly in case of West Bengal (553 KWH) which was highest among all states followed by Punjab 521 KWH. State which remained at the lowest level in 1982-84 were Assam, Orissa and H.P. The co-efficient of variation declined from 147.63% in 1971-73 to 105 in 1982-84 which shows the regional disparities at inter-state level declined in power consumption in agriculture sector.

Table - III-6 Also shows the level of tractorization in different state. IN 1971-73 the highest number of tractors per thousand of hectares available was highest in case of West Bengal followed by Assam M.P. and Orissa. In 1982-84 the tractor available per thousand of hectare again found highest in case of Punjab (137), followed by Haryana (93) and Uttar Pradesh (41).

In 1971-73 the number of states above national average were three which remained same in 1982-84. The co-efficient of variation declined from 173.28% in 1971-73 to 158% in 1982-84 in case of tractor.

III.5 INDUSTRIAL DEVELOPMENT

In the preceding section the process of development is assessed in the agricultural sector. It is noted that the economy is highly dependent upon agriculture, although the non agriculture sectors of the economy play equally important role in the overall economy of the country. In the following section an attempt is made to see the inter-state differences in the industrial development with the help of following indicators:-

- i) Percentage of employment in industry to total employment.
- ii) Industrial production per worker.
- iii) Percentage of NDP originating from industrial sector
- iv) Non House hold work force to household plus non household work force.
- v) Power used per worker in industrial sector.
- vi) Railway per 100 Sq. K.M.

III . 5A PERCENTAGE OF EMPLOYMENT IN INDUSTRY TO TOTAL

Table III-7 shows that during 1971-1981 the share of employment in total workforce at national level remained more or less same. It was 10.11% in 1971 which increased marginally to 12.10% in 1981. In 1971 backward states like Assam, Bihar, Orissa and Himachal Pradesh were below 6% of industrial employment to the total employment. There were eight states having below national average in 1981.

PERCENTAGE OF EMPLOYMENT IN INDUSTRIAL SECTOR

T A B L E - III-7

<u>States</u>	<u>1971</u>	<u>1981</u>
Andhra Pradesh	10.07	11.47
Assam	4.41	4.41
Bihar	5.26	6.68
Gujarat	13.37	17.09
Haryana	9.96	13.10
Himachal	5.76	5.76
J & K	7.21	7.21
Karnataka	10.15	12.06
Kerala	14.20	14.66
M.P.	7.40	8.91
Maharashtra	15.65	17.15
Orissa	5.41	6.80
Punjab	11.20	13.86
Rajasthan	6.99	9.64
Tamil Nadu	10.16	16.62
U.P.	7.55	9.23
West Bengal	14.42	16.63
All India	10.11	12.10
Co-efficient of variation	36.28	36.93

Inter state inequalities remained same 1981 as it were in 1971. The co-efficient of variation was 36.28% in 1971

increased marginally to 36.93% in 1981.

III.5B INDUSTRIAL PRODUCTIVITY :-

The level of industrial productivity is one of the important indicators of industrial development. Table No.III-8 shows the industrial productivity in different states at two point of time. It is clear from the table that there were not much variation in the Industrial productivity of different states, The co-efficient of variation calculated for 1971-73 is 19% which increased to 22% in 1982-84. Productivity was lowest in Madhya Pradesh in 1971-73 and it was highest in case of Karnataka. Situation changed in 1982 - 84. It was highest in case of Maharashtra and lowest in case of Haryana. In 1971-73 there were eight states having productivity less than national average, this number increased to 10 in 1982-84. Industrial productivity declined in case of Haryana, Rajasthan, Tamil Nadu and West Bengal while it observed steep rise in case of Maharashtra from 1972-74 to 1982-84

INDUSTRIAL PRODUCTIVITY PER WORKER

(Rs. at 1970-71 prices)

T A B L E - III-8

<u>States</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	7407	6952
Assam	9540	12039

<u>States</u>	<u>1971-73</u>	<u>1982-84</u>
Bihar	7728	8920
Gujarat	7526	8920
Haryana	9515	6962
Himachal	6550	9716
J & K	7422	10924
Karnataka	11941	12133
Kerala	9809	10167
M.P.	7125	7772
Maharashtra	8343	16152
Orissa	9915	11200
Punjab	10239	11968
Rajasthan	11138	9142
Tamil Nadu	13500	9963
U.P.	9859	7503
All India	9174	11008
Co-efficient of variation	19.80	22.35

III. 5C SHARE OF INDUSTRIAL SECTOR IN NDP

It has been assumed that with the passage of development the share of secondary sector would increase. Thus percentage of Net National Product originating from industry is a significant indicator of economic development as well as industrial development

Table III-9 shows the inter-state variation in the share of industrial sector in NDP during 1971-73 and 1982-84. The most important feature during 1971-73 was that there were four most industrially developed states, these states were Maharashtra (27.26%) Tamil Nadu (19%) West Bengal (17.40) and Gujarat (17%). While the most backward states in term of share of NDP coming from industrial sector were Himachal Pradesh (5.60) Jammu & Kashmir (5.65%) and Orissa (6.64%). There were five states in 1971-73 having more than national percentage share of NDP from industrial sectors, this number increased marginally to six in 1982-84.

PERCENTAGE OF NDP ORIGINATING FROM INDUSTRY

T A B L E - III - 9

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	9.16	10.23
Assam	9.10	10.28
Bihar	9.90	34.35

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Gujarat	17.00	19.00
Haryana	10.97	13.67
Himachal	5.65	5.60
J & K	5.60	9.00
Karnataka	16.22	20.71
Kerala	13.00	16.24
M.P.	9.40	10.93
Maharashtra	27.26	30.10
Orissa	6.64	9.18
Punjab	8.41	11.87
Rajasthan	8.37	8.13
Tamil Nadu	19.08	24.82
U.P.	8.90	12.40
West Bengal	17.40	12.64
All India	13.40	15.00
Co-efficient of variation	46.74	51.39

SOURCE : CSO Estimate of State Domestic Product
1960-61 to 1984-85 (1986) Govt. of India.

III.5D WORKFOCE IN NON-HOUSEHOLD SECTOR

The variations in Non-House hold sector work force to total worker force in manufacturing are not very high. It is clear from the table that state like Andhra Pradesh, Himachal Pradesh, Jammu & Kashmir, Orissa were having less

than national average. Andhra Pradesh had just 24% worker engaged in Non H.H. industries against the 43% of the national average. This ratio was very high in some of the industrial developed states like Maharashtra (70%) Gujarat (76%), West Bengal (80%). Situation in 1983-84 though experienced eight percentage point decline in the co-efficient of variation, yet the ratio remained high only in those states where it was high in 1971-73. Maharashtra and Gujarat remained on the top followed by Bengal (West).

WORKFORCE IN NON-HOUSEHOLD SECTOR (PERCENTAGE)
TO TOTAL WORKFORCE IN MANUFACTURING SECTOR.

T A B L E - III-10

<u>State</u>	<u>1971</u>	<u>1981</u>
Andhra	24	61
Assam	66	66
Bihar	53	65
Gujarat	76	85
Haryana	67	79
Himachal	37	39
J & K	40	43
Karnataka	57	72
Kerala	72	83
M.P.	45	62
Maharashtra	70	85

<u>State</u>	<u>1971</u>	<u>1981</u>
Orissa	38	58
Punjab	71	81
Rajasthan	48	65
Tamil Nadu	66	75
U.P.	49	61
West Bengal	80	81
All India	43	47
Co-efficient of variation	28.73	20.17

III.5E POWER USED WORKER

Use of power in industrial sector is one the important aspect. The variation worked out for 1971-73 were as high as 106.12%.
The use of power per worker is found to be very high in case of J & K followed by Orissa and Punjab. While it is lowest in case of U.P. followed by Bihar and Kerala as shown in Table - III-11. It seems that states with low density of population had high power used per work in industrial sector while states with high density of population have low power consumption per unit of labour.

POWER USED PER WORK IN INDUSTRIAL SECTOR (KWH)

T A B L E - III-11

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	540	916

<u>State</u>	<u>1971-73</u>	<u>1982-84</u>
Assam	720	2410
Bihar	575	582
Gujarat	845	913
Haryana	1487	1947
Himachal	859	1035
J & K	6600	5631
Karnataka	1038	1338
Kerala	580	777
M.P.	758	1003
Maharashtra	724	697
Orissa	3864	1284
Punjab	2254	5622
Rajasthan	1403	1240
Tamil Nadu	865	951
West Bengal	1604	2347
U.P.	358	1227
All India	844	933
Co-efficient of variation	106.12	88.33

SOURCE - Different issues of statistical Abstract of India.

In the year 1982-84 the co-efficient of variation declined by 28% point from 1971-73. The per unit consumption of power increased significantly in case of Punjab from 2254K.W.H. to 5422KWH, West Bengal 1604 to 2347 and Uttar Pradesh 358 to 1227 KWH.

III.5F ROAD AND RAILWAY PER 100 SQ.K.M.

Road and Railway line are crucial factors for mobility which helps in industrial development. Better Roads and Railways facilitate the smooth and fast transport of finished goods as well as raw material.

Table III-12 shows inter-state variation in availability of Road and Railway per 100 Sq.K.M. It is clear from the table that in road availability in 1971 as well as in 1981 there were very high inter-state disparities. The co-efficient of variation calculated was as high as 133.99% in 1971 which declined to 92.58% in 1981. Kerala had highest availability of road with 311.7 K.M. per 100 Sq.K.M. while J & K was on the lowest and with just 5.4 K.M. per Sq. K.M. in 1971. Other states having low road availability per 100 Sq.K.M. were Rajasthan (14.6), Madhya Pradesh (19).

Inter-state differential in Railwayline per 100 Sq. K.M. though small in comparison to Road yet the absolute level of is quite significant. There were states like J & K with 1 K.M. of railwaylineⁱⁿ/1981 while in 1971 there was almost no railway track. It was 88. K.M. in West Bengal in 1981 which was 29^{KM}/in 1971. Other states having low level of Railway track in 1971 were Himachal Pradesh (5.K.M.), Madhya Pradesh (12 K.M.), Rajasthan (16 K.M.). State in which case availability of Railwayline improved significantly from 1971

to 1981 were Andhra from 17 K.M. to 49 K.M., Bihar 30 K.M. to 53 K.M., Maharashtra 17 K.M. and Rajasthan from 16 K.M. in 1971 to 56 K.M. 1981.

ROAD/RAILWAY PER 100 SQ.KM.

T A B L E - III-12

<u>States</u>	<u>ROAD</u>		<u>RAILWAY</u>	
	<u>1971</u>	<u>1981</u>	<u>1971</u>	<u>1981</u>
Andhra	26.3	46	17	49
Assam	38.6	76	28	23
Bihar	67	48	30	53
Gujarat	22	30	29	55
Haryana	30	52	32	15
Himachal	21.6	35	5	3
J & K	5.4	5	-	1
Karnataka	51.7	59	15	30
Kerala	311.7	267	23	9
M.P.	19	24	12	58
Maharashtr-a	31.6	58	17	54
Orissa	36.7	76	12	20
Punjab	59	92	42	21
Rajasthan	14.6	19	16	56
Tamil Nadu	71.4	95	29	39
West Bengal	38	51	29	88
U.P.	60	64	43	38
All India	9	15	6	6
Co-efficient of variation	133.99	92.58	57.21	69.80

SOURCE : Different issues of Statistical Abstract of India and
Indian Railway year Book.

III.6 SERVICES SECTOR

In the preceeding analysis the industrial sector's development was measured by seven indicators. With the process of development the services sector of the economy also developed. This sector provide super-structure to the agriculture and industrial sector. The following indicators have been taken to measure the development of services sector.

1. Percentage of workforce in services.
2. Production per worker in services.
3. Number of insurance companies per lakh of population
4. Number of joint stock companies per lakh of population
5. Number of policeman per 100 Sq. K.M.
6. Level of urbanization.

III.6A PERCENTAGE OF WORKFORCE IN SERVICES

In 1971 the share of services sector workforce at national level was 14.89% which increased with a very small margin to 15.83% in 1981. The qualitative change observed in the distribution of workforce are as follows.

PERCENTAGE OF WORK FORCE IN SERVICEST A B L E - III-13

<u>State</u>	<u>1971</u>	<u>1981</u>
Andhra	15.09	14.96
Assam	14.62	14.62
Bihar	8.34	10.16
Gujarat	16.75	17.98
Haryana	16.68	20.98
Himachal Pradesh	24.00	24.00
Jammu & Kashmir	21.00	21.00
Karnataka	14.57	15.50
Kerala	27.05	21.31
M.P.	9.31	10.42
Maharashtra	16.48	18.29
Orissa	11.65	12.49
Punjab	23.66	24.02
Rajasthan	12.58	13.71
Tamil Nadu	18.35	18.47
U.P.	13.87	14.17
West Bengal	22.68	22.13
All India	14.89	15.83
Co-efficient of variation	30.89%	25.25%

1. The Co-efficient of variation declined from 30.89% in 1971 to 25.25% in 1981.

2. There were seven states below the national average in 1971 while in 1981 this number increased to eight.
3. There is no major change in the percentage of share of services sector work force from 1971 to 1981.
4. The share of work force in services ~~is~~ declined in Kerala from 27.05% to 21.31%.

III.6B PRODUCTION PER WORKER

The productivity of worker has increased from 1527 rupees in 1971 to 2287 in 1981 at constant prices of 1970-71 at national level. The number of states above national average in 1971 ^{were} only three which increased to six in 1981. The Lowest productivity in service sector in 1971 was found in case of Jammu & Kashmir while highest observed in case of Maharashtra. In 1981 highest productivity observed in case of Punjab, while it is lowest in case of Assam (1800 rupees).

States where productivity in services sector improved significantly from 1971 to 1981 were Punjab 1144 rupees to 3498 rupees Haryana 1156 rupees to 2421 rupees, Himachal 918 rupees to 2107 rupees. It has been observed from Table III-14 that co-efficient of variation in labour productivity had declined from 25.48% in 1971 to 23.63% in 1981.

PRODUCTION PER WORKER IN SERVICES (Rs.)

T A B L E - III-14

<u>States</u>	<u>1971</u>	<u>1981</u>
Andhra	1141	1920
Assam	1331	1800
Bihar	1225	2119
Gujarat	1560	2911
Haryana	1156	2421
Himachal	918	2102
J & K	700	1605
Karnataka	1291	2024
Kerala	799	1548
M.P.	1155	2028
Maharashtra	1824	3067
Orissa	840	1801
Punjab	1149	3498
Rajasthan	1175	2518
Tamil Nadu	1172	2283
U.P.	1104	1680
West Bengal	1616	2527
All India	1527	287
Co-efficient of variation	2548	2363

SOURCE - CSO Estimates of State Domestic produces in India 1960-61 to 1984-85 Govt. of India and Different issues of statistical Abstract of India.

III.6C INSURANCE AND JOINT STOCK COMPANIES PER LAKH OF
POPULATION

Insurance and Joint stock companies are key to the development of trade and commerce activities. It has been observed that (Table - III-15) that there are serious type of fluctuation in the number of availability of these companies in different, states. Some developed states like Maharashtra had as high as 0.112 insurance companies (per lakh of population) and 13.17 Joint companies (per lakh of population) in 1971-73. States in 1971-73 having no insurance company and very small number of Joint stock companies were Bihar, Haryana, J & K Madhya Pradesh.

States in which number of Joint stock companies increased (per lakh of population) significantly from 1971-73 to 1982-84 were Andhra Pradesh from 1.88 to 5.74, Gujarat 5.19 to 21.16 and West Bengal from 27.37 to 29.97. It has been observed that the inequalities in term of joint stock companies/ insurance companies were very high in absolute term. The change of co-efficient variation from 1971-73 to 1982-84 was only marginal i.e. 229.30% to 215.79% in case of insurance companies while it was 234.18% to 230.26% in case of joint stock companies. It is clear from the above analysis that development of services sector limited to few developed states in term of joint stock companies.

INSURANCE/JOINT STOCK COMPANIES PER LAKH OF POPULATION

T A B L E - III-15

<u>State</u>	<u>Insurance</u>		<u>Joint stock</u>	
	<u>1971-73</u>	<u>1982-84</u>	<u>1971-73</u>	<u>1982-84</u>
Andhra	.005	.003	1.88	5.74
Assam	.006	.005	2.95	4.17
Bihar	-	-	.81	1.72
Gujarat	0.026	.004	5.19	21.16
Haryana	-	-	2.92	4.92
H.P.	-	-	1.76	58
J & K	-	-	2.17	5.3
Karnataka	0.013	.007	3.80	10.24
Kerala	.018	.004	5.22	8.32
M.P.	-	.002	.99	2.49
Maharashtra	0.112	0.057	13.71	32.26
Orissa	0.004	0.003	1.11	2.83
Punjab	0.020	0.012	6.1	12.83
Rajasthan	-	-	1.92	4.73
Tamil Nadu	0.04	0.02	7.53	16.28
U.P.	0.006	0.007	1.58	3.32
West Bengal	0.074	0.049	27.37	29.97
All India	0.030	0.014	7.93	10.61
Co-efficient	229.30	215.79	234.18	130.6

SOURCE - DIFFERENT ISSUE OF STATISTICAL ABSTRACT OF INDIA

III.6D NUMBER OF POLICEMAN PER 100 Sq. K.M.

The availability of policeman as such is not directly related to the development of services sector,

The number of policeman may be high in some states due to some peculiar problem like political disturbances etc.

But the certainty of better law and order condition helps in the development of services sector.

It is again clear from the table III-16 that availability of police man per sq. KM was higher in case of some developed state like Kerala (54) West Bengal (75) in 1971. There were nine

states in 1971, having more than national average of availability of policeman per 100 sq. KM. West Bengal had highest number of police man with 81 per 100 sq. K.M. followed by Pubjab (59). There is marginal decline in differentiation at inter-state level from 1971-1981. The co-efficient of variation was 64.20% in 1971 which declined to 57.94 in 1981.

NUMBER OF POLICEMAN PER 100 Sq. K.M.

T A B L E III - 16

<u>State</u>	<u>1971</u>	<u>1981</u>
Andhra	15	18
Assam	25	40
Bihar	28	38
Gujarat	22	26
Haryana	32	41

<u>State</u>	<u>1971</u>	<u>1981</u>
Himachal	12	14
J & K	4	9
Karnataka	20	20
Kerala	54	56
M.P.	13	16
Orissa	15	18
Maharashtra	25	32
Punjab	47	59
Rajasthan	11	13
Tamil Nadu	33	38
U.P.	46	46
West Bengal	75	27
Co-efficient of variation	64.20	57.94

III.6E LEVEL OF URBANISATION

In the modern economy level of urbanization is an important characteristics of both industrial development as well as development of trade and commerce. In fact the urban centres are supposed to be centres of trade, commerce and services. Table III-17 reveals the comparative position of different states in level of urbanization. The national average in 1971 was 19.9%. The co-efficient of variation in 1971 was 39.20% which means that there werewide variations in level of urbanization from one state to another states.

There were as many 11 states having the level of urbanization below the national average. Maharashtra was on the top in 1971 with 31.2% followed by Tamil Nadu and West Bengal with 30.3% and 24.7% respectively. In the year 1981 the national average of urbanization increased from 19.9% in 1971 to 23.3% with 3% point decline in level co-efficient of variation. State below the national average in 1981 were 10 against 11 in 1971 which means that decline in inter-state disparities in the level of urbanization from 1971 to 1981 are only of marginal nature. Maharashtra had the highest level urbanization in 1971 followed by Tamil Nadu (33.6%) and Karnataka (28.9%). ^{The} Lowest level of urbanization observed in case of Himachal Pradesh both in 1971 as well 1981. Surprisingly comparatively less developed states observed high rate of growth of urbanization 1971 to 1981. In case of Orissa the change was from 8.4% in 1971 to 11.8%. Rajasthan from 17.6% to 20.9%. Uttar Pradesh from 14% to 18% etc.

LEVEL OF URBANIZATION (Percentage)

T A B L E - III-17

<u>State</u>	<u>1971</u>	<u>1981</u>
Andhra	19.3	23.3
Assam	8.8	10.3
Bihar	10.5	12.5
Gujarat	18.1	31.1

<u>State</u>	<u>1971</u>	<u>1981</u>
Haryana	17.7	21.9
Himachal	7.0	7.6
J & K	18.6	21.0
Karnataka	24.3	28.9
Kerala	16.2	18.8
M.P.	16.3	20.3
Maharashtra	31.2	35.00
Orissa	8.4	11.8
Punjab	23.7	27.7
Rajasthan	17.6	20.9
Tamil Nadu	30.3	33.6
U.P.	14.0	18.0
West Bengal	24.7	16.5
All India	14.9	23.3
Co-efficient of variation	39.20	36.01

III.7 COMPOSITE INDEX

The over all spatio-temporal structure of economic development of different state can be visualized through composite Indexes which were constructed for Agriculture sector, Industrial sector and Tertiary sector separately by taking the indicators mentioned in the preceding section. After that a composite index was developed for the over all economic development of all the state at two points of time (1971-73 and 1982-84).

III.7A COMPOSITE INDEX OF AGRICULTURE DEVELOPMENT

A well known study . at the district level (Bhalla and Alagh 1979) has revealed that growth has been extremely disparate across the regions. In eight states, it has been observed that there was not a single high growth district. In the four states (Andhra Pradesh, Bihar, Maharashtra and Orissa) the largest proportion of the districts include in the study belonged to negative growth category. On the other hand, the largest proportion of districts belonged to high or moderate growth groups are from Punjab, Haryana and U.P.

Table III-18 gives more or less same picture. In 1971-73 Punjab was on the top in the composite index ranking followed by Tamil Nadu Haryana and Kerala. Though ranking change slightly in 1982-84. Punjab remained on the top followed by Haryana, Tamil Nadu and Uttar Pradesh.

COMPOSITE INDEX OF AGRICULTURE DEVELOPMENT

T A B L E III-18

<u>States</u>	<u>1971-73</u>	<u>Rank(71-72)</u>	<u>1982-84</u>	<u>Rank(82-84)</u>
Andhra	-1.01664	9	-34225	07
Assam	-2.50841	13	-4.08637	16
Bihar	-1.75342	11	-2.20927	12
Gujarat	-1.53519	10	-1.72218	9
Haryana	+5.67074	3	+7.82410	2

<u>States</u>	<u>1971-73</u>	<u>Rank(71-73)</u>	<u>1982-84</u>	<u>Rank(82-84)</u>
Himachal	- .75064	7	-2.06538	9
J & K	- .95844	8	-1.08439	8
Karnataka	-2.19764	12	-3.27095	14
Kerala	+1.57995	4	- .18129	6
M.P.	-4.56540	17	-4.96318	17
Maharashtra	-4.27083	16	-3.74726	13
Orissa	-3.54616	14	-3.10847	11
Punjab	+13.28001	1	+16.74751	1
Rajsathan	-4.08071	15	-4.04260	15
Tamil Nadu	+7.29354	2	+2.84247	3
U.P.	+ .95112	5	+2.59762	4
West Bengal	- .20168	6	+1.65839	5
All India	- 1.39970		- .81648	
S.D.	4.56261		5.23269	

the
 Madhya Pradesh remained most backward state in terms
 of agricultural development both 1971-73 and 1982-84. States
 those improved their ranking from 1971-73 to 1982-84 are
 Andhra Pradesh from 9th to 7th, Haryana 3rd to 2nd, Uttar
 Pradesh 5th to 4th, West Bengal 6th to 5th. Rest of the
 states observed not much change. There were as many as
 seven states above the national average, the number of states
 above the national average in agriculture development declined
 from seven to six in 1982-84. It shows that disparities
 in agricultural development has increased from 1971-73 to 1982-84

III.7B INDIX OF INDUSTRIAL DEVELOPMENT

A meaningful spatio-temporal trend is emerging through the analysis of the indexes given in Table - III-19. In 1971-73 West Bengal was on the top of industrial development while in 1982-84 Maharashtra was on the top of the score. Kerala remained on 2nd place at both point of time, while Tamil Nadu reach to third position, from 4th position in 1971-73. On the other hand Jammu & Kashmir remained at the lowest in the ranking both in 1971-73 as well as in 1982-84 followed by Himachal Pradesh. Though Orissa, Andhra Pradesh improved their positions from 15th to 14th and 10th to 11th from 1971-73 to 1982-84. Madhya Pradesh remained on 13th position at both the time periods. There were nine states above the National average in 1971 - 73. While in 1982 - 84 there were only seven states above the national average.

COMPOSIT INDEX OF INDUSTRIAL DEVELOPMENT

T A B L E III-19

<u>States</u>	<u>1971</u>	<u>Rank(71-73)</u>	<u>1982-84</u>	<u>Rank (82-84)</u>
Andhra	-2.43533	14	- .78099	11
Assam	- .35666	9	-2.03755	15
Bihar	- .75920	10	+1.12898	6
Gujarat	+2.84366	5	+2.85739	4
Haryana	+1.12000	8	+ .22976	8

<u>States</u>	<u>1971-73</u>	<u>Rank (71-73)</u>	<u>1982-84</u>	<u>(Rank(82-84))</u>
Himachal	-4.23140	16	-4.40890	16
J & K	-6.12467	17	-5.07340	17
Karnataka	+1.20080	7	+1.11251	7
Kerala	+4.61974	2	+3.25939	2
M.P.	-2.35013	13	-1.3972	13
Maharashtra	+4.06694	3	+4.714500	1
Orissa	-4.04248	15	-1.98382	14
Punjab	+1.92001	6	+ .08089	9
Rajasthan	-1.63818	12	-1,09550	12
Tamil Nadu	+3.43104	4	+2.95480	3
U.P.	- .90241	11	-.37515	10
West Bengal	+4.83814	1	+1.67414	5
All India	-1.29983		1.10533	
S.D.	3.22048		2.58396	

III.7C COMPOSITE INDEX OF SERVICES SECTOR

States which were on the top of development in terms of composite Index of services sector were Maharashtra, West Bengal, Gujarat and Tamil Nadu in 1971-73. On the other hand there were states like Orissa, Himachal Pradesh and Jammu & Kashmir which were on the lowest level of development. In 1982-84 Maharashtra remained on the top followed by West Bengal. State which improved their ranking from 1971-73 to 1982-84 were Punjab from 5th in 1971-73 to 3rd 1982-84,

Haryana from 8th to 6th, Himachal Pradesh from 16th to 13th Jammu & Kashmir 15th to 12th. While on the other hand there were states which destroyed their position in term of over all ranking these states were Andhra Pradesh from 9th position in 1972-73 to 10th position in 1982-84 Assam from 10th position to 16th position, Bihar from 13th position to 15th position Karnataka from 6th position to 7th position.

It is again clear from the Table that inequalities in terms of development of services sector more or less remained same from 1971-73 to 1982-84.

COMPOSITE INDEX OF SERVICES SECTOR

T A B L E III-20

<u>States</u>	<u>1971-73</u>	<u>Rank</u>	<u>1982-84</u>	<u>Rank</u>
Andhra	-1.03958	9	-1.25117	10
Assam	-1.23190	10	-2.23181	16
Bihar	-1.41778	13	-2.08933	15
Gujarat	+1.13825	3	+1.14196	5
Haryana	- .91121	8	+0.7375	6
Himachal	-2.70647	16	-1.87926	13
J & K	-2.564420	15	-1.69787	12
Karnataka	- .07183	6	- .51596	7
Kerala	-1.30075	12	- .8750	8
M.P.	-1.42377	14	-1.92521	14
Maharashtra	+3.81001	1	+3.68219	1
Orissa	-2.82552	17	-2.74735	17

<u>States</u>	<u>1971-73</u>	<u>Rank</u>	<u>1982-84</u>	<u>Rank</u>
Punjab	+ .01480	5	+2.74735	3
Rajasthan	-1.26512	11	-1.06086	9
Tamil Nadu	+ .91021	4	+1.17273	4
U.P.	- .85775	7	-1.26441	11
West Bengal	+3.58521	2	+2.98334	2
All India	+3.15711		+2.76000	
S.D.	2.75909		2.39868	

iii-7D

COMPOSITE INDEX OF OVER ALL DEVELOPMENT

It is clear from the preceding analysis of composite Index of Agricultural sector industrial sectors and services sector that inequalities of economic development more or less remained same in both the periods. Table III-21 shows that Punjab was on the top of Development in 1971-73 and it remained on the top in 1982-84 . This was mainly due to fast development of agriculture sector in Punjab. Other states among the fast growing states were Tamil Nadu which was 2nd in the rank in 1971-73 though it lowered in its ranking to 4th position. The main factor responsible for the Tamilnadu's slow growth was agriculture in 1971-73 though in the later period industrial sector improved the situation, which manage to place the Tamil Nadu at 4th position in 1982-84. Kerala was on 3rd place in 1971-73, while in 1982-84 it declined to 5th position main reason for fall in ranking was decline in the rate of growth of agriculture development in comparison to

other developed states. Another developed states in 1971-73 was West Bengal at 4th position which improved to 3rd position in 1982-84. This was mainly due to fast growth of services sector in West Bengal in comparison to other states. Table III-21 reveals that Haryana was a very fast growing state. It was on fifth position in 1971-73 while in 1982-84 it improved its position to 2nd only after Punjab. Main reason for fast development was fast growth in agriculture and services sector. States which declined in terms^{of} over all development were Karnataka from 7th position in 1971-73 to 11th position in 1982-84, Assam from 10th to 15th position, Kerala 3rd to 5th position, Madhya Pradesh from 16th to 17th position, Rajasthan from 13th to 14th position. It is clear from the above analysis that developed state like Punjab, Haryana and West Bengal strengthened their respective position from 1971-73 to 1982-84. While backward states like Madhya Pradesh, Assam, Bihar, either remained at the same ranking or their position detroyed furhter from 1971-73 to 1982-84.

COMPOSITE INDEX OF OVERALL DEVELOPMENT

T A B L E - III-21

<u>States</u>	<u>1971-73</u>	<u>Rank</u>	<u>1982-84</u>	<u>Rank</u>
Andhra	-3.73648	11	-2.04945	9
Assam	-3.51953	10	-6.13708	15
Bihar	-3.91762	12	-5.00413	12
Gujarat	+1.56923	6	+ .83507	6

<u>States</u>	<u>1971-73</u>	<u>Rank</u>	<u>1982-84</u>	<u>Rank</u>
Haryana	+5.79399	5	+9.21565	2
Himachal	-5.81303	14	-5.21156	13
J & K	-6.24757	15	-2.83701	10
Karnataka	+ .85099	7	-3.18321	11
Kerala	+6.90416	3	+2.31458	5
M.P.	-7.76713	16	-7.77831	17
Maharashtra	+ .09574	9	- .12823	8
Orissa	-7.94905	17	-6.65327	16
Punjab	+15.2036	1	+21.8883	1
Rajasthan	-5.77053	13	-5.63948	14
Tamil Nadu	+11.18308	2	+5.30506	4
U.P.	+ .27403	8	+ .63775	7
West Bengal	+6.8-163	4	+5.90638	3
All India	-2.34356		-1.48159	
S.D.	6.70773		7.21333	

III.9 FINDINGS

It is clear from the preceding analysis that there is not a single factor responsible for the development or backwardness of the state. Industrially backward areas and drought prone areas are backward in other respect as well, for example Developed states are not only developed in terms of agricultural development but also developed in term of Industry and services. While on the hand backward states like Orissa, J & K and Himachal are backward in ^{all} spheres.

Thus the single approach adopted for the removal of imbalances proved faulty. These strategies were

1. The sectoral approach to the development process
2. Financial/material incentives for reduction of backward regions are formulated on the basis of specific sectoral deficiencies, For the integrated development of a specific area, the local resources and problem of the areas should be taken into account. For that, there is need for the micro-level in-depth study of the problem of low agricultural productivity and industrialization of logging regions should provide a suggestive analysis for the balanced regional growth.

CHAPTER - IV

THE PROCESS OF BANKING DEVELOPMENT AND CHANGING ECONOMIC DEVELOPMENT'

From the earlier discussion two important results have come out. (1) There is significant increase in banking development of backward states and (2) there is no corresponding decline in inter-state disparities in economic development. The net result of this type of change is that the relationship of banking development and economic development in the latter period of the study is changed. This hypothesis can be checked by studying the correlation of levels of Banking development with economic development and regression analysis.

IV.I. CORRELATION OF BANKING DEVELOPMENT WITH ECONOMIC DEVELOPMENT

Table IV-1 shows the correlation with different sectors of the economy at two points of time. It is clear from the table that in early seventies the development of banking has very high positive relationship with the economic development. The correlation was very high in case ^{of} services and industry in this period. It was mainly because of the reason that in traditional banking practice, credit was given against safe collateral. The importance was generally given to borrowers credit worthiness rather than to project credit worthiness. This type of creditworthiness is mainly found either in trade or commerce or to some extent in the industrial sector but not in agricultural sector. The nature and credit needs

of agriculture are so different from those of trade and industry that the banking practices developed in the context of the latter are ill equipped to serve the needs of the former. More so in a country like India where agriculture is pre-dominantly a family activity, making banking facilities and credit available to this sector according to traditional norms of creditworthiness was a difficult work.

CORRELATION OF LEVELS OF BANKING DEVELOPMENT WITH AGRICULTURAL DEVELOPMENT, INDUSTRIAL DEVELOPMENT AND TERTIARY SECTOR DEVELOPMENT.

T A B L E - IV-1

	<u>Agriculture</u>	<u>Industry</u>	<u>Tertiary</u>	<u>Overall</u>
Early 70s	+0.130	+0.716	+0.720	+0.493
Early 80s	-0.140	-0.734	-0.684	-0.398

Another important outcome from the above table (table - IV-1) is that developed states in the earlier period of the study were getting more of banking finance. This hypothesis is revealed by the positive correlation of banking development with economic development in 1971-73. The record of commercial banks was poor with regard to the balanced development of various states in country. Since there were wide spread differentials in the level of economic development in 1971-73 the positive correlation with this type of development

contribute to the fact that the development of commercial banking was also of uneven nature. Thus Banks in earlier period of present study played a passive role in allocation of resources in backward states. The study of correlation of co-efficients (Table IV-1) shows that there was $+0.493$ correlation of banking development with overall development in early 70s. Among different sectors the value of tertiary sector is highest with $+0.720$ closely followed by industry with $+0.716$ though the correlation with agriculture sector is only $+0.130$.

It is clear (tabel - IV-1) that the situation took a drastic turn in latter period of study in terms of correlation of banking development with economic development. The association between these two turned into a negative sign. It seems that after nationalization the character of banking finance changed drastically. The resource of banks diverted towards backward states in the latter period of the study. The resources were more diverted towards industrially backward states as negative co-efficient of correlation of banking development with industrial development was highest in case of industry during this period (-0.734). Resources also diverted towards Tertiary and agriculture sectors of backward states. The co-efficient correlation of tertiary and agriculture sector with banking development is -0.684 and -0.140 respectively in these periods.

As already indicated reasons of this type of development are many : The commercial banks have followed a policy of systematic branch expansion designed to achieve a progressive reduction in regional imbalances. In this connection special emphasis has been laid on the expansion of banking facilities in the rural and semi-urban areas of the deficient districts in the country. After nationalization Public sector banks also given up the traditional aim of maximising profits and have come to recognize their role as major instruments of development . . . The most important aspect of this new aspect was 'Lead Bank Scheme' under which the concept of priority sector lending was implemented. Under this 'concept' the public sector banks extended liberal credit facilities to the agriculture, small scale industries trade and commerce etc.

IV.2 REGRESSION ANALYSIS OF BANKING AND ECONOMIC DEVELOPMENT

REGRESSION ANALYSIS OF BANKING DEVELOPMENT (X) WITH

ECONOMIC DEVELOPMENT (Y)

Overall development

Early 70s

$$Y_1 = 0.9331 + 1.07213 x$$

(t value 2.268) $R^2 = .24$

Early 80s

$$Y_2 = +0.0008 - 0.75931 x$$

(t value = -1.737) $R^2 = .16$

Table - IV-2 also shows the same results as we observed in the preceding analysis. In the early 70s the economic development significantly dependent on the level of banking development. It explained the 24% of the variation in economic development among different states. The value of regression co-efficient calculated for 1971-73 is 1.07213 which ^{is} significant at 2% level, means that economic development was significantly dependent on banking development in early seventies.

However, the regression equation in early 80s shows entirely different type of relationship. The value of regression co-efficient is negative in character, which means that the level of association between banking development and economic development is very weak (tabel - IV-2). It also appears that level of development in different states is decided by other than banking finance. It seems that increase in banking finance failed to increase the level of development in the latter part of the analysis.

In sum up we can safely conclude the following :

- 1) In early 70s Banking fiannce has strong correlation with industrial development and tertiary sector development and overall development.
- 2) Situation changed drastically in early 80s. The correlation of co-efficient of banking development formed negative correlation with all three sectors

of the economy as well as with the overall economic development.

- 3) The dependence of economic development on banking development was found significantly high in early 70s.
- 4) While in early 80s the economic development was found to be almost independent of banking development.

IV.3 CORRELATES OF BANKING DEVELOPMENT

Inter-state variation in different parametres of banking development have already been explained in chapter II of the present work. It has been observed that after nationalization there were many policy changes for the diversification of banking activities due to which indicators of banking development behaved differently at points of time. Table IV-3 and IV-4 shows the correlation of co-efficients between different indicators of banking development in 1969 and 1986.

The co-efficient of correlation of branch expansion with per capita advances and per capita deposits in quite high. This was, mainly due to the fact that the banking development at the time of nationalization was that of localised nature. While in 1986 there is decline in the value of correlation in case of per-capita deposits with per thousand of population which means that branches opened were in low deposit potential areas (rural areas). However there is no much change in the correlation of per capita advances with

branches per thousand of population. This was mainly because of priority sector lendings in rural areas. Another factor showing the priority sector lending as one of the important determinants of banking development was high correlation of co-efficient of priority sector lendings with rural advances. It was only 0.202 in 1969, which increased to 0.723 in 1986. This relationship also contribute to the fact that "Lead Bank Scheme" proved fruitful in increasing the bank credit in rural areas. There was also change in the nature of relationship of priority sector lendings and rural deposits. This relationship was negative in 1969, while in 1986, it was as high as 0.601.

It is clear from the above analysis that Branch expansion policy and Lead Bank Scheme were two important determinant responsible for the regional pattern of banking development in India.

IV.4 CORRELATES OF ECONOMIC DEVELOPMENT

In chapter III of the present work we have analysed the different variables which shows the different levels of economic development indifferent states. Table V and Table VI show the correlation coefficient between selected economic indicator at two points of time namely 1971-73 and 1982-84.

It is clear from table IV-5 that land productivity in different states was highly correlated with inputs of agriculture namely irrigation and fertilizer. In the same way labour productivity in agriculture sector was also significantly correlated with irrigation facilities available and fertilizer used in both the time periods. However the use of power is not very important in increasing labour productivity as well as land productivity in 1971-73. Though there was increase in correlation co-efficient between these two variables in the latter period of the study,

In the industrial sector the level of employment in Non household sector and power used in industrial sector were mainly responsible ^{for} differential in Net Domestic product originating from the industrial sector in the earlier period of the study. Though in early 80s the role of power became insignificant as the correlation of power used with industrial production became negative.

In services sector main variable responsible for productivity in services sector was level of urbanization and work force in Non house hold sector.

Thus main determinants of differentials in the level of development in agriculture, industry and services were inputs, work force in non household sector and level of urbanization respectively.

TABLE - IV-3

CORRELATION MATRIX AMONG SELECTED BANKING INDICATORS

TABLE - IV-4

1	2	3	4	5	6	7
1. 1.000						
2. .317	1.000					
3. .497	.727	1.000				
4. .620	.411	.884	1.000			
5. .442	-.092	-.175	-.053	1.000		
6. .102	-.426	-.326	-.109	-.193	1.000	
7. -.052	-.189	-.523	-.545	.202	.030	1.000

1. Branches per lakh of population
2. Percentage of Credit Deposit (ratio)
3. Per capita advances
4. Per capita Deposit
5. Share of priority sector to total lending
6. Percentage of rural deposits to total deposits
7. Percentage of rural advances to total advances.

1	2	3	4	5	6	7
1. 1.000						
2. .313	1.000					
3. .445	.424	1.000				
4. .413	-.055	.846	1.000			
5. -.014	-.432	-.632	-.364	1.000		
6. -.455	-.539	-.325	-.034	.601	1.0000	
7. -.588	-.406	-.643	-.479	.723	.789	

1. Branches per lakh of population
2. Percentage of Credit Deposit (ratio)
3. Per capita advances
4. Per capita Deposit
5. Share of priority sector to total lending
6. Percentage of rural deposits to total deposits
7. Percentage of rural advances to total advances.

CORRELATION MATRIX SHOWING INTER-RELATION
AMONG SELECTED ECONOMIC INDICATORS 1971-73

TABLE IV - 5

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	1.000																				
2	.709	1.000																			
3	.626	.473	1.000																		
4	.429	.563	.412	1.000																	
5	.641	.762	.209	.518	1.000																
6	.476	.539	.053	.254	.858	1.000															
7	.296	.382	.013	.146	.619	.877	1.000														
8	.499	.831	.402	.822	.704	.430	.187	1.000													
9	1.23	-.020	-.226	.324	.409	.296	.219	.125	1.000												
10	.242	.249	-.205	.197	.461	.623	.569	.184	.067	1.000											
11	-.126	-.286	-.442	-.099	.177	.331	.341	-.187	.767	.239	1.000										
12	.427	.150	.015	.415	.361	.331	.239	.266	.612	.298	.603	1.000									
13	.101	.318	.036	-.028	-.079	-.137	-.113	.132	-.307	-.057	.445	-.317	1.000								
14	.408	.009	.212	.166	.279	.211	.079	-.005	.372	.220	1.29	-.382	.226	1.000							
15	.531	.482	.163	.494	.543	.386	.269	.469	.341	.276	.255	.729	-.395	.238	1.000						
16	.689	.340	.533	.455	.436	.254	.123	.301	.491	.002	.079	.371	.089	.491	.159	1.000					
17	-.277	-.266	-.424	-.058	-.028	.016	.010	-.88	.494	-.014	.729	.423	-.557	-.294	.276	-.199	1.000				
18	-.154	-.136	-.192	-.118	-.009	.040	.047	-.100	.314	.017	.388	-.007	-.193	-.137	-.197	-.007	.634	1.000			
19	-.114	-.108	-.154	-.085	-.017	.014	.016	-.088	.252	.009	.284	-.031	-.185	-.134	-.185	-.012	.584	.988	1.000		
20	.616	.342	.280	.394	.469	.257	.135	.270	.537	.228	.319	.676	-.361	.520	.784	.457	.233	.111	.128	1.000	
21	.035	.083	-.486	.147	.502	.542	.485	.141	.797	.305	.797	.511	-.150	-.025	.270	.213	.553	.288	.215	.241	1.000

1. Land productivity
2. Irrigated Area to net cropped area
3. Cropping intensity
4. Labour Productivity
5. Fertilizer used per hect of cropped area
6. No. of tubewells per thousand hectare
7. Power used per hect. of Net sown area
8. Number of tractors per thounsand hect.
9. Percentage share in employment of industrial sector
10. Labour productivity in Industrial sector
11. Percentage of NDP Originating from Industry
12. Work force Non-House to Non house hold plus house hold
13. Power used per worker in Industrial sector
14. Road milage per 100 sq. K.M.
15. Railway line per 100 sq. K.M.
16. Percentage of workforce in services sector
17. Labour productivity in services sector
18. No. of insurance companies.
19. No. of joint stock companies
20. No. of Policeman per 100 sq. K.M.
21. Level of Urbanization

TABLE - IV-6

CORRELATION MATRIX SHOWING INTER-RELATION
AMONG SELECTED ECONOMIC INDICATORS 198²₈ - 8²₉.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1																					
2	.798																				
3	.598	.534																			
4	.807	.611	.556																		
5	.839	.771	.291	.651																	
6	.397	.412	-.089	.210	.637																
7	.622	.691	.295	.628	.710	.515															
8	.813	.842	.546	.849	.762	.370	.595	.100													
9	.226	.092	.315	.365	.485	.560	.612	.174	1.00												
10	-.042	-.101	-.061	-.129	.072	-.003	-.193	-.013	.043	1.00											
11	-.175	-.091	-.380	-.198	.057	.376	.083	.119	.399	.295	1.00										
12	.224	.098	-.237	.464	.347	.433	.521	.272	.795	.096	.486	1.00									
13	.677	.674	.426	.418	.477	-.011	.262	.586	-.185	.209	-.358	-.174	1.00								
14	.354	-.084	.165	.301	.188	.308	.063	.042	.285	.102	.135	.462	-.114	1.00							
15	.362	-.015	-.380	-.277	-.018	.030	.077	-.107	.155	-.013	.304	.263	-.305	-.222	1.00						
16	.652	.324	.460	.598	.472	.228	.504	.397	.408	.054	-.215	.173	.403	.278	.545	1.00					
17	.286	.309	.028	.517	.491	.299	.586	.518	.579	.181	.257	.557	.121	-.183	1.35	.339	1.00				
18	-.103	-.087	-.215	-.090	.083	.039	.091	-.089	.267	.267	1.65	-.009	-.202	-.182	-.154	-.002	.185	1.00			
19	-.091	-.093	-.232	-.070	-.85	.022	.077	-.089	.259	.196	.134	-.018	-.207	-.189	-.185	-.010	.173	.992	1.00		
20	.529	.387	.326	.534	.435	.225	.726	.338	.461	-.035	.188	.623	.076	.514	.57	.387	.267	.080	.060	1.00	
21	.123	.128	-.520	1.73	.482	.567	.508	.162	.881	.201	.423	.647	.008/	-.017	.244	.237	.595	.263	.247	.185	1.00

1. Land productivity
2. Irrigated Area to net cropped area
3. Cropping intensity
4. Labour Productivity
5. Fertilizer used per hect. of cropped area
6. No. of tubewells per thousand hectare
7. Power used per hect. of Net sown area
8. Number of tractors per thousand hect.
9. Percentage share in employment of industrial sector
10. Labour productivity in Industrial sector
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12. Work force Non-House to Non house hold plus house hold
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16. Percentage of workforce in services sector
17. Labour productivity in services sector
18. No. of insurance companies.
19. No. of joint stock Companies
20. No. of Policeman per 100 sq. K.M.
21. Level of Urbanization

CONCLUSIONS

The present study is an attempt to examine the nature of relationship between process of commercial Banking and regional and sectoral aspects of economic development in India from 1969 to 1986. It is clear from the earlier discussion that there has been multi-dimensional expansion in the commercial banking. Branches especially in rural areas were enlarged after 1969. Commercial banks opened 44635 branches after June, 1969 to June 1986. As many as 27615 branches opened in rural areas only consequently, the share of rural branches increased from 22% in 1969 to 55% in June 1986. The population per bank branch came down from 65000 in 1969 to 14000 in 1986.

The most important finding of the present study is that correlation co-efficient of Banking and economic development found to be negative in the latter period of the study (Table - IV-5) while it is positive in earlier period. It has been found that the phenomenon of commercial banking was limited to developed states at the time of nationalization of major commercial banks in 1969. Developed states not only utilized their own resources by means commercial banks but these states also utilized the resources of other backward states. The commercial banks worked as channels through which funds from backward state kept

flowing to the developed states. Thus there was a paradox. Instead of the developed states contributing to the development of backward states, it was otherway round. Thus in the earlier period banks worked as an instrument of economic development in already developed states. This was because of two reasons (1) Pre 1969 era was dominated by traditional approach of playing safe. It was possible only when '

the risk element in investment was minimised. Developed states had sufficient infra-structure to minimise the risk element in investment and (2) credit policy and norms were generally laid down on All India basis as if the entire economy were one homogeneous unit.

Thus banking development was limited to developed states in the earlier period of the study. In the latter period of the present study growth of banking sector was guided by Lead Bank scheme recommended by a study group (known as Godgil group) of National credit council. The group was of the view that because of the diversity of conditions all over the country, an area approach was essential for appropriate credit arrangements on the basis of local conditions. Accordingly, Lead Scheme made all major schedule commercial banks responsible for providing integrated and all-round banking facilities under their leadership in all the districts of the country in well planned and phased manner. The key feature of this planning were emphasis on credit to 'priority sectors' and emergence of food credit. Important sectors of

this scheme were, agriculture, small-scale industries exports, road and water transport operators, professional and self employed persons, retail trade and small business and education. Special efforts were made to increase the bank credit under priority sector.

At the time of nationalization there were wide disparities in financing of priority sector. These disparities declined about 23 percentage point from 1972 to 1986 (Table II-8). It has been found from the preceding analysis that there was significant increase in ^{the} priority sector credit flow particularly in backward states like Himachal Pradesh, Orissa and Bihar.

So, Banking developemnt which was limited ^{to} a few developed states at the time of nationalization, reached to the most backward states of India. It was found that ranking pattern of the states in term of banking development from 1969 to 1986 changed significantly in favour of backward states. Consequently, the positive correlation between banking development and economic development in 1971-73 turned into negative correlation in 1982-84. This fact was mainly contributed by the phenomenon that growth of banking development was much more in backward states than in developed states in the latter of the study.

As stated in the beginning of the present work, banks

Played crucial rôle in the development process. However their impact on the development was limited by certain other factor like absence of infra-structural facilities. In post nationalization period though banking facilities in backward states increased tremendously yet the pace of growth in these states remained low. That is why we found a negative correlation of banking development and economic growth in the latter period of our study.

It was observed that through policy measures, government diversified the banking activities and reduced the regional imbalances in the development of banking sector. At the time of nationalization of commercial banks deposits and advances both were high in case of developed states. In the post nationalization period per capita deposits and advances increased in case of backward states also. Consequently the coefficient of variation in case of per capita advances and deposits declined by 25 percentage points and 47 percentage points respectively (see table II-4, II-5) from 1969 to 1986. However there was no decline observed in case of rural-urban disparities. The percentage of total rural deposits/advances remained same (Table II-3, II-6) at both the periods of the present study.

The hypothesis that banking development failed to bring the economic development in the latter period of the study is revealed by the fact that credit to deposit

ratio declined from 78% in 1969 to 63% in 1986 (table - II-7). This has happened mainly due to the fact that the increase in infrastructural facilities was much less than the increase in banking activities demanded, particularly in rural areas where priority sector lendings increased significantly. The net result of this type of development was that banking finance failed to produce backward and forward linkage effects. This also raised the problem of recovery in the initial stage, which further made banking finance shy (Bankers hesitate in financing). With this type of scenario the priority sector lending increased (It was mandatory for banks to finance under priority sector as mentioned elsewhere in the present work) but the general financing declined due to the non-availability of bankable schemes (bankable schemes are to a great extent decided by infra-structural facilities available). Industrial activities suffered most in the post nationalization through this type of development. In 1971-73 the correlation co-efficient of banking development with industrial development was positive and was quite high (table - IV-1), but in 1982 - 84 it turned into negative with lowest correlation in comparison the Agriculture and services sectors.

To sum up, the role of commercial banks in economic development was limited by other infra - structural facilities.

At the time of nationalization in 1969 the banks were more concerned with growth. While in the latter period it

was development which was the prime objective of the commercial banks. In the earlier period banks worked on the philosophy of "invisible hand": their chief aim was to maximise the gains of bank rather than that of the economy. The consequence has been the predominance of microapproach. Given the genesis of banks and the fact of private motivation, banks tend to be used further the interest of the big capitalists. After 1969 a macro approach was adopted towards banking industry as a whole. In this approach social gains were^s given more importance than private and individual gains. This was a qualitative change in the working of commercial banks. The share of backward areas in terms of the banking activities increased significantly. However, we observed in our analysis that the increase of banking activities in backward states didn't bring any corresponding changeⁿ in the development process.

In fact a positive association of banking development with economic development in the earlier period of the study is mainly due to the fact that credit operations have always waited for a region to develop to a sufficiently high degree. Due to this tendency banking industry showed a highly localized pattern in earlier period of the study. As a result of this pattern of operations of the banking industry, the country favoured already developed regions. Though in the latter period of studies banking industry moved towards backwards

areas through deliberate policy measures . the effect of these policy measures was not strong enough to start the process of economic development in these states. Now, Time has come to evolve the method through which bank can take on a full fledged development role.

POLICY IMPLICATIONS

As economic development is becoming the major concern of policy formulation impact of banking finance on the process of economic development is becoming significant day by day. It has been observed by the cross section study at two points² of time in the present worked¹ that till 1969 the banking finance was decided by the economic development while in the latter period banking finance become autonomous variable and it was decided by the government policies. This leads to a very high banking development in the most backward states of India. Credit was assigned a new role of an agent of economic development rather than economic growth. Though it is too early to conclude whether credit alone can bring economic development yet one thing which is very clear is at least in the absence of some social overheads and infra-structural facilities the banks have to wait till such overheads are created. Efforts should therefore be made to develop the much needed infrastructured support in the backward areas.

Secondly, it is clear from the above analysis that though banking credit has been diverted towards backward areas yet the record of development of these states is very poor (Table - II-6). Hence there is need to review the policy of Micro or partial approach in providing credit. The dependence of the role of banks in an economy on the type

of economic system prevalent has generally been ignored. That is why the role of banks in backward states is not very significant. This makes the role of banks passive in economic development. The net result of all these is that if banks conduct themselves efficiently then they would be able to fulfill their economic role of facilitating wheels of the economy. To avoid this type of lacuna in the working of commercial banks there is need to revamp the present credit planning of the commercial banks. At present District credit plan is prepared at the district level. This kind of planning at the district level could not be implemented because the district still remained a big unit for achieving social and economic equity. Therefore, there is need to brought down size and area of credit planning at block level. The credit planning at block level would become an instrument of development because of the following reasons

- 1) The experience of credit planning at district level shows that absence of proper planning at the block level imposed a grave handicap on development of Indian rural economy. It is reflected in the relatively slow and patchy progress in agriculture, rural industry and related fields.

- 2) Credit planning at block level would be done after understanding the local problems.
- 3) It will help in ensuring vital integration of credit with non-credit inputs at grass root level.
- 4) All targets would be set up keeping the actual topography, and socio-economic life of village in mind.

With the establishment of a large network of branches in rural and semi-urban areas the time is opportune to revamp the present policy of lending particularly in rural areas so that the quality of lending can be improved. The government realized the handicap of present policy in developing the rural areas. In late 1987, the entire gamut of rural lending programme came under sharp focus, consequently, in the Budget speech of 1988-89, the Finance Minister declared a new rural lending policy. This policy is known as "service Area approach". Which is nothing but a part of "Block level credit Planning. The salient features are of this policy/as under

- (i) Each rural/semi urban branch will be allocated 15-25 villages which will be their designated service area
- (ii) Branch Managers will conduct extensive survey of villages allocated to them and prepare village profiles.
- (iii) On the basis of village profiles they will prepare village credit plan keeping in view the potential and needs of concerned area.

The new dispensation is expected to bring about the desired changes.

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