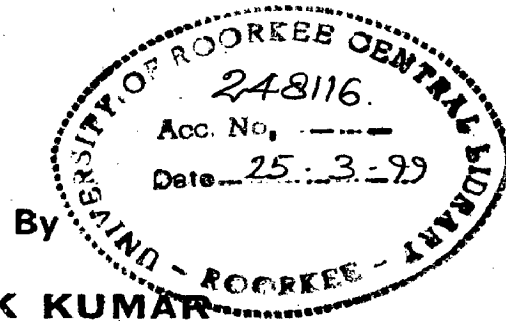


INTEGRATED DISTRICT DEVELOPMENT PLANNING FOR HARIDWAR DISTRICT

A DISSERTATION

*submitted in partial fulfilment of the
requirements for the award of the degree
of*

MASTER OF URBAN AND RURAL PLANNING



DEPARTMENT OF ARCHITECTURE AND PLANNING
UNIVERSITY OF ROORKEE
ROORKEE - 247 667 (INDIA)

JANUARY, 1998

CANDIDATE'S DECLARATION

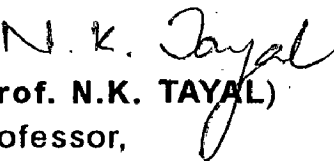
I hereby certify that the work which is being presented in the dissertation entitled, "INTEGRATED DISTRICT DEVELOPMENT PLANNING FOR HARIDWAR DISTRICT", in partial fulfilment of the requirement for the award of Degree of Master of Urban and Rural Planning, submitted in the Department of Architecture and Planning, University of Roorkee, Roorkee, is an authentic record of my own work carried out during the period from July 1997 to January 1998, under the supervision of Prof. N.K. Tayal, Professor, Department of Architecture & Planning, University of Roorkee.

The matter embodied in this dissertation has not been submitted by me for the award of any other degree or diploma.

Date : 27th Jan., 1998


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This is certified that the above statement made by the candidate is correct to the best of my knowledge.


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Roorkee and friends for their help and encouragement. Thanks are also due to Atul Printers, Roorkee, for typing this thesis. /

At the last, but not the least, I would like to accord my deep appreciation and gratitude to my parents, wife and all family members for their encouragement and moral support without which it would not have been possible to complete this thesis work.

Dated : 27th January, 1998

Place : Roorkee


(ASHOK KUMAR)

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CHAPTER - 1

1.0 CONCEPTUALISATION

1.1 BACKGROUND

1.2 IDENTIFICATION OF THE PROBLEM

1.3 OBJECTIVES OF THE STUDY

1.4 SCOPE AND LIMITATIONS

1.5 APPROACH AND METHODOLOGY

1.0 CONCEPTUALISATION

1.1 BACKGROUND

India has been emphasizing the importance of developmental efforts at the micro level since the last three decades for the speedy development of the area and people. By and large all five year plans since Third Five Year Plan identified **Districts** as planning units/regions. A successful plan while taking into account the limitations posed by national priorities, resources and investment of funds, must be sensitive to the regional variations so that a balance is struck. Thus, Government of India issued guidelines to State Governments for preparation of district plans and encouraged them to establish planning and management machinery at the district level.

The idea of Decentralized Planning in India is over a century old, going back to Pre-Independence years of British Rulers and the resolution of local self-government underlined the importance and relevance of local self-government by **Lord Ripon (1882)**, which was followed up by the Royal Commission on Decentralization in 1909, which stressed the need for making village the basic unit of local self-government, which should become an integral part of the administrative structure of Government of India. **Gandhiji** formulated the concept of complete decentralization with Village Panchayat as a social organization which would aim at allround development of the village in terms of, the agricultural produce, cottage industries, aspects of health, education, employment and social organisation. These ideas were further crystallized by **Shriman Narayan** in the form of Gandhian constitution for Free India. Efforts were made to initiate decentralization at the district level and block level and to promote the establishment of three tier institutions, viz. Panchayati Raj at the village, block and district level. In order to suggest ways and means to accomplish the task of decentralized planning and people's participation etc., the Planning Commission in its endeavour to strengthen the levels below the state, set up various committees and expert groups to review the issues regarding the planning process in India.

Several expert committees like *Balwant Rai Mehta Committee*, *Ashok Mehta Committee*, *Gadgil Committee*, *Dantawala Committee* and *Hanumantha Rao Committee*, emphasized the need for *Integrated District Development Planning in India*. In 1969, Planning Commission issued the first set of guidelines for district planning, focussing on area approach to planning by which utilization of local resources could be efficiently undertaken. The Working Group on District Planning (1984), appointed by the Planning Commission (PC) recommended "*district planning*" as a concept in decentralized and multi-level planning for taking into account the local needs and problems more realistically and to adopt the districts as planning and development units to reduce inter district disparities within states. This seems to have revived as a necessary measure for revitalizing the planning process in order to federalize national planning and to attack mass poverty and deprivation in the rural areas and continued regional backwardness. This led to the formation of comprehensive guidelines for 'district planning' by the Planning Commission in 1984. Such an approach in planning was considered useful both from the point of view of greater efficiency in resource mobilization and its allocations as well as from the point of view of development from grass-root level.

During 1987-89, the Planning Commission initiated pilot projects on District Planning for five districts in different states of India namely *Tirunelveli (Tamil Nadu)*, *Nasik (Maharashtra)*, *Munger (Bihar)*, *Sitapur (Uttar Pradesh)* and *Shimla (Himachal Pradesh)*. The National Institute of Rural Development (NIRD) Hyderabad was entrusted with the responsibility of providing technical guidance in formulating these district plans. The approach followed was "*Growth Centre Concept*" with the premise that a "*Growth Centre*" is a settlement capable of sending socio-economic impulses to its surroundings (hinterland), thereby forming their nucleus (Nagaiya D.). The approach envisages identification of villages and their

clusters for providing facilities and services in hierarchical order, as the first step towards spatial planning. It envisaged a five year perspective plan comprising of resource development plan, provision of socio-economic facilities and development of economic infrastructure.

District planning got a further fillip with a new mandate consequent to the **73rd and 74th Constitutional Amendment Acts (1992), wherein district planning has been recognized as a tool for Integrated Spatio - Economic Development of a district through active participation of people and involvement of democratic institutions at local levels.** This has considerably enlarged the erstwhile scope, coverage and approach to District planning. This will naturally have enormous implications in the process of District Planning, development, management and manpower training.

A Comprehensive Data Base, Scientific tools and Techniques to analyse the data generated for projecting a development scenario for the future, enabling optimum utilization of resources and meeting the national as well as state objectives of socio-economic development are essential steps before formulating a blue print/plan for development programmes and activities of a District. An overview of the approaches brings out the need for standardization of different parameters for building up the spatial profile of the District which is essential for Spatio-Economic Development Planning for the District. It is also advocated that the plans for the District should be simple, so that the people who participate in framing these plans, can understand their scope, limitation and contents.

1.2 IDENTIFICATION OF THE PROBLEM

Various approaches being followed by different states in India for district planning though differing in many ways, focuses on the decentralization aspect. However, almost all of them consider only rural areas and villages for development to the complete exclusion of urban centres of the district. Thus, District planning in its present form as practised, has serious limitations as mentioned below.

process, but are also an indicator of the importance of spatial dimension in the planning framework. This has considerably enlarged the scope, coverage and approach to District Planning.

This constitutional responsibility assigned to the Panchayats and the Municipalities on one hand and the District Planning committee on the other, would change the whole complexion and approach to District Planning as hitherto being practised, requiring interdisciplinary professional inputs in planning, implementation and management for integrated development of the district. Haridwar being a new district, District planning in context of the Constitutional Amendments will be more effective and realistic.

1.3 OBJECTIVES OF THE STUDY

In line with the background as mentioned in 1.2 the objectives of my thesis are as under.

- a) To review the present system of formulation of district plans in India.
- b) To appraise the district planning process being carried out in the states of Himachal Pradesh and Uttar Pradesh.
- c) To identify the limitations in the existing district planning process, management machinery in Himachal Pradesh and Uttar Pradesh.
- d) To evolve a methodological framework for formulation of Integrated District Development Plan (IDDP) at the district level, for Haridwar District, Uttar Pradesh.
- e) To prepare a Model Integrated District Development Plan (IDDP) for Haridwar District, Uttar Pradesh.
- f) To suggest a workable district planning process and management mechanism for formulating and managing Integrated District Development Plan (IDDP) at the district level., for Uttar Pradesh.

1.4 SCOPE AND LIMITATIONS OF THE STUDY

The scope of my thesis study is restricted to prepare an *“Integrated District Development Plan (IDDP)”* by evolving a suitable methodological

framework and to suggest a workable ***“Planning Management Mechanism”*** to operationalise the District Plan. ***After reviewing various approaches being followed by different states in India, the study would attempt to adopt a holistic approach to Integrated District Development Planning with priority assigned to grass-root development, in context with Constitutional Amendment Acts. For this, Haridwar has been selected as a study area.***

Following parameters will be given priority in the various stages of Plan formulation in context of items listed in the 11th and 12th Schedules as mentioned below :

- a) Planning for Resource development for maximum utilization of resources and full employment of the people of the study area;
- b) Planning for economic development and social justice for community welfare and alleviating poverty;
- c) Planning for infrastructure development;
- d) Planning for industrial development;
- e) Planning for Tourism Development; and subsequently
- f) Sustainability

All these parameters would help in developing backward and problem areas thus reducing inter-block/settlement disparities and achieving a harmonious balance in the district and achieving a degree of self-sufficiency to make Haridwar district self-sustainable.

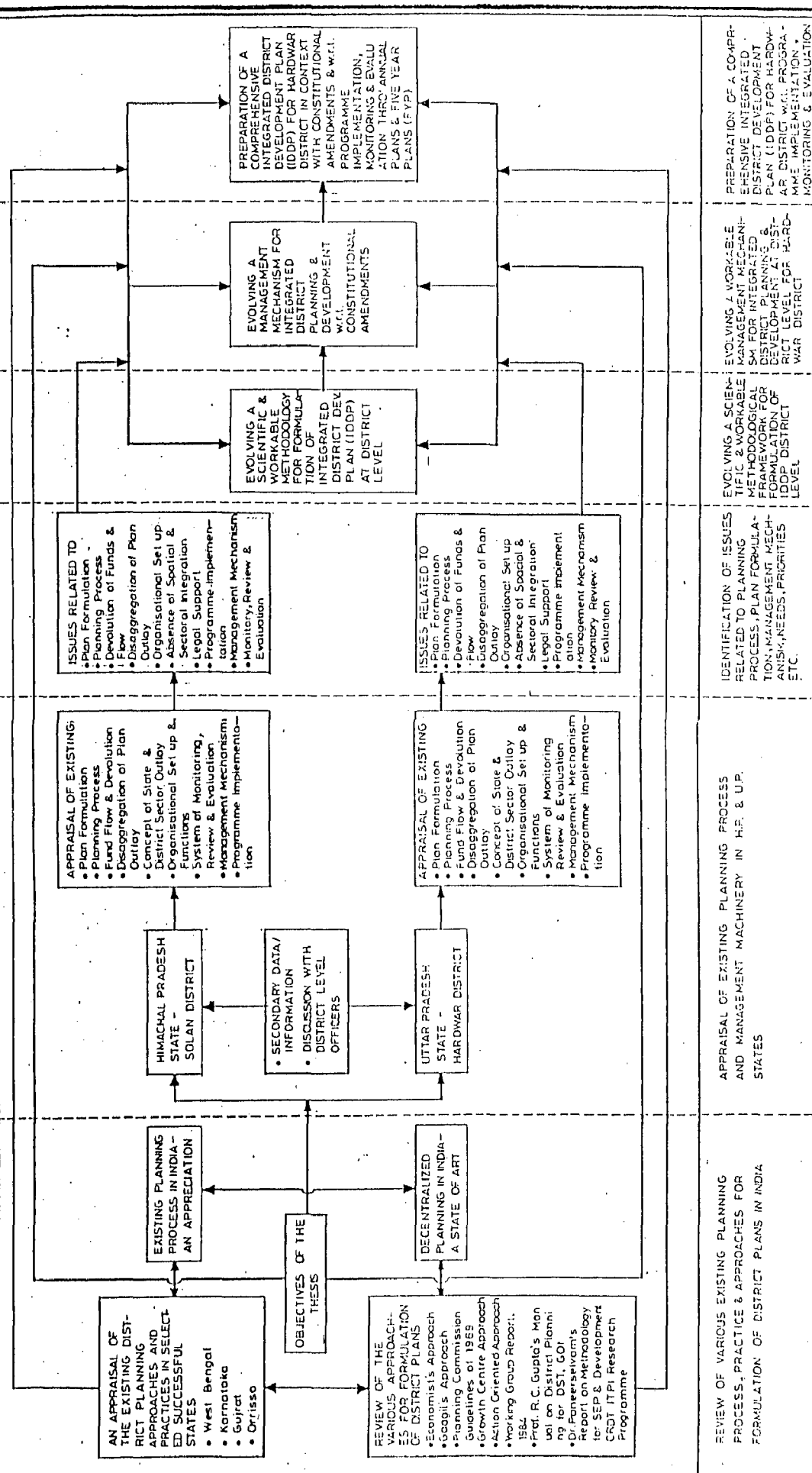
1.5 APPROACH AND METHODOLOGY

The suggested Planning Approach and Methodology has helped in carrying out thesis work in a systematic way in various stages. The various tasks accomplished in order to meet the objectives of the thesis work, are as under (Refer Fig. 1).

1.5.1 Existing Planning Process in India - An Appreciation

As an initial task of the thesis work, an appreciation of the planning process

FIG. 15: APPROACH AND METHODOLOGY



<p>REVIEW OF VARIOUS EXISTING PLANNING PROCESS, PRACTICE & APPROACHES FOR FORMULATION OF DISTRICT PLANS IN INDIA</p>	<p>APPRAISAL OF EXISTING PLANNING PROCESS AND MANAGEMENT MACHINERY IN H.P. & U.P. STATES</p>	<p>IDENTIFICATION OF ISSUES RELATED TO PLANNING PROCESS, PLAN FORMULATION, MANAGEMENT MECHANISM, NEEDS, PRIORITIES ETC.</p>	<p>EVOLVING A SCIENTIFIC & WORKABLE METHODOLOGY FOR FORMULATION OF INTEGRATED DEV PLAN (IDDIP) AT DISTRICT LEVEL</p>	<p>EVOLVING A MANAGEMENT MECHANISM FOR INTEGRATED PLANNING & DEVELOPMENT WITH CONSTITUTIONAL AMENDMENTS</p>	<p>PREPARATION OF A COMPREHENSIVE INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDIP) FOR HARDWAR DISTRICT IN CONTEXT WITH CONSTITUTIONAL AMENDMENTS & W.C.I. PROGRAMME IMPLEMENTATION, MONITORING & EVALUATION THRO' ANNUAL PLANS & FIVE YEAR PLANS (FYP)</p>
<p>INTEGRATED DISTRICT DEVELOPMENT PLANNING FOR HARIDWAR DISTRICT</p>	<p>ASHOK KUMAR M.U.R.P. THESIS</p>	<p>SESSION 1997-98</p>	<p>DEPT. OF ARCH. & PLANNING UNIV. OF ROORKEE. U.P. (INDIA)</p>		

in India has been done with a view to understand the planning process at the centre, process of formulating five years plans and annual plans, centre - state relationships, planning machinery at the state level and district level and in understanding clearly the deficiencies in the planning Process particularly the absence of spatial planning dimension in formulating plans at the district level.

1.5.2 Decentralized Planning in India - A State of Art

After reviewing the planning process in India, an attempt has been made to study and understand the importance and trends of decentralized planning in India, which encourages the people's participation in decision making process through formulation and execution of plans at the grass root level.

1.5.3 Review of Existing Approaches, Practices and Model Studies on District Planning in India Prior to 73rd and 74th Constitutional Amendments

After studying the importance and trends of decentralized planning in India, the next step has been to review the district planning approaches and practices attempted in India since first year plan till the recent eighth five years plan to understand the direct and indirect ways of achieving decentralized planning process in India as well as to know the Scope and Application of the various Approaches as mentioned below:

- a) V.K.R.V. Rao's Approach on District Planning;
- b) Gadgil's Approach on District Planning ;
- c) Planning commission Guidelines of 1969;
- d) Growth Centre Approach ;
- e) Action Oriented Approach to Area Planning ;
- f) Report of National Commission on Urbanisation, 1983.
- g) Working Group Report on District Planning 1984; and

After reviewing the various approaches suggested for district planning in India, the next step has been to review the existing practices as well as Model studies on district planing. e.g. case study of "*Spatio-Economic Plan*

and Integrated District Development Plan Solan District (H.P.) to understand the planning process, management mechanism, organisational set up, functions, methods of plan formulation, approval, budgeting, devolution/flow of funds, implementation, monitoring, review inter-linkages and evaluation of district plans etc.

1.5.4 Identification of Issues and deficiencies related to planning process, database, management mechanism - An Appraisal

After detailed analysis of various approaches and model studies on district planning, the next step has been to identify certain critical issues and deficiencies regarding organisational setup, functions, interlinkages, absence of spatial dimension in the district plans, planning process, methodology, implementation, monitoring, review and evaluation in context with constitutional amendments.

1.5.5 Evolving a Methodological Framework for formulating Integrated District Development Plan (IDDP) at District Level

After identifying various critical issues and deficiencies in district planning and also reviewing the various methodologies on district plans developed by many professionals in the Past, an attempt has been made to develop a comprehensive, scientific and workable methodology for formulating an Integrated District Development Plan (IDDP) at the district level for Haridwar District.

1.5.6 Preparation of a Spatio-Economic Plan and Integrated District Development Plan (IDDP) for Haridwar District.

This stage is the crucial of the whole study, which is the culmination of the series of earlier stages with strategies for district development and planning. It covers formulation of proposed resource utilization plan, proposed settlement scenario, settlement and infrastructure development strategy including transport network development, water-supply, Electricity, socio-economic development plan, industrial development plan, plan for developing backward and problem area, plan for Tourism development etc.

in accordance with existing five year plans and programme implementation, monitoring and evaluation through annual plans/within the framework of Spatio-Economic Plan (SEP) and Integrated District Development Plan (IDDP) Policies.

1.5.7 Evolving a Management Mechanism for Integrated District Development Planning in context with Constitutional Amendment Acts

The new organizational and management structure for District Planning has been primarily derived from the 73rd and 74th Constitutional Amendments which provide for three tier Rural Panchayats at village, intermediate (Panchayat Samiti) and District levels (Zilla Parishad) and similar hierarchy of municipal bodies for urban areas, Viz. Transitional Area (Nagar Panchayat), Small Urban Area (Municipal Council), and Large Urban Area (Municipal Corporations), all of which are to be elected bodies. A Management Mechanism for District Planning will be suggested.

2.0 REVIEW OF EXISTING APPROACHES, PRACTICES AND MODEL STUDIES ON DISTRICT PLANNING PRIOR TO 73RD AND 74TH CONSTITUTIONAL AMENDMENTS

Existing Planning Process, Decentralized Planning; and various Approaches and practices suggested for District Planning are mentioned below.

2.1 EXISTING PLANNING PROCESS IN INDIA-AN APPRECIATION*

The planning process that has developed in India has been the resultant of a number of important economic and political forces operating with varying degrees in intensity since the First Five Year Plan and this has both a hierarchic and an interactive character as it operates within the framework of a federal democratic structure. The planning process has tried to achieve the objective of accelerating the growth rate of the economy through promoting diversification of economic activities in the industrial sector through massive investment in agricultural infrastructure and in other forms of social overhead capital, while trying to reach a certain measure of regional dispersal of economic activities.

The Planning Commission is the apex body of the planning apparatus in the country even though its role is essentially advisory. The committees examine the projects proposed by the state and Central Ministries in their respective fields. In addition to the formulation of plan, it has also to overview the whole process of planning and evaluation. The perspective plan, five year plan and the Annual Plan deal with resource mobilization, projected development in a number of key sectors of the economy desired directions of economic activities to serve essentially as pointer in formulating the operational targets that go into a Five Year Plan. The Five year documents constructed on the basis of recommendation made by a large number of working groups which deal with all the major sectors of economic activities.

* *Dr. Paneerslevam A (1993) : Research Study on Methodology for District Level Spatio - Economic Planning and Development, ITPI, New Delhi.*

2.1.1 The State Planning Machinery

Planning Machinery in the state varies considerably from one state to another. The Council of Ministers in a state is the highest authority responsible for broad policy decisions regarding, plan objectives, size, priorities, etc. Then there are State Planning Committees or State Planning Boards with Chief Ministers Chairman and Ministers as members.

2.1.2 The Machinery for Local Planning

The Planning Commission under the leadership of the Prof. Gadgil drew up a set of detailed guidelines for formulation of district plans with a premise to identify the priorities for development in the light of local potential, problems etc. Later, working group report on District Planning Under the Chairmanship of Dr. Hanumantha Rao during 1984 also recommended guideline for formulation of an ideal district plan. Panchayati Raj Institutions (PRIs) were established and powers were given so that a public participation in district planning can be achieved. The 73rd and 74th amendments further envisages the decision making powers to PRIs at the grass root level.

2.2 DECENTRALIZED PLANNING IN INDIA - A STATE OF ART

Every since planning started in India - after independence, the main objectives of all the five year plans a revolve around economic growth with reduction of inequalities, removal of poverty and regional disparities. Although the priorities from plan to plan might have changed but the basic objective remained the same. Planning commission made a great deal of efforts during 1950's and 1960's to evolve a suitable methodology in decentralised planning.

2.2.1 Decentralised Planning in India : Trends

The recognition of the importance of decentralized planning in India is more than a century old. During British Rule, Lord Ripon emphasised the need for decentralized planning in the resolution on Local Self-Government in 1883. Thereafter, the Royal Commission on Decentralization in 1906 forcefully advocated to make the village the basic unit of Local self-government.

formulation and implementation.

- b) Emphasized the re-organization of district administration with primary emphasis on implementation of development programmes with active support and cooperation of the people.
- c) Government of India urged for the revival of village Panchayats to make them capable of assuming responsibility for a wide variety of socio-economic activities at local level.
- d) Launching of Community Development Programme (CDP)

2.2.4 Second Five Year Plan (1956-61)

- a) Planning Commission discussed in detail the concept of a local horizontal plan and comprehensive District Plan for each district.
- b) Appointment of Prof. Balwantrai Mehta Study Team by Committee of Plan Projects (COPP) in 1957.
- c) The study team recommended the process of democratic decentralization-a three tier system of statutory bodies, denoted as a Panchayat (village), Panchayat Samiti (Block) and Zilla Parishads (District) to ensure people's participation of development work. Also recommended adequate powers and responsibilities to these local bodies, but were not implemented.

2.2.5 Third Five Year Plan (1961-66)

- a) The Planning Commission explained a methodology for preparing state plan for rural development based on District and Block plans.
- b) Three Tier System of Panchayati Raj Institutions (PRIs)-Village, Block and District were established in many States. Blocks were middle sized tiers supposed to be the basic tiers of development.
- c) However, Maharashtra, Gujarat, Tamilnadu, Karnataka and Andhra Pradesh kept the primacy at District level with the collector or Deputy Commissioner given all powers except in Maharashtra where the non-official Zilla Parishads had considerable power.

minimum needs, employment opportunities and household oriented beneficiary schemes.

- c) The CDP of first three plans slowly took up a wider coverage in the concept of Integrated Rural Development Programme (IRDP) in 1976. The district agencies could only be acting as post offices clearing correspondences between State agencies for special programme and district departments.
- d) The shift to district planning seemed too hasty in view of too many adhoc beneficiary schemes imposed time to time. IRDP with 6 major agricultural and 7 non-farm schemes was not planned but assembled and when 20 districts were chosen for action planning by the Council of Agricultural Research one district plan could come out.
- e) The Block level planning was conceived to complement rural development. As the recommendations of Prof. M.L. Dantwala Committee (1978) a planning team at district level were to take up block planning function. The IRDP was interlinked with such planning.
- f) A report on Panchayati Raj Committee under Shri Ashok Mehta was prepared in 1978.
- g) Government of India issued guidelines for block level planning and 300 blocks plans got prepared by the end of fifth five year plan.

2.2.8 Sixth Five Year Plan (1980-85)

- a) Procedure for affecting financial, functional and administrative decentralization to districts outlined in the States.
- b) Central Scheme for strengthening planning machinery at district level was launched in 1983.
- c) The preparation of comprehensive block plan was diluted by preparation of five year development profiles for the district to be disaggregated into blocks.
- d) Thus, the inclination for district planning reversed the process, of micro-planning at block level.

- e) The district credit plans have also been undergone the same disaggregation technique. Thus, the block planning became a forgotten issue by the beginning of Seventh Five Year Plan.
- f) Here, the district plan was not a coordinated block plan (as in Dantwala Scheme) but a supplement to rational State Plan as inventory of local resources and as guide to specifically tailoring the investments to needs of the district.
- h) Launching of training programmes for district and block level officers.
- i) Launching of Rural Landless Employment Guarantee Programme (RLEGP) in 1983.

2.2.9 Seventh Five Year Plan (1985-90)

- a) Recognizing the working group report (1984), further stress laid on functional decentralization, financial decentralization, and planning mechanism at District level.
- b) Planning Commission to play promotional and guiding role in the following:
 - i) Introduction of scheme for strengthening District Planning machinery.
 - ii) Massive training organized at Centre and State Level.
 - iii) Data & Information system for District Planning proposed to update Natural Resources Inventory.
 - iv) Technical guidance through pilot projects for improving methodologies and procedure for decentralized district planning.
- c) The NCU report was prepared 1988 emphasizing the need for spatial planning approach.
- d) Launching of Jawahar Rozgar Yojana (JRY) in 1989.
- e) Panchayati Raj Sammalens were held in 1989 with a main objective of making the institutions viz., Taluka/Block (Panchayat Samities), Zilla Parishad, Municipal Committee, Town Area Committees and Notified Area committees, reflecting the felt needs of the people.

2.2.10 Eighth Five Year Plan (1992-97)

- a) Emphasis on district as a unit of planning, where a district plan would be prepared taking into account the physical and human endowments of that area, the felt needs of the people and the funds available. Projects and Schemes would be selected for implementation based on these plans.
- b) It is proposed that for planning and implementation of the district plan, the responsibility would vest in the Zilla Parishads where they exist and/or in the DRDAs.
- c) It is proposed that one district per State is selected for implementation of this programme as described above.
- d) It is proposed to initiate the following steps to overcome deficiencies in implementation of programmes and ensure effective achievement of targets and realisation of intended benefits by the beneficiaries.
 - i) Strengthening the people's bodies at local levels, i.e., District Boards and Gram Panchayats.
 - ii) Integrated area development approach by bringing about a convergence of all the sectoral agencies concerned at micro-level.
 - iii) Involvement of beneficiaries in the implementation of the programmes through organization of beneficiaries and/or Panchayats.
 - iv) Introducing flexibility in the programmes by giving more autonomy to the local bodies and Panchayats to plan according to the needs and resources available at the local area level.
 - v) Handing over the management and supervision of local service centres like health centres, schools, etc., to District Boards and Panchayats.
 - vi) Greater involvement of voluntary agencies who have the abilities to demonstrate and innovate, provide technology and training and act as support mechanism to local level institutions.

- vii) Streamlining of organisations at various levels so that overheads are cut down, delays are reduced, necessary funds are made available to local agencies in time, various sanctions are issued and dedicated manpower and other inputs made available in time.
- viii) A concerted effort to involve and train officials as well as non-officials, not only to bring about required skills for planning and implementation but also to inculcate required attitudes and impart necessary knowledge about the management of programmes at local levels.
- ix) Devising effective system of monitoring and evaluation which monitors the programmes more in terms of ultimate benefits than of expenditure incurred or inputs used. For example, the ultimate benefit of the family welfare programme is reduction in birth rate, while the targetting and monitoring is done in terms of couple-protection rate. This needs to change.
- x) Introductions of better delivery system through self-management organizations.
- e) The Plan recognises "human development" as the core of all development effort. The priority sectors of the Plan that contribute towards realisation of this goal are health, literacy and basic needs including drinking water, housing and welfare programmes for the weaker sections.
- f) For rapid economic development, the priority sectors identified for the growth of infrastructure are power, transport and communications.
- g) Eighth Plan recognises the essential need to involve people in the process of development.
- h) The new role of the Government in the process of Plan implementation envisages substantial devolution of power to the people's organisations at the district, block and village levels. *Panchayats and Nagar Palikas* would have a larger role in formulating and implementing the developmental projects in their areas.

- i) Eighth Plan pays special attention to employment in the rural areas. The need for expansion of employment opportunities in rural areas in order to check migration to urban areas calls for a shift in the emphasis in the rural development programmes from the creation of a relief type of employment to building up of durable productive assets in rural areas.

2.3 DISTRICT PLANNING IN INDIA - SCOPE, APPROACHES AND APPLICATION*

Government of India, in the process of operationalising the decentralized planning below state level, inspite of existence of various administrative and development units, accepted districts as viable units of planning after elaborate deliberations through successive five year plans.

The important reasons for choosing district as planning units are as follow:

- a) It has a settled pattern of administration with a high degree of internal consistency and well established administrative relationships.
- b) As it is an existing administrative unit, to take up planning at district level would ensure that evaluating the overall impact on the people and the area of total administrative and planning effort in the area would be feasible.
- c) The long history of district administrative, have ensured that citizen's awareness of administrative processes in a district is adequate implying that a new administrative or planning unit would need major re-orientation as regards the perceptions, on the part of the masses, of new administrable boundaries and procedures.
- d) It would be easier for the few agencies, which follow different area zones, to switch over to a district based System than for the opposite to be accomplished.

* *Paneerslevam A. (1993) : Research Study on Methodology for District Level Spatio-Economic Planning and Development, ITPI, New Delhi.*

- e) Even assembly and parliamentary constituencies are moulded as per district boundaries.
- f) The local resources and potentials may be fully mobilized to meet local needs and demands.
- g) It may be possible to act the balance among various economic sectors.
- h) Easy availability of data and information at district level.
- i) Coordination of different development agencies may easily be obtainable.

The concept of district planning have been envisaged by several specialists from various perspectives keeping in view the general scope of work as multi-level/decentralized approach to planning. Various approaches conceived and suggested by various professionals for district planning in India are discussed below.

2.3.1 V.K.R.V. Rao's Committee Report on District Planning

The report envisaged as follows:

- a) The district planner has to work at two levels viz., the district and the economic areas with overall frames and strategies being decided at the district level.
- b) While details of plans for conservation of natural resources and for production etc. shall have to be worked out at the economic area level, area wise and sectoral financial allocation, distribution of employment oriented schemes are best done at the district level.
- c) Coordination and synchronization efforts shall have to be made at both level while overall integrating shall have to be done by the district planner who shall be conversant with State and National plan priorities.

Thus the district plan is viewed as not a mere document spelling out targets and financial allocations, but as a much more comprehensive one, which keeping in mind financial restrictions, spells out logical relations between sectoral and departmental plans and between various economic area, and

which determines the chronological order in which schemes are to be started and implemented.

2.3.2 Gadgil's Committee Report on District Planning

According to Gadgil, the district would not necessarily coincide with an economic region. He thus, divided the districts into smaller, homogeneous units capable of being treated as an integral economic unit for purposes of planning. He suggested that in planning for the future, it would be convenient to start with such existing centres and provide, for the surrounding areas, the overheads which must precede development as radiating from the centres. Hence, in Gadgil's view the sub unit of the district will not be a block or village but a Mandi area.

His approach on the stages of plan formulation is as follows:

- a) Preparation of the physio-geographic plan of socio-economic overheads so as to be able to properly influence and direct the activities of thousands of producers and in turn consumers.
- b) Preparation of plan for the conservation of natural resources.
- c) Preparation of plan for productive activity while the first two activities are largely undertaken by the government, the third is dependent upon individual workers, managers and entrepreneurs.
- d) Preparation of a programme for the provision of adequate employment involving a choice of the type and volume of employment generation projects including their location.
- e) The district planner would have to ensure coordination, synchronization and proportionality of the various parts of the plan.

Subsequently Planning Commission issued guidelines in 1969.

2.3.3 Planning Commission Guidelines on District Planning (1969)

At the end of Fourth Five year plan (1966-74), the Planning Commission decided to issue guidelines for better district planning. The guidelines issued by them point to the following :

- a) The existing regional disparities;
- b) The prevailing under-utilization or misutilization of resources;
- c) The uniform application of policies without their adaptation to local conditions;
- d) The absence of synchronization between various programmes under simultaneous implementation;
- e) The lack of sufficient local mobilization and of the external feeding in of inputs;

The guidelines suggested the following:

- a) Involvement of government, local self-government bodies and progressive farmers and entrepreneurs in the assessment of resources and of existing administrative situation and in fixing of hierarchy of priorities.
- b) Simultaneous setting forth of a long term perspective plan of the activities to be undertaken in the next 15-20 years and the preparations of an integrated programme for the next 1-5 years.
- c) Various departments were also asked to assist in preparing statistical statements of existing resources for the collector to better coordinate the data and the plan proposals with the assistance of the cooperative, banks, public enterprises, farmers and entrepreneurs.
- d) A number of meeting with BDOs and other local citizens were also envisaged before a preliminary framework was prepared for presentation to various district level officers, who would then gradually concretize the plan.

It is however to be noted that the guidelines were too much bound by existing constraints to allow an integrated plan to be drawn up by one agency. As a result of different departments were to be responsible for the preparation of schemes pertaining to them for inclusion in the district plan.

Then the Planning Commission commissioned pilot projects in district planning for five districts in India namely Tirunelveli (Tamil Nadu), Nasik

(Maharashtra), Munger (Bihar), Sitapur (Uttar Pradesh) and Shimla (Himachal Pradesh) during 1987-89. The National Institute of Rural Development (NIRD) Hyderabad was entrusted with the responsibility of providing technical guidance in formulating these district plans. The approach followed by NIRD was on the similar lines of the one advocated by Lalit Sen and others on '**Growth Centre Concept**'.

A growth centre is a settlement capable of sending socio-economic impulses to its surroundings (hinterland) thereby farming their nucleus (Nagaiya D.) There is a spatial and socio-economic hierarchy of centres; each lower centre farming part of the hinterland of higher centre. The hierarchy may be conceived somewhat as follows:

Level of Centre	Attributes
Service Village	Dependent village
Service Town	Caters to neighbouring villages
Market Town	Higher order centres catering to service towns and service villages
Growth Point	Industrial activities with multiplier effects
Growth Centre	Higher level manufacturing activities & Administrative functions
Growth Pole	Apex metropolitan functions, industrial development & superior service functions.

Source: D.Nagaiya

The NIRD's approach to district planning is based on this assumption. The approach envisages that the district plan comprises of two parts namely Perspective Plan for 5 years and Annual Action Plan for one year. On the basis of the problems, potentials and local needs the five year plans are to be formulated, within which frameworks, the Annual Action Plans are to be prepared.

The approach envisages a grouping of villages in the district (forming clusters) and identification suitable locations for/ deploying services and facilities for utilization of the population in the cluster of villages as a first step of spatial dimension. This would be done by undergoing the following stages a) Establishing the hierarchy of functions, (b) Identifying the hierarchy of settlement and (c) Delineating hinterlands.

The Perspective Plan (5 years) comprises of the following:

- a) Plan for resources development
 - i) Agriculture sector
 - ii) Allied sectors viz., forestry, horticulture, animal husbandry, sericulture, fisheries etc.
 - iii) Industrial sector
 - iv) Human Resource Development
- b) Plan for socio-economic facilities
- c) Development of Economic Infrastructure.

The Perspective Plan would also indicate the review of on-going schemes and identified feasible schemes for next five years. This would be phased into Annual Action Plan which would also indicate financial requirement and sources of finance.

Then, R.P. Misra and K.V. Sundaram suggested "**Action Oriented Approach to Area Planning**". This approach was developed by Misra R.P. and Sundaram K.V. According to them there are two dimensions in area development planning, which are:

- a) Promoting location-specific economic activities i.e. location of developmental activities which perform most efficiently in a particular location because it can reap external and other economies and thus help increase and aggregate income of the area.
- b) Providing certain essential economic and social services which bring distributive justice in the area, thereby implying that the basic

minimum needs ought to be provided so that they are accessible to local population at convenient points.

They suggested that an area plan in Indian context must have a part from its basic economic content, the following special components.

- a) An employment programme including man power planning and budgeting
- b) Special programmes for specific target group in the area.
- c) A plan for the development of growth centres.
- d) A basic minimum needs programme and a service centre hierarchy plan.

The aims of area planning in the Indian context as conceived by Misra & Sundaram are as under:

- a) Developing backward and problem areas
- b) Reducing or at least combating inter-areal and inter-regional inequality in the levels of development
- c) Concentration of development in a small number of areas and favouring decentralization to achieve a harmonious territorial balance of activities and services by either forming groups or by dispensing them.
- d) Maximum utilizations of resources for full employment of people of its area.

The envisaged approach first focuses on developing the human resources of the area, which is why the stress on developing skills, on upgrading skills and on development of the peoples as against the conventional approach of developing area.

The suggested improvements in these existing approach are as follows:

- a) The idea of comprehensive normative planning be abandoned because we have no control over resources and event and because our planning and implementing agency is poor.

- b) Action Planning Methodology be adopted, in view of (a) above, in which certain specified programmes and projects be identified on the basis of "reconnaissance" instead of comprehensive survey.
- c) In view of (a) & (b) above, in place of a multi-pronged approach transcending every sector of the local economy, the **CORE SECTOR** approach should be adopted, where the core sector is defined as the one which has the greatest potential of development and of achieving the objectives of the plan.
- d) All other activities to be provided for in the plan should be built around the core sector.
- e) To reach the fruits of planning to the poorest of the poor, the target group approach to planning should be resorted to.
- f) Planning at the district level should help people below the poverty line to "earn the average national per capita income." Towards achieving this, the FAMILY APPROACH be adopted by evolving models of viable families with various socio-economic bases, identifying their needs and assisting them adequately by way of economic enterprises viability.

Government of India, appointed National Commission on Urbanization in 1983 to bring out broad guidelines in physical Planning both at Urban and rural settlement level. The report defined spatial planning as a development planning process by which it identifies growth centres considering both the physical and economic variables. It also suggested the future course of action for development of these centres and their environs to promote and resolve the regional spatio-economic pressures and requirements in given time-frame. The NCU Report recommended strengthening of microregional (district) planning mechanism to support and complement economic development efforts at that level and provide a conducive environment for living and working. It has suggested formulation of two sets of plans (a) a General Spatial plan (GSP) for a plan period of 10-15 years followed by

(b) an Integrated Spatial Plan (ISP) for each phase of GSP, corresponding to the five year plans period. The total process is conceived in nine stages, four a GSP level and five at ISP level.

(i) General spatial plan (GSP) level

- a) Identification of goals, policies and priorities of development relating to the planning area, identification of potentials and constraints of development of the area.
- b) Alternative GSP proposals;
- c) Evaluation of alternatives;
- d) Legal approval of the preferred alternatives

(ii) Integrated Spatial Plan (ISP) Level

- a) Preparation of ISP providing a detailed plan of action;
- b) Sector wise project formulation setting out financial implications, physical and quantitative targets to be achieved and specifying implementation body;
- c) Matching of budget demands with plan allocations and revision of targets if so required,
- d) Implementation; and
- e) Monitoring and review and formulation of the next phase of the ISP at stage five above.

As a link between national and local planning, spatial planning through the process outlined above, aims at desegregation of national and state policies and programmes to the grass root plans and projects. The process also involves aggregation of settlement and district plans and programmes at state level which, when further aggregated will give at any point of time, a national spatial pattern, in this system the integrated District Development plan will be a key instrument for crystallizing the multi level approach into district level action programmes.

2.3.5 The Planning Commission Working Group Report on District Planning (Dr. C.H. Hanumantha Rao), 1984.

The working group recommended district planning as a sort of integrated area planning seen as a sub-system of a multi-level planning frame works where development scenario can be evolved at the district level consistent with the specific needs of the people, the growth potentials of the area budgetary allocations available. Further, it has been suggested that the totality of all planning activities at the district level should vest with a single district planning body to avoid the present department wise fragmentation of planning.

(A) Allocation of Funds

The group has suggested that some proportion of the district sector funds earmarked for a district should be provided as a discretionary allocation to be spent as per the decision of the district planning body with all powers to decide the sectoral allocations in the district. The group has also suggested that resources at the district level should be allocated among blocks on a rational basis somewhat similar to that worked out for deciding district allocations.

B) Organisational Framework

The following suggestions were made. The group feels that ideally it must

- a) Offer an integration of political, district administrative and local institution for determining the programme of development for the district, thus enabling direct interaction among Panchayati Raj Bodies, non official agencies like cooperatives and implementing agencies.
- b) Bring together all the administrative operations at the district level under effective coordination and fragmented decision making associated with vertical hierarchies dealing with separate segments of the country.
- c) Clearly lay down a programme of work for the particular agencies

which could be made responsible for the proper execution of their respective assignments.

- d) Effectively oversee the implementation of the district plan.

The group states that in district planning bodies the collector must play a role of chief coordinator and Chief Planning Officer must be next to collector. The collector should be empowered to exercise powers of financial sanction within broad limits so that cases especially of district sector schemes, do not need to be referred to heads of departments at state level.

The chief planning officer should have considerable experience on development work and should be conversant with techniques of socio-economic planning, spatial planning project planning and analysis, programme evaluation and the like. He should be assisted by an able team of experts from economics, statistics, agronomy cartography/economic geography, engineering, horticulture and so on. There should be planning officer of (BDO's) Block Development Officer rank at the block level assisted by two research assistants to be the chief planning officer to coordinate block level programme.

C) Function of District Planning Authority

The functions of district planning body as suggested by the working group are as follows:

- a) Centralization of local need and objectives within the broad framework of national and state level objective;
- b) Taking stock of the natural and human endowments of the district and the regions within the district as well as the level and pattern of developments attained so far;
- c) Listing and mapping of amenities at the village, block and district levels;
- d) Formulation of district plans in their socio-economic, temporal and

spatial dimension alongwith their linkages with the rest of the economy;

- e) Formulation of policies, programmes and priorities relevant for the district;
- f) Coordination of the implementation of district plans; and
- g) Monitoring and review of implementation of district plan and programmes with due regard to their linkages and dependencies.

D) Suggested Methodology for District Plan

The following steps have accordingly been suggested :

- a) Formulation of major objectives of the district planning;
- b) Compilation of data for district planning;
- c) Bringing out the profile of the district in relation to the basic objectives;
- d) Formulating the main strategy and thrust of district planning;
- e) Analysis of existing programmes and projects with reference to the strategy out lined above and proposals regarding:
 - i) Modification of the ongoing programmes and projects;
 - ii) Proposals for removal of inter-block disparities;
 - iii) Assessment of unemployment/under employment and proposal for manpower planning and budgeting;
 - iv) Inclusion of new projects and plans;
 - v) Inter linkages between various projects and programmes; and
 - vi) Organization and management to ensure that no implementation gap exists.
- f) Assessment of resources for allocation to various programme and projects;
- g) Assessment of resources for allocation to various programme and projects;
- h) A statement of spatial dimensions of the district plan; and
- i) Relationship and linkages between the district plan and regional and state development plans.

2.4 CASE STUDY OF MODEL “INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) SOLAN DISTRICT” HIMACHAL PRADESH*

This concept is prior to 73rd & 74th Constitutional Amendments. A detailed survey of the Model Integrated District Development Plan for Solan District was done. Various stages of IDDP - formulation have been discussed below:

2.4.1 Concept

In order to have speedy socio-economic development of the country and improving the quality of life of the people, employment generation, utilization of sources to the fullest extent etc. calls for the need to prepare a “Spatio-Economic Plan” which would address area and location specific problems, issues, needs, preferences and priorities after considering the area specific potentials of the district. Thus, the district plan has to address itself to the following issues.

- i) Integrated Area Planning as Against Purely Sectoral Planning.
- ii) Rural-Urban Integration.
- iii) A Five Year Development Plan with a Twenty years perspective plan.
- iv) Integrated District Management and the role of the democratic Institution.

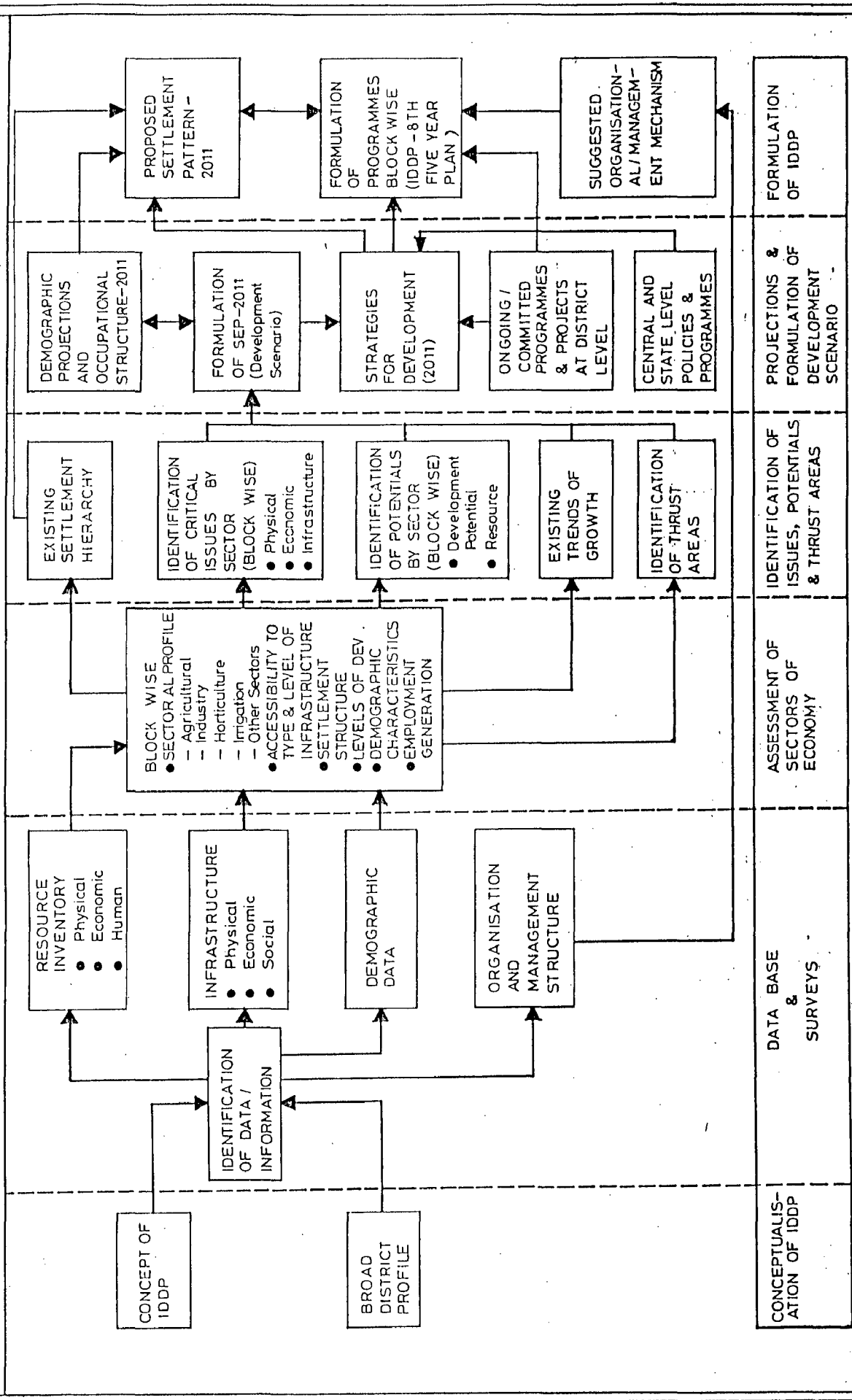
The concept conceived for Solan district is in line with the Govt. of India, Recommendations of National Commission on Urbanization (NCU), 1983.

2.4.2 Approach

The various tasks accomplished in order to prepare an IDDP for Solan were as follows :

* ***Prof. Gupta R.C. (1992) : Integrated District Development Plan for Solan District, (H.P.), Himachal Pradesh Institute of Public Administration, Shimla.***

METHODOLOGY FOR PREPARATION OF INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) FOR SOLAN DISTRICT



a) Data Base

Basic data and necessary information collected mostly through secondary surveys from various departments of state/district, institution etc. viz. agriculture, horticulture, industry, infrastructural facilities, demographic and occupational structure, forestry and a list of ongoing and committed programmes of all departments, at Block/Tehsil Level.

b) Appreciation and Assessment of Various Sectors of Economy

This is the one of the most important exercise in the preparation of IDDP. With the help of information and basic data collected (as listed in-a), a detailed analysis was carried out to understand and assess the existing situation of the Solan district eg. the level of various infrastructure facilities available blockwise and related to each sectors spatially.

c) Identification of Critical Issues, Development Potentials and Thrust Areas

The assessment of various sectors of economy and the infrastructure facilities helped in understanding the status of development in Solan district, which indicated critical issues of each sector at the specific block level and potentials for development.

d) Formulation of Spatio-Economic Plan (SEP)

Various steps identified in the formulation of a district plan were as under.

- * Demarcation of development activities and programmes confined in the district.
- * Determination of Broad Objectives in Conformity with the objectives of the National and State Plans.
- * Assessment of the levels of economic development as well as socio-economic infrastructure facilities.
- * Assessment of district's resources-nature, human and economic both existing-as well as potential.
- * Assessment of the needs of the people and different areas within the district; and

- * Assessment of the financial resources available within the district and estimate the gap to be filled up by the central and state governments.

2.4.3 Analysis of Data

Solan is the fastest growing district in Himachal Pradesh. Owing to its advantageous location and proximity to other developed districts in the plans of Punjab and Haryana, the district is experiencing a comparatively higher growth than other districts of Himachal Pradesh. Unlike other hill districts of Himachal Pradesh, Solan district has a mix topographic conditions that have favoured not only the development of both horticulture as well as agriculture but to some extent the industrial development within the district.

I) Demography

The district of Solan is one of the 12 districts of Himachal Pradesh with an area of 1936 Sq.Kms. (3.48% of total state area) and having a population of 3,79,321(1991), 1.98 Lakhs male and 1.81 lakhs female population located between 87°42' and 77° 20' longitude and 30° 05' & 31° 15' North latitude. It is a predominantly rural with 87.50% rural population and 12.46% urban population. Density of population has been 196 Sq.Kms. It has five tehsils, with Nalagarh the biggest tehsil of the district, sharing a percentage of 25% of the districts population, followed by Solan (19.38%), Kandaghat (7.69%) Ramshehr(7.32%) and Krishangarh sub Tehsils (5.89%) respectively.

Largest town is Solan which is a class IV town followed by Nalagarh town class V, Kasauli, Sabathu (Class VI), Parwanoo, Danshai and Arki (Class VII) respectively. The literacy rate of the districts is over 60%.

II) Land Utilization Pattern

Of the total area of the district of 1,80,321 Ha, 10.88% of the area is under forest land, 44.28% of the area is under permanent pasture and other grazing land, 27.09% of the land. New Sown Area, 6.56% the land is cultivable waste, 5.95% of the land put to non-agriculture use, 5.52% is barren and uncultivable, 0.9% is under miscellaneous tree crops and around 3% of the land is under fallow.

III) Occupational Structure

In 1991, the percentage of main workers to the total population is 35.25%, that of marginal workers is 9.73% and that of the non-workers is 55.02%. The total number of persons employed in the district is 34,609 (9.12% of the total population) and the total number of unemployed is 3,44,609 (90.88%) of the total population.

IV) Industrial Economy

About 3% of the total work force is engaged in traditional rural crafts and cottage industries like shoe making, weaving carpentry, blacksmith, bamboo crafts etc. Persons engaged in manufacturing industries, trade and commerce constitute about 55% of the total working population. Remaining 16% are engaged in other activities like transport, servicing etc. The district has four main industrial areas one each at Parwanoo, Barotiwala, Baddi and Solan, in addition to 2 mini industrial estates at Solan and Dharampur.

V) Infrastructure

Solan district has 100% potable water in all the blocks as also electrification in which by 1991, all the villages have been electrified. Main articles of export are agricultural products, specially off season vegetables and fruits, electronic goods, drugs, woolen shawls, carpets, candles, sheet metal articles, beverages, liquor etc.

VI) Places of Tourist Interest

There are many places of Tourist interest in the district.

a) Chail : 49 Kms. from Shimla via Chini Bungalow and 62 kms. Via Kandaghat, and is about 2,150 mts. above MSL famous for picturesque location, cool climate and dense forests.

b) Solan : It is a popular summer resort and is situated between Shimla-Kalka NH-22, 45 Kms. from Shimla and is well connected by Rail and Road. It has a height of 1453 mts. above MSL. The town is HQ of District Administration.

c) **Parwanoo** : It is situated 3 Kms. from Kalka and is the gateway of Himachal Pradesh from Haryana and Punjab. NH-22 passes through industrial area in the foot hills of Kasauli at an elevation of 1,100 mts. above MSL. Other tourist places are Dagshai, Kandaghat.

VIII) **Forestry and Mining**

Exploitation of natural resources forms the base of all economic development. According to National forest Policy, 60% of the hill area should be developed and managed as forests. But Solan district has around 38% of area under forest. The Mineral wealth so far found, includes building stone, limestone, sand, brick clay, bajri etc. and in all there are 26 mineral based small scale industrial units in the district apart from the numerous brick kilns and stone crushing mills and total revenue generated in 1990-91 was Rs. 6.41 lakhs, and the from forests was Rs. 1,17,365 during 1991-92.

VIII) **Horticulture**

Horticulture though not showing very high figures, has very bright potential for development in Solan district. Various types of fruits and mushroom production are major horticultural products. The total area under horticulture activities is 7947.85 acres (7.26% of total cultivable area in the district). It is apparent that horticulture could become one of the main stays of the economy, which can be improved with strengthened infrastructure facilities to enhance the future potentials.

2.4.4 **Development Scenario of Solan - 2011**

Proposed development strategies for the district have been mentioned below:

I) **Directions of Growth**

An intra-district level appreciation of resource availability, infrastructure, facilities, economic functions etc. indicates that ***Solan district established a comparatively faster growth along the Baddi-Barotiwala corridor upto Nalagarh with the concentration of major industrial activities.*** The

reasons attributed to this faster growth include a relatively plain topography and proximity to adjoining industrial districts of Punjab and Haryana and developed road network pattern and so on.

Another ***important corridor in the district is Parwanoo-Dharampur-Solan-Kandhaghat corridor.*** Owing to its developed road and rail network towards Shimla (NH 22 and the only narrow gauge rail link in the state) which is the most important of the state network, the corridor has demonstrated one of the fastest growth in the district. The settlements such as Solan, Dharampur, Parwanoo hence have shown relatively faster growth than others in the district.

The ***third important growth corridor established in this district can be observed along Solan-Sabathu-Kunihar-Arki corridor.*** By virtue of its better linkages, horticulture potentials and unexploited tourism potentials the settlements viz., Sabathu, Kunihar and Arki have emerged as nodal centres over a period of time.

In addition to the above mentioned three corridors, the emerging potential directions of growth in the district have been observed along the following :

- i) Nalagarh-Rameshr-Kunihar
- ii) Barotiwala-Krishangarh-Sabathu-Kandaghat
- iii) Kunihar-Kandaghat
- iv) Dharampur-Kasauli-Parwanoo

The settlements along the above mentioned corridors hence would also function as Nodal Centres of varying hierarchy levels in future.

II) Spatio-Economic Plan-2011

The Spatio Economic Plan SEP indicates broad settlement development strategies at the district level with a view to achieve a balanced development within the district. The SEP also indicates the broad strategies to be taken by 2011 in all the identified sectors for a balanced development. These

strategies helped in identifying the programmes for next five years and lead to formulation of the integrated District Development Plan (IDDP).

2.4.5 Management Mechanism

The management of district development plans has a strong relationship with the factors such as, structure and function of the various agencies responsible, scope, coverage and contents of the plan itself, system of fund flow and so on. An appropriate management mechanism was, therefore, considered essential for the proposed concept of integrated District Development Plan.

The constraints and inadequacies in the existing district development mechanism in Solan district were as follows :

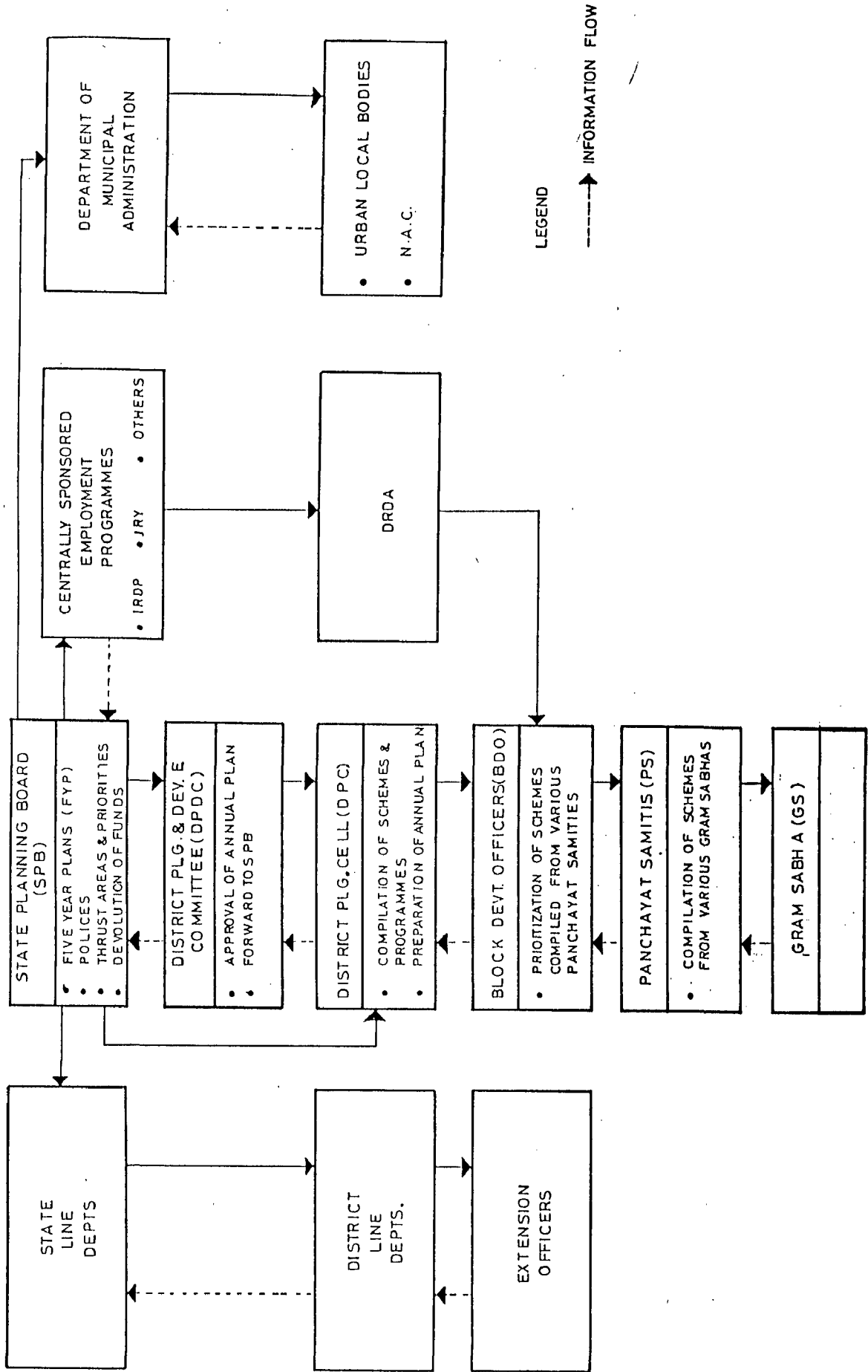
- * There was hardly any district plan being prepared as such which could establish a framework for long term and short term programming and implementation.
- * There is no coordination between District Planning Cell (DPC)/ Distt. Planning and Development Committee(DPDC) and other departments.
- * Monitoring and review schemes are being done parallely by DPC and other line Departments.
- * Involvement of democratic institutions (Panchayats) is only marginal which is not conducive to the functioning of democratic decentralization, which is the corner stone of District Planning.

Realizing the above constraints in order to achieve a realistic integrated district development process the following "Management Mechanism" was recommended.

I) Plan Formulation

- a) The district plan has to be prepared by a suitably structured District Planning Cell (DPC). There would be three types of plans as mentioned further.
 - i) Perspective plan of Spatio-Economic Plan (SEP) for 20 years

FIG-2.4-51: EXISTING MANAGEMENT MECHANISM AT DISTRICT LEVEL - SOLAN



The working group on finance would generally prepare Investment Plan. Preparation of ISP providing a detailed plan of action; (IP) based on the schemes and programmes prioritized by each working group.

d) The Spatial Planning Unit (SPU) would coordinate all the working groups and formulate Spatio-Economic Plan (SEP) and IDDP. District Level Statistical Office alongwith National Informative Unit (DISNIC) would assist SPU in this regard. The SPU would function directly under the technical control of State Town and Country Planning Department.

e) Hence, DPC would function more as technical secretarial of DPDC. After preparing SEP and IDDP, the plans would be placed before DPDC for approval and onward transmission to State Planning Board for approval and allocation of funds. Accordingly, the functions of DPC would be as follows :

- * It would function as the technical secretarial of DPDC;
- * To prepare perspective plan (Spatio-Economic Plan) for 20 years and formulate IDDP for every five years in close coordination with Deputy Director Town Planning, Lead Bank Officer, NIC, Line Departments, working groups etc.; and
- * To prepare Annual Plans including detailed budgeting.

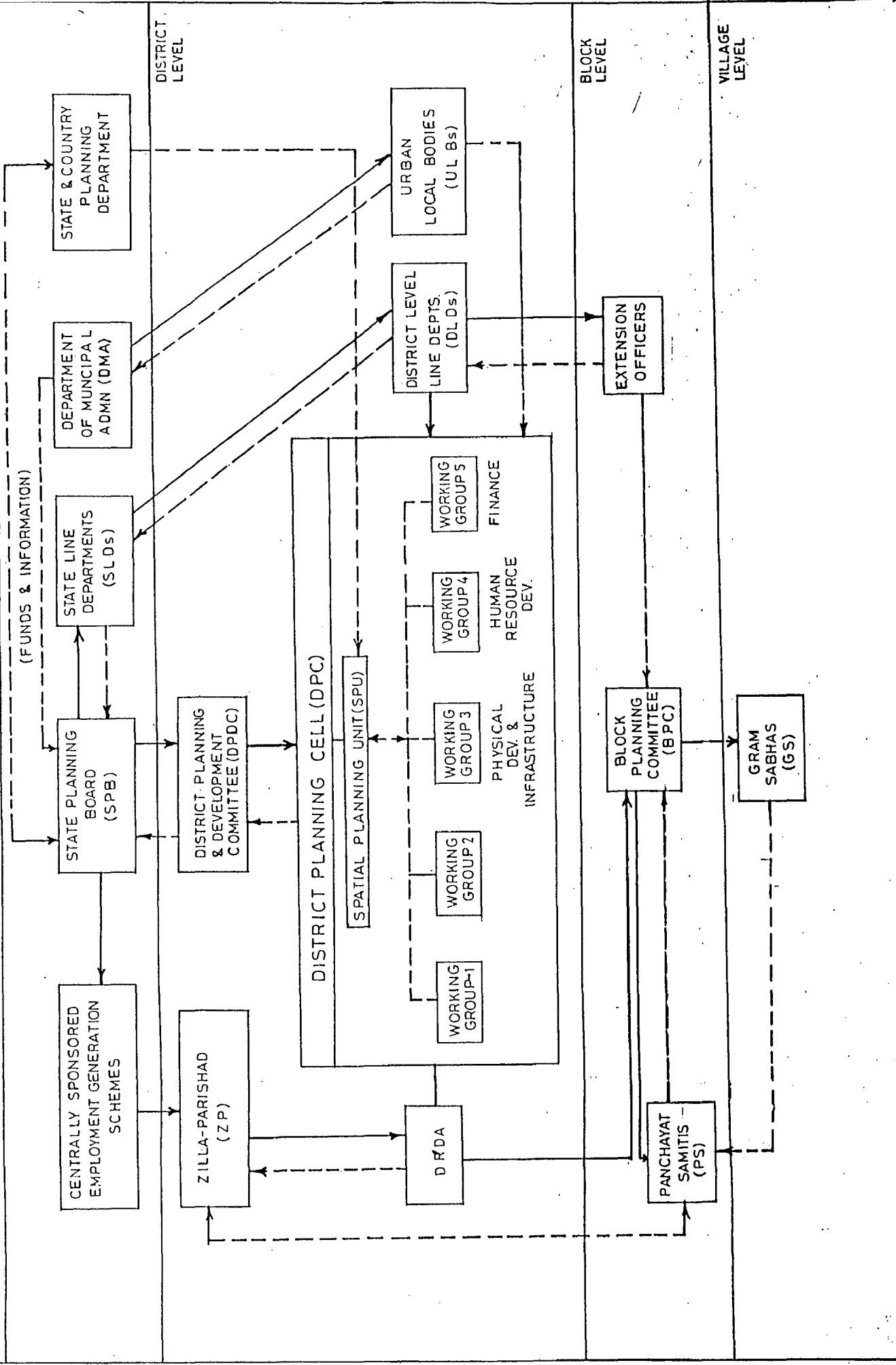
f) DPDC would function as an apex body under the chairmanship of Minister. Besides, in order to have the public participation in planning process the Chairman of Zilla Parishad who is deemed to be the highest elected representative of the people of the district, would act as Vice-Chairman. Other Members are as follows :

- | | |
|-------------------------------|-------------------|
| * Minister | -Chairman |
| * Chairman of Zilla Parishad | -Vice-Chairman |
| * ADC/ADM | -Member Secretary |
| * D.C. | -Member |
| * All District Level Officers | -Members |

g) The function of DPDC would be as follows :

- * Apex body to functions as policy planning council at district level;

FIG. 2-45-2: RECOMMENDED MANAGEMENT MECHANISM FOR SOLAN DISTRICT



- * To approve the IDDP for every five years and Annual Plans being prepared by DPC;
- * Onward transmission of IDDP and Annual Plans to State Planning Board for allocation of outlays; and
- * To supervise the implementation in terms of monitoring and review.

h) **Block Planning Committee (BPC)- Functions:**

- * To prepare a resource inventory and issues related to various sector needs, etc. and forward to DPC as an input towards preparation of IDDP;
- * To prioritise the schemes and programmes compiled from various Panchayat Samities;
- * Implementation of various programmes at block level other than those implemented through district line departments;
- * Monitoring of implementing process and periodical reporting to DPC;
- * Function as link between District Administration and Panchayat; and
- * To coordinate the activities of Extension Officers of various line department.

i) **Panchayat Samiti - Functions :**

- * To arrange periodical meeting with gram sabha pradhans and collect the identified schemes and programmes needed for village level;
- * To forward these schemes to BDO for onward transmission to DPC.

j) **Gram Sabhas - Functions:**

- * To identify the schemes and programmes and submit to Panchayat Samiti.

II) **Fund Flow and Monitoring**

- a) The release of funds from State Planning Board would be on two

strategy of development have been taken care of.

Thus, in the basic approach to District Planning, conceptualized here in, five stages of plan formulation have been identified. They are:

- i) Conceptualization of Integrated District Development Plan (IDDP);
- ii) Data base and Surveys (Spatial and Non-spatial);
- iii) Analysis of various socio-economic and spatial aspects at different levels;
- iv) Identification of Issues, Potentials, and Thrust Areas; Projection and Formulation of Scenario; and
- v) Formulation of IDDP; Programme Implementation, Monitory and Evaluation.

OBSERVATIONS

Since, the 73rd and 74th Constitutional Amendments came into existence after the proposal of the Solan district plan, therefore the following issues were not dealt with.

- i) The "73rd and 74th Constitutional Amendments", the Implementation of "New Economic Reforms" in the country and the "Environmental Crisis" calling for "Sustainable Development", which have revived our interest on Issues related to District Level Planning and these have not been given emphasis.
- ii) Rural-urban Integration has not been achieved fully.
- iii) The needs and priorities of the people at the grass-root level living in villages and smaller towns, have not been given due consideration.
- iv) District which holds good potential to develop into a stable, and self-supporting economy, capable of emerging as one of the developed districts of the state, have not used its potentials to the fullest extent.

Thus, by incorporating the identified good points and removing the lacunas

- * To approve the IDDP for every five years and Annual Plans being prepared by DPC;
 - * Onward transmission of IDDP and Annual Plans to State Planning Board for allocation of outlays; and
 - * To supervise the implementation in terms of monitoring and review.
- h) **Block Planning Committee (BPC)- Functions:**
- * To prepare a resource inventory and issues related to various sector needs, etc. and forward to DPC as an input towards preparation of IDDP;
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 - * To coordinate the activities of Extension Officers of various line department.
- i) **Panchayat Samiti - Functions :**
- * To arrange periodical meeting with gram sabha pradhans and collect the identified schemes and programmes needed for village level;
 - * To forward these schemes to BDO for onward transmission to DPC.
- j) **Gram Sabhas - Functions:**
- * To identify the schemes and programmes and submit to Panchayat Samiti.
- II) **Fund Flow and Monitoring**
- a) The release of funds from State Planning Board would be on two

heads, namely.

- * District Sector Schemes;
- * Other Schemes.

The funds for *district sector schemes* would be released to DPC through DPDC. The Chief Planning Officer (ADM/ADC) for DPC would in turn disburse the funds to various blocks based on the schemes and programmes already listed in IDDP.

On the other hand, the funds under '*other schemes*' would be released from State Planning Board to various state line departments. These would be further disbursed through their district level departments for implementation purposes.

- b) All the monitoring and review would be done at the DPC through various working groups.

Thus, after detailed discussions with the officials of Himachal Institute of Public Administration (HIPA), Shimla, and District level officers of Solan district and after doing critical analysis of Integrated District Development Plan (IDDP) with respect to 73rd & 74th Constitutional Amendments, the following conclusions were made.

2.5 CONCLUSIONS AND OBSERVATIONS

it can be concluded that district planning has been accepted as the primary and viable planning unit. The various approaches towards better district planning as explained in preceding sections although differ individually, by and large they emphasize on one major objective of planning i.e. towards better decentralized area planning. In comparison with other earlier approaches, the scope and methodology outlined in working group report, 1984 appears comprehensive and elaborate. However, by and large all the approaches invariably fail to integrate urban development plans also an essential part of district plan.

All the approaches restrict their premises to rural area plans and fails to detail the methodology of integrating urban area plans with overall district plan which is also a pre-requisite in district planning exercises, except NCU Report, wherein Integrated District Development plan has been considered as a key instrument for crystallizing the multi-level approach to district planning.

Then, the state of Himachal Pradesh came forward to think on the recommendations of National Commission on Urbanization (NCU). Solan district was selected for preparing IDDP. Prof. R.C. Gupta, SPA, Delhi was entrusted with the task of preparing the plan in the year 1992. Sh. Ali Raj Rizvi, I.A.S. put lot of efforts from inception till finalisation of the plan. The project was sponsored by Himachal Institute of Public Administration (HIPA), Fair Lawns, Shimla (H.P.), which was completed in 1992. Since 73rd and 74th constitutional amendments have not been implemented in any of the district in India. Therefore, Solan has been selected as the basis of study.

A comprehensive ***District Profile of Solan District*** Presented herein, provides an overview of the resource endowments, demographic and settlement scenario, sectors of economy and the levels of infrastructure availability. Such a profile is an essential step in the district planning process.

- * The analysis of development status and dynamics of change have led to the identification of issues on imbalance in the levels of development and resource base. Some selected issues and thrust areas were taken up, based on priority of the people and availability of resources.
- * The status of various 'Physical Resources (Land, water etc.), Economic Resources (Forest, Mineral, Human etc.) and other Man-made Resources, including Industrial, etc. has helped in assessing the economic viability of the district plan.
- * Delineation of Specialized areas in the district requiring a specific

strategy of development have been taken care of.

Thus, in the basic approach to District Planning, conceptualized here in, five stages of plan formulation have been identified. They are:

- i) Conceptualization of Integrated District Development Plan (IDDP);
- ii) Data base and Surveys (Spatial and Non-spatial);
- iii) Analysis of various socio-economic and spatial aspects at different levels;
- iv) Identification of Issues, Potentials, and Thrust Areas; Projection and Formulation of Scenario; and
- v) Formulation of IDDP; Programme Implementation, Monitory and Evaluation.

OBSERVATIONS

Since, the 73rd and 74th Constitutional Amendments came into existence after the proposal of the Solan district plan, therefore the following issues were not dealt with.

- i) The “73rd and 74th Constitutional Amendments”, the Implementation of “New Economic Reforms” in the country and the “Environmental Crisis” calling for “Sustainable Development”, which have revived our interest on Issues related to District Level Planning and these have not been given emphasis.
- ii) Rural-urban Integration has not been achieved fully.
- iii) The needs and priorities of the people at the grass-root level living in villages and smaller towns, have not been given due consideration.
- iv) District which holds good potential to develop into a stable, and self-supporting economy, capable of emerging as one of the developed districts of the state, have not used its potentials to the fullest extent.

Thus, by incorporating the identified good points and removing the lacunas

of Integrated District Development Plan- Solan District and adding the points of 73rd and 74th Constitutional Amendments, which could not be incorporated in Solan District Plan, the proposal for Integrated District Development Plan- Haridwar District will be prepared, for which relevant data has been collected and field surveys will be undertaken.

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CHAPTER - 3

- 3.0 THE CONSTITUTION (SEVENTY-THIRD AND SEVENTY-FOURTH AMENDMENT) ACTS, 1992-GOVERNMENT OF INDIA AND DISTRICT PLANNING**
- 3.1 INTRODUCTION**
- 3.2 THE CONSTITUTION (SEVENTY-THIRD AND SEVENTY-FOURTH AMENDMENT) ACTS, 1992**
- 3.3 DISTRICT PLANNING IN THE CONTEXT OF THE CONSTITUTION (SEVENTY-THIRD AND SEVENTY-FOURTH AMENDMENT), ACTS**
- 3.4 IMPLICATIONS OF THE CONSTITUTION SEVENTY-FOURTH AMENDMENT ACT, ON URBAN AND REGIONAL PLANNING**
- 3.5 ROLE OF DISTRICT PLANNING COMMITTEE (DPC) AND METROPOLITAN PLANNING COMMITTEE (MPC) ON DISTRICT PLANNING**
- 3.6 EMERGING IMPERATIVES AND ISSUES FOR DISTRICT PLANNING**

3.0 THE CONSTITUTION (SEVENTY-THIRD AND SEVENTY-FOURTH AMENDMENT) ACTS, 1992 - GOVERNMENT OF INDIA AND DISTRICT PLANNING

3.1 INTRODUCTION

Even though Panchayati Raj Institutions were in existence since 1959, these have not acquired the status and dignity of peoples representative bodies to generate momentum through active participation of people in the development process due to lack of financial resources, insufficient devolution of powers etc. The Constitutional (73rd and 74th Amendment) Acts, 1992 which were passed by the parliament on 20th April, 1993, have given Constitutional status to these Panchayati Raj Institutions. According to these Acts, Panchayati Raj Institutions have been empowered to formulate and implement, ***“plans for economic development and social justice”*** through people's participation. Besides the 29 items as per 11th Schedule relating to rural development and 18 items as per 12th Schedule relating to municipalities, these bodies would be required to implement ***“schemes of economic development and social justice as may be entrusted to them.”***

A close scrutiny of these items brings out the need for choice of items to suit the conditions of the areas which differ under varied ecological and socio-economic conditions. Likewise, it is necessary to identify even from the general list of items, schemes that require the spatial development perspective holistically rather than treating each item in isolation which is likely to happen without the spatial perspective. For example, ***agriculture, land improvement, soil conservation, minor irrigation, watershed development, animal husbandry, fuel and fodder and non-conventional energy have to be planned using the principles of physical planning of land use.*** Such an approach underlies the concept of integration of environment in development process or sustainable development. Likewise, ***some of the schemes related***

to education, health, markets, small scale industries, food processing, etc. are to be planned in selected settlements linked by appropriate level of transport keeping in view the criteria of efficiency in spatial organisation of these settlements around a hierarchy of nodes. Without the evaluation of the physical and human resources and identification of spatial gaps in respect of land improvement, agricultural productivity, infrastructure facilities and amenities and potential for location of small scale and processing industries, the task of formulation and implementation of development plans by the Panchayati Raj Institutions would pose formidable problems.

*"In respect of the items listed in "Twelfth Schedule" under the 74th Amendment relating to municipalities, most of them are of local nature. The acts do not provide specifically for setting up a planning machinery at the district Level. Instead, a **District Planning Committee is proposed to be constituted in which four-fifth of the members would be from among the elected members of the Panchayat at the district level and of the municipalities. The committee is expected to use spatial planning approach in sharing of water and other physical and human resources, infrastructure, etc. A provision has been made for the District Planning Committee (DPC) to "Consult such institutions and organisations as the Governor may, by order, specify"***

These provisions and the prerequisites of spatial approach to District Planning do not provide enough scope for systematic analysis of the data by the involvement of specialists in the field of spatial planning as a multi-disciplinary exercise and also the professionals from the existing Departments who, by proper training could be involved in the Planning Process.

3.2 THE CONSTITUTION (SEVENTY-THIRD AND SEVENTY-FOURTH AMENDMENT) ACTS - 1992

3.2.1 The Constitution (Seventy-Third Amendment) Act, 1992'

This Act may be called the Constitution (Seventy-Third Amendment) Act, 1992.

* It shall come into force on such date as the Central Government may by notification in the Official gazette, appoint.

Insertion of new Part IX- After Part VIII of the Constitution the following Part Shall be inserted namely :

PART IX

THE PANCHAYATS

243. Definitions- In this Part unless the context otherwise requires:

- (a) "District" means a district in a State;
- (b) "Gram Sabha" means a body consisting of persons registered in the electoral rolls relating to a village comprised within the area of Panchayat all the village level;
- (c) "Intermediate level" means a level between the village and district levels specified by the Governor of a State by publication to be the intermediate level for the purposes of this Part;
- (d) "Panchayat" means as institution (by whatever name called) of self-government constituted under Article 243-B for the rural areas;
- (e) "Panchayat area" means the territorial area of a Panchayat;
- (f) "Population" means the population as ascertained at the last preceding census of which the relevant figures have been published;
- (g) "Village" means a village specified by the Governor by public notification to be a village for the purposes of this part and includes a group of villages so specified.

243-G. Powers, authority and responsibilities of Panchayat- Subject to the provisions of the Constitution, the Legislature of a State may, by law,

endow the Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government and such law may providing for the evolution powers and responsibilities upon Panchayats at the appropriate level, subject to such, conditions as may be specified therein with respect to -

- (a) the preparation of plans for economic development and social justice;**
- (b) The implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the "Eleventh Schedule".**

Addition of Eleventh Schedule - After the 10th Schedule to the Constitution, the following Schedule has been added, namely;

"Eleventh Schedule (Article 243G)

1. Agriculture, including agricultural extension.
2. Land improvement, implementation of land reforms, land consolidation and soil conservation.
3. Minor irrigation , water management and watershed development.
4. Animal husbandry, dairying and poultry.
5. Fisheries.
6. Social forestry and farm forestry.
7. Minor forest produce.
8. Small scale industries, including food processing industries.
9. Khadi, village and cottage industries.
10. Rural housing.
11. Drinking water.
12. Fuel and fodder.
13. Roads, culverts, bridges, ferries, waterways and other means of communication

14. Rural electrification, including distribution of electricity.
15. Non-conventional energy sources.
16. Poverty alleviation programme.
17. Education, including primary and secondary schools.
18. Technical training and vocational education.
19. Adult and non-formal education.
20. Libraries.
21. Cultural activities.
22. Markets and fairs.
23. Health and sanitation, including hospitals, primary health centres and dispensaries.
24. Family welfare.
25. Women and child development.
26. Social welfare, including welfare of the handicapped and mentally retarded.
27. Welfare of the weaker section, and in particular, of the Scheduled Castes and the Schedule Tribes.
28. Public distribution system.
29. Maintenance of community assets.

3.2.2 The Constitution (Seventy-Fourth Amendment) Act, 1992

An Act Further to amend the Constitution of India

This Act may be called the Constitution (Seventy-Fourth Amendment) Act, 1992.

* It shall come into force on such date as the Central Govt. may, by notification in the Official Gazette, appoint.

Insertion of new Part IXA - After Part IX of the Constitution, the following Part shall be inserted namely :

PART IXA

THE MUNICIPALITIES

243-P Definitions - In this Part, unless the Context Otherwise requires:

- (a) "Committee means a committee Constituted under article 243S.
- (b) "district" means a district in a State.
- (c) "Metropolitan area" means an area having a population of ten lakhs or more comprised in one or more districts and consisting of two or more Municipalities or Panchayats or other contiguous areas, specified by the Governor by public notification to be a Metropolitan area for the purposes of this part.
- (d) "Municipal area" means the territorial area of a municipality as is notified by the Governor.
- (e) "Municipality" means an institution of self-government constituted under article 243-Q.
- (f) "Panchayat" means a Panchayat constituted under article 243-B.
- (g) "Population" means the population as ascertained at the 1st preceding census of which the relevant figures have been published.

There shall be constituted in every state at the district level a District Planning Committee (DPC) to consolidate the plans prepared by the Panchayats and the Municipalities in the district and to prepare a draft development plan for the district as a whole.

(3) Every District Planning Committee shall, in preparing the draft development plan shall have regard to-

- (i) matters of common interest between the Panchayats and the Municipalities including spatial planning, sharing of water and other physical and natural resources, the integrated development of infrastructure and environmental conservation.***
- (ii) the extent and type of available resources whether financial or other wise;***

- (iii) *the overall objectives and priorities set by the Government of India and the Government of the State;*
- (iv) *the extent and nature of investments likely to be made in Metropolitan area by agencies of the Government of India and of the Government of the State and other available resources whether financial or otherwise.*
- (b) *consult such institutions and organisations as the Governor may by order, specify,*
- (4) The Chairperson of every Metropolitan Planning Committee shall forward the development plan, as recommended by such Committee, to the Government of the State.

243-ZF Continuance of existing laws and Municipalities

After the Eleventh Schedule to the Constitution, the following Schedule has been added, namely :-

"Twelfth, Schedule" (Article 243W)

1. Urban planning including town planning.
2. Regulation of land-use and construction of buildings.
3. Planning for economic and social development.
4. Roads and bridges.
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation conservancy and solid waste management.
7. Fire services.
8. Urban forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded.
10. Slum improvement and upgradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as park, gardens, play-grounds.

13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds; cremations, cremation grounds and electric crematoriums.
15. Cattle ponds; prevention of cruelty to animals.
16. Vital statistics including registration of births and deaths.
17. Public amenities including street lighting, parking lots, bus stops and public conveniences.
18. Regulation of slaughter houses and tanneries.”

3.3 DISTRICT PLANNING IN THE CONTEXT OF THE CONSTITUTION (73RD AND 74TH AMENDMENT) ACTS

The Constitution (73rd and 74th Amendment) Acts-1992, together would ensure that representative local governments are in place in all the urban and rural areas of the country and that once elected and put into place it would not be easy for State governments to supersede them. Thus, the Acts ensure by providing that panchayats would be given an opportunity of being heard before they are superseded and once an elected body at the panchayat or municipal level is superseded, it would be the constitutional responsibility of the State government to see that through the due process of election another representative local government is put into place within six months.

The Acts also ensure that urban and rural local governments are given certain financial independence by constitutionalising criteria for devolution of funds from the State to local governments to enable them to create their own consolidated funds. For this purpose the Acts suggest creation of State Finance Commissions in each State.

The two Acts put together also seek to remove the anomalies inherent in the existing constitution of local governments according to which they are vertically divided into separate urban and rural apparatus without much horizontal

developments as mentioned, the integrated development of which would be the primary responsibility of the officials who would take over the local administration of rural areas under the amended Act. Similar provisions are made in respect of the Municipalities as per "Twelfth Schedule" of the Constitution 74th Amendment Act.

3.4 IMPLICATIONS OF THE CONSTITUTION (74th AMENDMENT) ACT, 1992 ON URBAN AND REGIONAL PLANNING*

The Constitution (74th Amendment) Act, provided a meaningful status of local bodies with a democratic setup, dynamic functions, desirable financial support and a structure of planning and development mechanism for the first time. It introduced a three-tier system of government where local bodies play a dynamic role and serve the people at the grassroots in urban centres and also transitional areas.

* The Constitution (74th Amendment) Act exclusively covers municipalities as institutions of self-government at local level and provides for constitution of the following three types of such bodies:

- a) Nagar Panchayat for transitional areas
- b) Municipal Council for Smaller Urban Areas and,
- c) Municipal Corporation for Larger Urban Areas.

Section-2 of Article 243-Q provides parameters for defining these local bodies.

These parameters include:

- population,
- density of population,
- percentage of employment in non-agricultural activities, and
- revenue generated for local administration.
- economic importance.

* *Dr. Kulshrestha S.K. (1994), Proceedings of National Workshop on "Implicatioin of 74th Constitution Amendment Act on Urban Planning and Development", ITPI, New Delhi.*

The ITPI has suggested the following parameters for classifying the local bodies excluding hill areas/states where there is a need to have a different set of norms.

Criteria (Minimum)	Transitional Area (Nagar Panchayat)	Small Urban Area (Municipal Council)	Large Urban Area (Municipal Corporation)
1. Population	5,000	50,000	300,000
2. Population density (persons per sq.km)	400	2,400	6,000
3. % age of non - agriculture workers	75	80	95
4. Revenue generated (Rs. lakh).	2	35	150

In actual practice, the types of urban local bodies differ from state to state. As seen in Table 3.1, a majority (50 per cent) of states have single-type local body, other states have more than one type generally classified as A, B, C depending upon the size of settlement by population.

In the classification of municipalities provided by 74th Amendment. Nagar Panchayat is a new addition and in addition to population size, new variables under section - 2 of Article 243-Q have been introduced. This requires a joint intervention of town planners, economists and demographers in setting a set of norms for classification of local bodies with relevant variations in specific cases like hill states.

- * The 74th Amendment provides both mandatory and discretionary functions, to be endowed by state legislature, by law. In the mandatory list the function of municipalities is the preparation of plan for economic development and social justice.

Table 3.1 : Types of Urban Local Bodies in Different States of India

Type	No.	Percentage	Name of State
Single Type	7	50	West Bengal, Punjab, Himachal Pradesh, Andhra Pradesh, Orissa, Gujarat, Jammu and Kashmir.
2-Types (city town of municipality/ councils)	2	14	Karnataka and Pondicherry
3-Types (A,B,C/Board Council, Corporation)	4	29	Haryana, Maharashtra, Goa and Rajasthan
4-Types (By Population Size)	1	7	Madhya Pradesh
	14	100	

- * *Based upon information from unpublished comparative statement of main provisions of different Municipal Acts by **Bansal, R.P.**, TCPO, New Delhi.*

This is for the first time, 'urban planning including town planning' has been introduced in the Constitution. It is highlighted here that planning for economic and social development also features in this list. This calls for a clear cut understanding of the aims and objectives and contents of the plan for economic development and social justice. The aims of this plan are clear and the two terms economic development and social justice define it. This amendment, therefore, through listing in the Twelfth Schedule recognises the

inter-relationship between urban/town planning and planning of economic and social development.

Therefore, it seems desirable to include both the functions, that is, urban planning including town planning and planning for economic and social development in the mandatory provisions while modifying the relevant municipal acts by the respective state governments. As far as town planning functions are concerned, some Regional and Town Planning Laws/Acts. (for example Maharashtra Regional and Town Planning Act and Model Regional and Town Planning Law) already have such provisions where this function can be assigned to a municipality which then serves as a competent authority for discharging town planning and development functions.

The municipalities, therefore, are expected to play a wider role than hitherto performed which generally was limited to maintenance of services. An issue that rises out of this is the role of single function authorities like electricity boards, water supply and sewerage corporation board and the like. The revised Delhi Municipal Act has provision for existence of such single function bodies.

* Articles 243(S) provides for a mandatory Constitution of Ward Committees within the territorial area of a municipality having a population of 300,000 or more. This provision sets the composition of an urban area which normally consists of a hierarchy of planning units starting from, at the lower end, cluster of houses (serving a population of 2,500-5000) through neighbourhoods (8,000-15,000), communities (80,000 - 100,000) and districts (3,00,000-5,00,000). A district as the planning unit of a city, therefore will be administered by the Ward Committee and the influence zone of the 'district' shall be the territorial area of a Ward accomodating houses, commercial, educational, health care, recreational and other infrastructural facilities and services as per norms of urban planning

commensurate with its the population (3,00,000 to 5,00,000). Integration of ward and district boundary in a city will be desirable in the interest of efficient implementation. It can also be designated as the sub-zones in a metropolitan city context.

- * The various laws and acts that are affected by the 74th Amendment are the different Municipalities Acts, State Town and Country Planning Acts particularly those provisions that deal with deligation of town planning functions to local bodies; and acts establishing single function boards/corporations/undertakings etc.
- * According to Abhijit Datta, the 74th Amendment marks a water-shed in the fiscal decentralisation of the country and its impact on municipal finances will be for reaching.

This amendment envisages widened municipal functional jurisdiction (12th Schedule) and revenue authority. It does not specify the pace of implementation of functional and fiscal devolution.

Article 243Y of the Constitution Amendment provides for setting of a State Finance Commission to review among others, the financial position of the municipalities and make recommendations on the principles governing revenue distribution between the state and the municipalities, the alternative revenue generating mechanisms for municipalities and the grant-in-aid to the municipalities from the Consolidated Funds of the state.

The various issues for consideration of the State Finance Commission include:

- *Can plan funds be allocated to the municipalities particularly when under the 12th Schedule these bodies can be assigned urban planning functions?*
- *What should be the funding pattern for state assigned or sponsored projects?*
- *Should there be a uniform pattern of revenue sharing or should there be*

considerations like status of a municipality by size, revenue generation, fiscal needs and sustainability at a given point of time in the development process?

* **The Hierarchy of Plans**

In an overall perspective, the preparation of spatio-economic plans, as implied by the Constitution Amendment could be as under :

- a) Sub-Zonal Plans and Local Ward Committees/Nagar Panchayats
Area Plans and Projects
- b) Town Plans and Zonal Municipal Councils/Corporations
Plans incorporation (a) under
the framework of MAP or DDP
- c) District Development Plan District Planning Committee (DPC)
(DDP) incorporating (b)
Under the framework of
MAP where applicable
- d) Metropolitan Area Plan(MAP) Metropolitan Planning
incorporating (c) Committee (MPC)

* **Manpower and Training Needs**

The new functions and responsibilities of the local bodies and the two committees, as stipulated by the Constitution Amendment, require manpower and therefore training programmes need to be tailored to discharge these functions.

3.5 ROLE OF DISTRICT PLANNING COMMITTEE (DPC) AND METROPOLITAN PLANNING COMMITTEE (MPC) IN DISTRICT PLANNING

The articles 243ZD and 243ZE provide for constituting two mandatory committees :

- a) District Planning Committee (DPC), and
- b) Metropolitan Planning Committee (MPC)

This provision of constituting these two committees establishes the Constitutional recognition accorded to regional planning and the process of planning that ensures grass roots level participation as the major function of these committees is to consolidate plans prepared by the Panchayats and the Municipalities in the district and prepare draft development for the district/ metropolitan areas as the case may be.

The Constitution Amendment in both cases highlights that in preparing draft development plan, the District/Metropolitan Planning Committee shall have regard to matters of common interest between the Panchayats and the Municipalities including coordinated ***spatial Planning***. (243ZD 3.a.i) and (243ZE.3.a.ii). This mandatory provision has accorded for the first time recognition to spatial planning which is one of the mandatory functions of these two committees.

According to **National Commission on Urbanisation (NCU) Report**, *spatial planning refers to a physical development process and it plays a significant role in identification and development of new areas, new resources and a new spatio-economic order leading to rational use of land and other resources and improvement of living standard of the people. It thus, not only aims at identifying geographic location of investment but also probes into future impact of investment on various constituents of sub-systems of the settlement and the region of its setting. (page 73).*

With the above role of spatial planning, role of Town and Country Planner becomes pertinent and his participation in the two committees becomes desirable and necessary.

3.6 EMERGING IMPERATIVES AND ISSUES FOR DISTRICT PLANNING

Some issues of Importance, which emerge are :

- 1) Now preparation of District or Metropolitan Area Development Plan

becomes the responsibility of the District or Metropolitan Planning Committee instead of State Town and Country Planning Department/ Directorate or Regional Planning and Development Boards or Development Authorities.

Such committees can not be constituted under municipal acts and therefore there are two options.

- a) to be constituted under a separate act of state legislature or
 - b) to be constituted under a modified Regional and Town Planning Act or Development Authorities Act.
- II) Since the Regional and Town Planning Acts already have the provision of Constitution of Regional Planning and Development Authorities/ Boards the same needs modification to constitute DPC and MPC and also to prepare Draft District/Metropolitan Area Development as per provisions of 74th Amendment. In cases like Delhi, Punjab and Rajasthan where there is no Regional and Town Planning Act yet, these committees will need to be constituted under option(a) above.
- III) Another very important point to be highlighted here is that district planning is considered by the Constitution as a link between the rural and urban area development efforts as the Draft Development Plan of the district aggregates the plans of Panchayats and Municipalities as constituted under Article 243B of the Constitution (73rd Amendment) Act, and Article 243Q of the Constitution (74th Amendment) Act, respectively.

Through these efforts the urban-rural continuum is ensured. It is a very positive provision that will integrate developmental efforts at rural and urban levels and introduce dynamism in the system.

- IV) Such an approach to district and metropolitan area development requires professional input of urban and regional planners in the planning and development process and it is desirable and necessary that while

modifying the various acts at the state level their participation in DPC and MPC is ensured by law.

- V) The other issue that arise out of these provisions is - what will be the fate of existing Development Authorities/Boards and State Town and Country Planning Departments?

The role of Regional Planning and Development Authorities constituted for areas other than the metro-regions will continue to be the same as envisaged under Regional and Town Planning Act/ Law. For metro-regions, however, it will change and the composition of Planning and Development Authorities will also change as per Constitution Amendment. This requires that modification of Regional and Town Planning Acts should have provisions for both the bodies.

- VI) The role of State Town and Country Planning Departments will change from preparation of development plans to scrutiny of Draft Spatial Development Plans prepared by the Panchayats, the DPC and the MPC on behalf of State Government as its technical arm. The other functions related to State level planning and policy formulation related to urbanisation and such other responsibilities as entrusted by the state government will however continue as they were. It is a colossal task and needs strengthening of these departments.

- VII) The provision under the Constitutional Amendments also do not cover metropolitan areas which are crossing the jurisdiction of one or more state boundaries. In such cases the fate of existing authorities of such areas still lie unheard.;

- VIII) The Constitution (74th Amendment) Act, 1992 is salient on the specific functions of the ward committees and there is a need to specify these, by the state legislature, in such a way that any conflict or overlapping of functions is avoided. These functions should among others include

preparation of sub-zonal plans and local area plans and implementation of projects within its framework.

- (IX) It is imperative to prepare Village Development Plans not only because it is mandatory in the act, but also to reflect the people's felt needs, aspirations, perceptions and priorities;
- X) Planning for "Economic Development and Social Justice" Calls for a clear cut understanding of the aims, objectives and contents of the District Plan. The statement of objectives to achieve this aim will include provision of job opportunities through industrial and commercial activity planning and development which involves both economic planning for policies and funds. Urban and Rural Planning for provision of land and related infrastructure like transportation network, facilities and services.

Similarly, objectives for social justice will include Equity in the provision of facilities like education, health, recreation, transportation and equal opportunities for everyone for their use. This also requires planning for social development policies and programmes, which has strong relationship with rural and urban planning.

- XI) The task for preparing such large number of Plans both at town level as well as at district level, would require a large number of trained personnel who will be trained in the task of preparing implementable plans. There is also a need for having a well geared up 'planning and management machinery' which can constantly and closely monitor these plans;

The 73rd and 74th Constitution Amendment Acts would, therefore, lead to a great demand for planners suitably trained in planning for integrated development of rural and urban areas in general and physical development in particular.

From the list of topics mentioned in 11th & 12th Schedules and taking into consideration the generic needs of district planning, it appears that major professional concerns for district planner would lie not only within the realms of rural and regional planning but urban planning as well. However, the relative importance of the concerns would vary from district to district and would all depend on whether a district is predominantly rural or urban in character. Districts which have within themselves large urban centres, obviously the urban issues would dominate; whereas in other districts the rural issues would be the major concern of Planner. In certain districts, special aspects would be highlighted such as in hilly or coastal areas; or in districts comprising mostly tribal population, rich in mineral resources, forming industrial belts, or characterised by economic backwardness or any other specific issue.

Thus, it can be concluded that the enlarged scope, coverage and approach to District Planning would change the Planning Process as hitherto being practiced.

CHAPTER - 4

4.0 DATABASE FOR PLANNING AT VILLAGE, DEVELOPMENT BLOCK AND DISTRICT LEVEL-AN APPRAISAL

4.1 INTRODUCTION

4.2 DATABASE FOR PLANNING AT DIFFERENT HIERARCHICAL LEVELS

4.2.1 Land as a Resource

4.2.2 Landuse and Agriculture

4.2.3 Irrigation

4.2.4 Human Resources

4.2.5 Industries

4.2.6 Tourism

4.2.7 Infrastructure, Facilities and Amenities

4.2.8 Management and Development Programmes

4.2.9 Primary Data Collection Through Field Surveys at Village/Settlement Level.

4.3 SIGNIFICANCE OF SPATIAL ANALYSIS IN PLANNING

4.0 DATABASE FOR PLANNING AT VILLAGE, DEVELOPMENT BLOCK AND DISTRICT LEVELS - AN APPRAISAL*

4.1 INTRODUCTION

The creation of database operates under the Constitutional framework based on the division of responsibility among the Central Ministries/Departments and State Government. At the Central and State level there are full-fledged Statistical Departments (e.g. Central Statistical Organisation under the Department of Statistics and Bureau of Economics and Statistics at the State level). Statistical Data pertaining to different subjects are collected and compiled by statistical units operating under the jurisdiction of different departments at the centre and state levels. These data are collected at the local levels in disaggregated form and then aggregated to the higher order administrative units.

In respect of secondary sources data on land resources are generated at the level of individual fields and land holdings by the Patwaris and aggregates to the level of revenue village. The Statistical Department at each level of the administrative hierarchy maintains these records which are available in aggregated form for each Tehsil/Development Block. The State Statistical Department (Bureau of Economics and Statistics) maintains these data with District as the area unit and the same are available at the National level through the Central Statistical Organisation (CSO). Similarly, the Census Organisation is the principal agency for conducting and creating databases on demography, for all the locations of human settlements both rural and urban - and these data are also available in aggregated form at the Tehsil/Development Block, District and National levels. Other data relates to economic activities, infrastructure, social facilities and amenities which are compiled by on Line Departments of the administrative hierarchy.

*Prof. R.C. Gupta (1996), "Manual on District Planning".

At the District Level, there are District Statistical Officers (DSO) primarily entrusted with the task of collecting primary data and building up the data base for micro-level planning. The DSO also has the responsibility of execution of fieldwork of different surveys such as agricultural census, economic census, etc. undertaken by the Directorate of Economics and Statistics (DES) of different states. By far, the National Sample Survey Organisation conducts periodically surveys on a uniform basis and these data are aggregated on the basis of a specially designed scheme of regions with District as the areal unit for regional delineation. These data serve to build up coefficients and norms that would facilitate for formulation of region specific strategies and schemes for development, e.g., data on land utilisation, yields based on crop cutting experiments, consumer expenditure and so on. Broadly the data to be generated would cover the following main aspects:

I. *Resource Endowment:*

- i) Land resource as a product of interaction among different elements of the natural environment.
- ii) Land Cover (forest, grassland), water, minerals.
- iii) Agriculture-Land utilisation, Land Holding-common property lands, land tenures, crop, irrigation, livestock.

II. *Human Resources:*

- i) Population and its social and demographic attributes.
- ii) Settlements by size and growth - Rural and Urban.
- iii) Occupation.
- iv) Mobility-Migration, Movements and interaction.
- v) Urbanisation.
- vi) Rural-Urban Interaction.

III. *Economic Activities:*

- i) Industries - Large, medium and small scale.
- ii) Commodity Flows - inter - industry/economic activity linkages.

IV. Infrastructure:

- i) Roads
- ii) Railways
- iii) Energy.

V. Social Facilities and Amenities:

- i) Education.
- ii) Health
- iii) Communications.
- iv) Market.
- v) Credit Institutions - Banks.
- vi) Co-Operatives.
- vii) Cultural.
- viii) Storage - Access to variety of inputs and outputs.

VI. Plan Statistics:

- i) Norms of distance, technological and other norms for infrastructure and community facilities.

Against this background, this part of the thesis report attempts to highlight the need for creating a database for district planning in a three tier system of Village, Development Block and the District. Once the detailed database with areal, locational and line specific dimensions is created, it becomes easy for spatial analysis at all the regional levels by the process of aggregation and disaggregation integrating the planning process from micro to macro levels and vice versa.

4.2 DATA BASE FOR PLANNING AT DIFFERENT HIERACHICAL LEVELS

The analysis of the process of planning and the issues related to the nature of the data and the purpose for which they are to be used points out the need for evolving an appropriate spatial framework at which data should be

completed, and made available in appropriate form for use in planning and for various other purposes. In the context of district planning the following are the area levels of the administrative framework at which the development plans have to be formulated and implemented.

- i) Village (land holding using field as the areal unit and households).
- ii) Development Block (with village as the areal unit and settlement as the location).
- iii) District (with village as the areal unit and settlement as the location)

Thus, the data system built up at different area levels have to be processed and mapped to bring out spatial patterns and variations using appropriate cartographic techniques.

4.2.1 Land as a Resource

Evaluation of land quality is the first step aimed at optimum utilisation of land. Land quality varies under different conditions of natural environment and as such, its quality is influenced by the geomorphological processes that work under different climatic conditions. The main elements of natural environment influencing the characteristics of land units are-rainfall temperature, geology, drainage, slope, soil and landcover, etc. Since these elements of natural environment are important at different area levels it is possible to identify hierarchy of land units ranging from the smallest (land unit termed as facet to land units, land systems, physiographic or natural regions. Land units thus identified need to be grouped and their boundaries adapted to those of administrative units ranging fields, land holding and villages.

The objective is to prepare a land capability map based on inherent land form/land use characteristics in the scale of 1:250,000, 1:50,000 and/or 1:25,000 where available. The main data source is through Topographical

maps, Satellite imageries, Aerial Photographs, Maps of Geology etc., With the help of maps of 1:50,000 scale of Survey of India Topographical maps and of Geology and Minerals, *delineation of areas suitable for quarrying for building materials and areas of important minerals can be attempted. Areas showing minerals of economic importance can be marked off.*

The purpose is to build up a resource inventory map. These maps alongwith the maps of landuse and cropping pattern would serve to build up a comprehensive resource inventory spatially.

4.2.2. Landuse and Agriculture

In respect of broad landuse, cropping pattern, crop intensity (with or without Irrigation) the data are in standard proforma built up from the Patwari records and aggregated to Block/Tehsil, District, State and National level, District and Block level Departments of agriculture being the principal sources. Composite land productivity per acre can be worked out taking into consideration the area and yield of each crop. For District planning, village level data have to be compiled for at least three consecutive years.

The main purpose is to assess the land capability classification in agriculture to reveal the spatial variations in existing agricultural productivity, growth-rate, and potentials. The Standard Proforma of the Secondary Data Base on landuse and agriculture and allied activities is detailed below.

1) Landuse :

- * Total geographical area,
- * Forest,
- * Not available for cultivation,
- * Permanent pastures and other grazing lands,
- * Land under miscellaneous tree crops and groves (not included in the net area sown),

- * Cultivable waste,
- * Fallow lands other than current fallows,
- * Current fallows,
- * Net area sown,
- * Area sown more than once and
- * Total cropped area.

Permutation-combination of different parameters mentioned above serve to bringout spatial variations in broad landuse, area potentially cultivable or for grassland, horticulture, afforestation, intensity of cropping, etc.

Data by forest types, species and legal status, etc. are available mainly at the office of the Forest Officer at District Headquarters. Topographical maps are used as base maps for forest survey; and with access to satellite imageries and aerial photographs it becomes possible to build up a resource inventory in respect of data on distribution of forests by type.

The Data base on forest identifies the relationship between environment dimensions and forest and to delineate areas mainly suitable for forests (reserved, protected, open forest for use by the community).

- * Total Forest Area
- * Composition - Coniferous (soft-wood) and non-coniferous (broad leaved) Species - Teak, Sal, Bamboo, etc.
- * Legal Status - 'reserved', 'protected', 'Open', 'un-classified', etc.
- * Area by ownership - Forest Department, Civil Authorities, Corporate Bodies and private.
- * Forest Produce: (by quantity and value)

Data are generally available at District Level only. (pulp and matchwood, firewood, bamboo and canes, fodder and grass, gum and resin, lac, medicinal product, spices, tanning and dye stuffs, etc.).

II) Agriculture, Horticulture, Floriculture etc.(depending on the district under study):

The purpose of this data is to assess the levels of agricultural development and identification of areas of agricultural potential so that related development is possible. Other than the area under cultivation as identified earlier as a part of landuse, the following type of data for agriculture is also required to be collected as identified below.

Size of Land Holdings (In Area and NO's).

Cropping Pattern: (includes area under each crop and their production)

* Rice, Jowar, Bajra, maize, Ragi, Small Millets, Wheat, Barley, *Total Cereals.*

* Gram, Tur, Other Pulses, *Total Pulses.*

* Groundnut, Sesamum, Rapeseed and Mustard, Linseed, Castor

Seed: *Total Oilseeds.*

* Cotton, Jute, Mesta, Tea, Coffee, Rubber, Banana, Sugarcane, Tobacco, Potato, Black Pepper, Chillies (dry), Ginger (dry) Coconut, Turmeric: *Total Commercial crops.*

Agricultural infrastructure : Storage godowns, Seeds and Fertilizers Depot and Agricultural implements store.

III) Allied Activities (Livestock, Poultry, Fishery etc;) :

The main source of Database is from Department of revenue, agriculture and animal husbandry at the Block/Tehsil Headquarters compiled from revenue agencies at the village level and municipal or other local bodies at the level of urban centres. These data are collected through a census. ***The purpose is to assess the role and relationship of this sector to agriculture and its complementary in providing occupation and supplementing food products.*** The data base is as follows :

Number of Cattle, Buffaloes, Sheep, Goats, Horses and Ponies, Other

Livestock: Total Livestock; their produce; by-products; veterinary facilities location etc..

In spatial analysis association of these parameters with cultivated land and size of land-holding have to be measured using village level data. For measurement of spatial association and variation in relation to agriculture in general, availability of grass and other fodder crops, poultry products market for dairy products, livestock and poultry and access to veterinary facilities are some of the uses of these parameters.

4.2.3 Irrigation

Irrigation becomes an important basis for agriculture; and its requirements vary seasonally and regionally depending on the quantum of rainfall and its distribution during growth phases of different crops and its variability. The sources of irrigation and their spatial arrangement and distribution bring out variations in their availability. Crop diversity and cultivation of commercial crops requiring irrigation bring about spatial variations in cropping pattern and overall agricultural land productivity. Spatio-temporal variations in extension of irrigation provide a basis to evaluate the diffusion of innovations in agriculture and its differentiation among land holdings of different sizes. The main source of information is the Department of Revenue, Agriculture, Irrigation. The purpose is to bring out spatial variations in irrigation, availability and its use and to differentiate irrigated and unirrigated crops and yield in their spatial distribution. This exercise forms a part of the analysis of the relationship among cropping pattern, variations in intensity of crops and land capability classification. The data base for irrigation is as follows:

I) Irrigation by Source

Canals: Government; Private, Tanks, Wells, Other sources, and total.

II) Gross Area under Irrigation by Crops

Data on irrigation and un-irrigated yield of different crops need to be compiled

using crop cutting experiments conducted by Agricultural Research Stations and sample surveys conducted by the National Sample Survey Organisation. At village level, the data on item II are compiled on the basis of individual crops)

4.2.4 Human Resources

As such, population as a resource is location specific and these locations as physical entities are dynamic reflected through the demographic and socio-economic attributes, movements of people, goods, finances and communication. Intensity of dynamism varies within and between regions caused by the type and quality of the resource endowment and its utilisation overtime and it is shared among relatively few settlements which have favourable conditions to become nodal centres of different size and status as functional-economic centres. Analysis of this process of spatial organisation of the economy starting from the lowest spatial unit of planning serves to identify a variety of schemes of development rooted to environment, land and water management, and related resources and the requirements of the people.

The main data source is the Census Organisation (Office of the Registrar General, Census) at the centre and the Director, Census of the States bringout publications under different series covering demographic and socio-economic attributes of the population, services, facilities and amenities. District Census Handbook is the main source of data for building up the data base with village as the administrative unit and rural and urban settlements. These facilitate intra-state and inter-state comparison of the human resource structure wherever necessary.

These data sources classify towns according to their functions, e.g., mono-functional, functionally diversified, or as agricultural, industrial, commercial, trade and commerce, transport and services, etc. An important attribute, namely

of association among related attributes and their spatial variations. ***The objective of this data compilation is to prepare a spatial development framework taking into consideration the relationship between physical and human resources under different ecological conditions and to identify scheme of development according to their location and area specific properties and to assess their impact in the background of the spatial development framework.***

4.2.5 Industries

Among the socio-economics parameters, Industry occupies an Important place; and it is location specific. The type and number of industrial establishments, type of raw material consumption, and output would vary in these locations. These data are available according to large, medium and small industrial units; and they are complementary.

A) Large and Medium Scale Units

Annual Survey of Industries (ASI) is the principal source of industrial statistics in India. The survey is conducted annually under the statutory provisions of the collection of Statistics Act, 1953 by the Central Statistical Organisation under the Department of Statistics. Government of India. The survey covers all Factories covered under Factory Registration Act, 1984. It covers all factories employing 10 or more workers using power and those employing 20 or more workers but not using power on any day of the preceding 12 months. The survey also covers Bidi and Cigar manufacturing establishments employing 10 or more workers using power and those employing 20 or more workers but not using power as per the Act, 1966.

The primary unit of enumeration is a factory in the case of manufacturing industries, a workshop in the case of repair and services, an undertaking in the case of electricity, gas or water supply undertakings. The main source from which the ASI compiles data on Factories is from the office of the Chief

inspectorate of Factories in each State.

Following are the parameters on which data are compiled at the factory level for both the class of factories.

- * Fixed Capital,
- * Working Capital,
- * Invested Capital,
- * Outstanding Loan,
- * Number of workers,
- * Number of Employees,
- * Total Persons Engaged,
- * Wage to total Workers,
- * Total Emoluments,
- * Contribution to Provident Fund and other funds,
- * Workmen-Staff Welfare Expenses,
- * Fuel Consumed,
- * Material Consumed,
- * Total Inputs,
- * Products,
- * Value of Output,
- * Depreciation,
- * Net Value Added,
- * Rent Paid,
- * Interest Paid,
- * Net Income,
- * Net Fixed Capital Formation,
- * Gross Fixed Capital Formation,
- * Addition in Stock of (a) Material,
- * Fuels, etc. (b) Semi-finished goods (c) Finished goods (d) Total;
Gross Capital Formation and Profits.

To facilitate aggregation at the national, state and district levels the ASI has adopted classification as under-

- I. Major Industry Groups (2 digit e.g. 20 and 21-Manufacture of Food Products)
(National and State Level)
- II. Sub-group of Industries (3 digits e.g. 201- Manufacture of dairy Products)
(National and State Level)
- III. Industry Groups (4 digits e.g. 2011)
(District Level) (by type)
- IV. Industry by name _____
(location wise)

Locationwise data becomes starting point in building up the industries profile of the district spatially while classification of industry by type serves to evaluate specialisation in respect of related groups of industries.

B) Village and Small Industries

The spectrum of village and small industries extends from the organised large medium industries to modern small scale industries and unorganised traditional industries. The modern small scale industries and unorganised traditional Industries known as village and small Industries (VSI) constitute an important segment of the economy which provides maximum employment and accounts for 54 percent of the total exports of the country. In terms of value added, they account for 50 percent of value added in the manufacturing sector. This sector is next only to agricultural sector. In terms of its distribution these industries are widely distributed in a large number of human settlements. In District Planning aimed at utilisation of local resources, these industries provide off-farm development activities and employment to the local people depending on the type of agricultural and other local resources.

Categorisation of Village and Small Scale Industries

These have been divided into different sub-sectors. The type of industry and data sources are as under.

S.No.	Sub-Sector	Source
I	Khadi and Village Industries	Khadi and Village Industries commission (KVI Boards in States and Khadi and Village Industries District Offices)
II	Handlooms	All India Handloom Board (Development Commissioner, Handlooms in States and District Offices)
III	Handicrafts	All India Handicrafts Boards (Development Commissioner, Handi crafts in States and District Officers)
IV	Sericulture	Central Silk Board (National, State and District)
V	Coir	Coir Board (National, State and District)
VI	Power looms	Textile commissioner (National, State and District)
VII	Smallscale Industries	Smallscale Industries Board (Development Commissioner-SSI) (National, State and District)

** The first five sub-sectors are termed as Traditional Industries. The last, the small scale industries account for about 75 percent of the gross output of the sector.*

4.2.6 Tourism

Tourism plays a very important role in promotion of an economy of the district/ region by not only contributing a substantial share in the region's economy but also generating a lot of employment. The database for the tourism sector is as follows.

- * Identification of Tourism spots and circuits of National, State and local importance.

- * Tourists flow-Seasonal (foreign and domestic)
- * Tourism Infrastructure.

The purpose of the data is to assess the tourism potential in the district/region and identify matter of importance related to tourism economy, infrastructure etc.

4.2.7 Infrastructure Facilities and Amenities

The purpose of Data Collection regarding infrastructure is to identify settlement hierarchy and spatial gaps in respect of access of these facilities.

1) Infrastructure

These include mainly roads, railways, water and air transport, electricity production and transmission. In the context of District Planning, roads, railways and water transport are important at different hierarchic levels of human settlements and economic activities that go with them as attributes relating spatial organisation of the economy within the District Sub-region of the State and groups of States.

Data source are mainly in the form of qualitative maps showing linkages as given in appropriate scale of topographical map and satellite imageries and those prepared by Departments dealing with these sectors of the economy. Data on length of roads and railway lines by types as well as electricity production and consumption for different activities have to be compiled locationwise and activitywise from the respective Departments. Regarding intensity of interaction among human settlements, two types of data have to be compiled; one is in respect of frequency of buses and trains available in time tables of movement of these modes of transport as a proxy to the number of people and goods (in the case railways) moved. Sample surveys of lorries or other means of transport have to be conducted regarding the volume, origin and destination of goods by type. Using these data, it would

help in identifying a hierarchic system of nodal centres (growth centres).

II) Social Facilities and Amenities

These include water for different purpose (drinking, irrigation, industries, etc.), education, health (including veterinary facilities), post and telegraphs, credit, market, recreational and cultural facilities as well as facilities required for utilisation of local resources such as agricultural implements, repairs and maintenance, etc.

Main sources of secondary data are the Primary Census Abstract but on account of time lag between periods of survey and use they have to be updated by compilling the data from the respective Departments.

Certain norms of distance and threshold population required are generally provided by the Planning Departments; and they have to be modified to suit the local conditions. These are elaborated further:

Norms for Rural Drinking Water and Sanitary Conditions

- * The stipulated norms of supply would be 40 litres of potable water per capita per day (lpcd) of safe drinking water within a walking distance of 1.6 Km. or elevation difference of 100 meters in hilly areas to be relaxed as per field conditions applicable to arid, semi-arid and hilly areas.
- * Provision of atleast one hand pump/spot source for every 250 persons.
- * Provision of additional 30 lpcd for cattle to be provided.

With the help of these norms in respect of the facilities and amenities mentioned above, it becomes possible to identify the gaps in spatial coverage and of population. Maps showing the locations of all settlements (rural and urban), their population size and transport linkages provide a spatial framework to identify these gaps and to formulate locational policy in respect of these infrastructure facilities and amenities. Response of the community

to avail these facilities, felt needs and priorities have to be assessed by field enquiry with the help of specially designed questionnaire and sampling covering different socio-economic strata of households.

4.2.8 Management and Development Programmes

The main purpose of this data is to appraise the existing district level programmes which are operational in the district. This helps in understanding the acceptability of the governmental programmes as well as assimilating the needs and priorities of the people in the district. This information will further be strengthened with the help of village level surveys and household level surveys in selected village in the district.

The main data under this head is identified below.

- * Type of Development programmes (at different hierarchical levels)
- * Types of schemes under each programme, their aim and target groups.
- * Targets and Achievements under various schemes (Physical and Fiscal)

4.2.9. Primary Data Collection through Field Surveys

Field survey or local enquiry is complimentary to building up information system for District Planning even through secondary data compilation and analysis serve to understand and evaluate the problems of development on ground reality. There are two other considerations that necessitate local enquiry. Firstly, the behaviour of the people, their identity of sense or belonging to the area, their response to utilisation of local resources and felt needs show sharp contrasts spatially as well as among different sections of the society; and this information-qualitative and quantitative, needs to be collected afresh. Secondly, quantitative norms and coefficients in respect of development schemes have to be worked out, as the national, state and district averages do not reflect local conditions. Total survey to generate primary data is

impossible and hence the need for sample surveys of different types depending on the purpose. The sample have to cover areas and people in their horizontal (i.e., spatial) and vertical (different strata of the society), dimensions. These surveys can be broadly divided into five categories :

- I. Land Resource Utilisation (agriculture land by size of land holding and livestock belonging to different households).
- II. Felt needs of infrasturcture, social facilities and amenities.
- III. Consumer expenditure and travel pattern.
- IV. Industries (large, medium and small scale including cottage and household industries).
- V. Establishments other than industrial and households.
- VI. Appraisal of government programmes.

These are not mutually exclusive; and it would be necessary to design surveys for specific purposes. By far the National Sample Survey Organisation and Ministry of Industries have been conducting survey regulrty and these with modification could be used for field surveys.

4.3 SINGIFICANCE OF SPATIAL ANALYSIS IN PLANNING

Areas, locations and transport lines are the three elements of space involved in the development process and they are complementary. Any deficiency in any one or all the elements would retard the development process leading to accentuation of disparities in development and the role of existing land use, land productivity and potential keeping in view the criteria of optimum use, assessment of resource endowment (natural vegetation, mineral and water resources) and agricultural development including human response to utilisation of resources that helps to identify spatial gaps in land productivity. Distribution of population is location specific; people live in rural and urban settlements of varied sizes.. Spatial arrangement of these settlements and the types of settlements (fragmented, nucleated, linear, etc.) and emergence of

selected settlements as nodes connected by transport lines at the initial stage of organisation of the socio-economy in space is influenced by topography, land forms soil, surface and underground cover (physical landscape).

Attributes of demographic, economic, infrastructural facilities and amenities are location specific. Settlements with varied size and socio-economic functions are connected by transport and communications lines of different area level importance. Thus, a hierarchic system of regions and locations provides framework of spatial organisation at different points of time. ***Spatial element, therefore assumes significant role in the District planning process. All the physical, economical and social data generated from various sources have been subjected to an indepth spatial and critical analysis which have been covered in the chapter 7.0 of the thesis report.***

CHAPTER - 5

5.0 DISTRICT PLANNING PROCESS AND MECHANISM IN UTTAR PRADESH - AN APPRAISAL

5.1 BACKGROUND

5.2 DISTRICT PLANNING PROCESS

5.3 EXISTING DISTRICT PLANNING MACHINERY

5.3.1 State Planning Commission

5.3.2 State Line Departments

5.3.3 Town & Country Planning Department

5.3.4 Planning Machinery at District Level

5.3.4.1 District Plan Coordination and Action Committee

5.3.4.2 District Planning and Monitoring Committee

5.3.4.3 Executive Committee

5.3.4.4 Divisional Committee

5.3.4.5 District Line Departments

5.3.4.6 Lead Banks

5.3.4.7 Urban Local Bodies / Development Authorities

5.3.5 Machinery Below District Level

5.4 PLANNING PROCESS

5.4.1 Allocation of Funds

5.5 CRITICAL ISSUES

5.6 CONCLUSIONS

5.0 DISTRICT PLANNING PROCESS AND MECHANISM IN UTTAR PRADESH - AN APPRAISAL*

5.1 BACKGROUND

The district planning process and the management machinery in Uttar Pradesh is considered to be one of the partially successful story in India. An attempt has been made to appraise the district planning process, management machinery, fund flow disaggregation of State and district sector schemes etc. The study and observations made in here are primarily based on the extensive discussions held with the district planning officials of Haridwar district and the Annual Reports of U.P. etc..

Decentralized planning in the State of Uttar Pradesh was started with the induction of Community Development Programme (CDP) in early 50's as in many states. The 3-tier PRI's were set up in 1963. Simultaneously, the development departments were asked to make a districtwise distribution of the divisible outlays of the sectoral funds which were further to be distributed among Blocks and Gram Sabhas. Without adequate public participation on the onehand and without adequate expertise at the district level to formulate the plans on the other, did not make much impact on the district planning process. The plans for the districts continued to be formulated for each sector at the state level. Also the allocated funds were earmarked over the sectors. Working Groups were set up to look into the issue of decentralisation which made several important recommendations during 1978-81.

5.2 DISTRICT PLANNING PROCESS

The State of Uttar Pradesh took the momentaus decision to implement the decentralized planning after a cabinet decision on 06.05.1981. The scheme has been implemented with effect from financial year 1982-83. The

* *Paneerselvam A.*, (1993): "Methodology for District Level Spatio - Economic Planning and Development", Annual Report of Uttar Pradesh 1995 and Statistical Diary of Uttar Pradesh 1994.

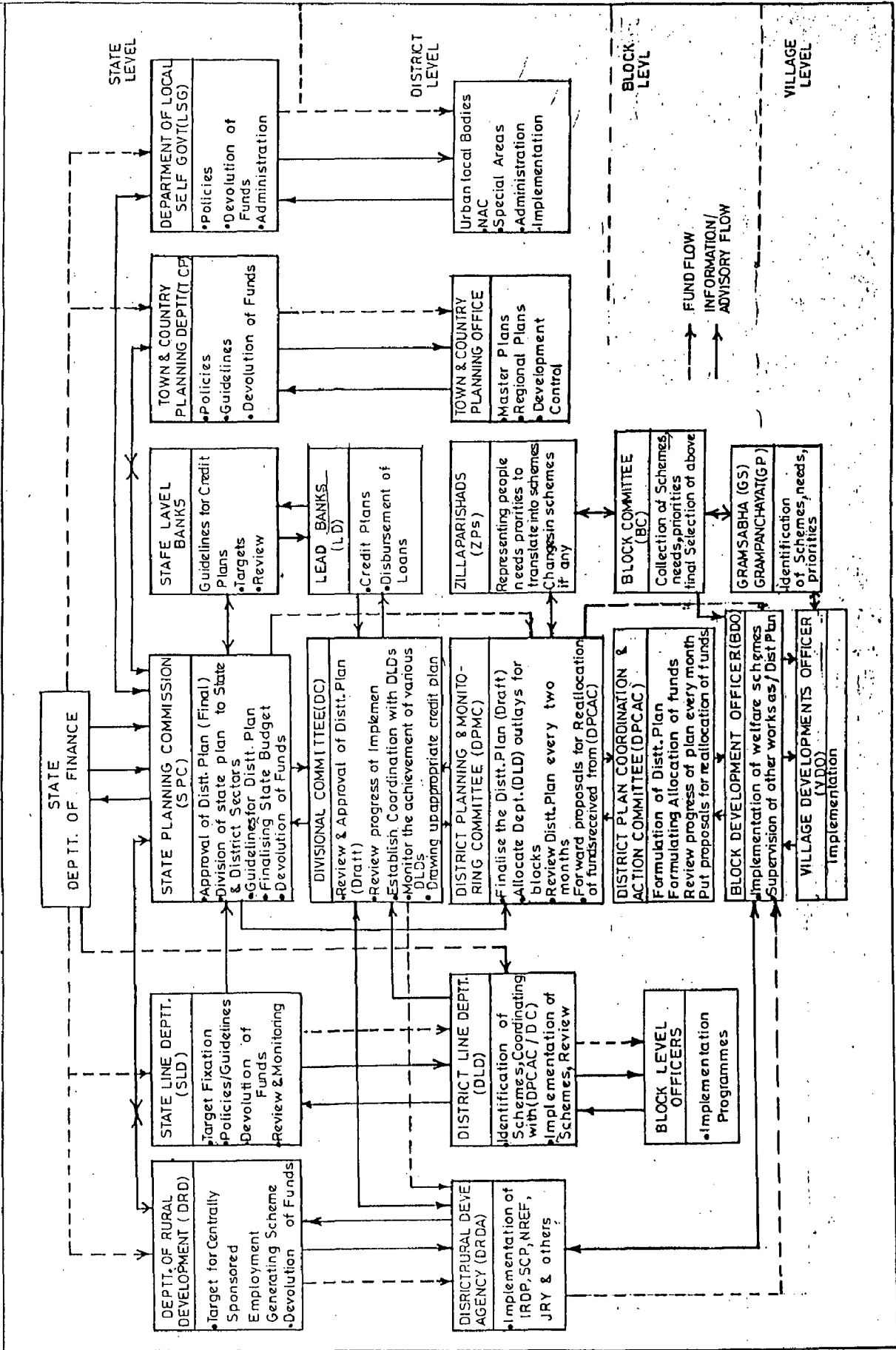
formulation of Area Development Plans require the integration and coordination of the activities of different sectors, which can be undertaken, at present, only at the district level, because District is the lowest territorial unit in Uttar Pradesh at which most of the departments have responsible officials who can work out schemes, lay down time schedules and decide upon lines to ensure proper coordination of activities between various departments. Moreover, in respect of most activities, the system of data collection does not go below the district level. Therefore, Districts have been authorised to formulate their plan keeping in view the aspirations of the people, while adhering to National and State Plan priorities.

In Uttar Pradesh, the Plan has been classified under two sectors, viz., State sector, and District sector. The formulation of District Plans is the only means for ensuring efficient use of local potentials and resources as also providing firm basis for planning at the State level. Therefore, the basic objectives which would serve as a general framework for determining local priorities was formulated at the State Level. The schemes classified under district sectors were finalised by the State Government in consultation with the Heads of Departments, on the basis of a careful consideration of local experiences in this behalf. The schemes under district sector mainly include programmes of agriculture and allied sectors, rural electrification, village and small-scale industries, education, tourism, sports, vocational training, medical and public health water supply, labour welfare, social welfare and welfare relating to Scheduled Castes and Scheduled Tribes. The policy structure which often determines the parameters as well as quality of local action was also been laid down by the State Government. It has essentially emerged through an evolutionary empirical process of political and bureaucratic initiatives, improvisations and interactions.

5.3 EXISTING DISTRICT PLANNING MACHINERY

The nature of planning machinery available at the State level, District level and below district level, their set up, functions and inter linkages are

FIG-5.1: EXISTING MANAGEMENT MACHINERY AT STATE, DISTRICT & BELOW DISTRICT LEVEL IN UTTAR PRADESH



discussed as under.

5.3.1 State Planning Commission (SPC)

The SPC is the apex planning body in the state level. ***The main functions of SPC are as under.***

- a) Issuing guidelines for preparation of district plans to the Divisional Committee (DC) and District Planning & Monitoring Committee (DPMC).
- b) Indicating and dividing the State Planning into State Sector and District Sector Schemes in discussion with other State level Line Departments (SLD).
- c) Careful examination of district plans forwarded by Divisional Committees at the district level and final approval of these plans.
- d) Preparation and Finalisation of State Budget for each Annual Plan and every Five Year Plan.
- e) Indication of devolution of funds to all the SLDs and DLDs (for district sector) as well as routing of funds from Dept of finance to each DPMC.
- f) Appraisal of annual plans.

5.3.2 State Line Departments (SLDs)

The state line departments are functioning as coordinating and implementation authorities with regard to all the state sector and district level other schemes which forms parts of district plan being prepared by District Plan Coordination & Action Committee (DPCAC). ***The major functions State Line Departments (SLD) are as under.***

- a) Issuing guidelines for identifying schemes and programmes at the districts and below district level relating to sectors of their concern.
- b) Target fixation for each scheme and programme within the context of annual plan of such sector finally approved by the SPC.
- c) Devolution of funds to various district line departments for implementation.
- d) Review and monitoring of schemes and programmes being implemented by DLDs.

- e) Co-ordinating with SPC in finalising the annual and five year plans.
- f) Co-ordinating with SPC in finalising the annual and five year plans.

5.3.3 Town & Country Planning Department (T&CP)

The T&CP basically functions as a planning body involving in preparation of master plans, and detailed development plans for the areas falling in their jurisdiction through various regional offices. It also advises the control of functions pertaining to development activities of all the Towns and Municipalities.

5.3.4 Planning Machinery at District Level

There are various organisations involved in coordination, supervising, planning and implementation process at the district level. These can be grouped as follows :

- a) District Plan Coordination & Action Committee (DPCAC).
- b) District Planning Monitoring committee (DPMC).
- c) Divisional Committee (DC) and Executive Committee (EC).
- d) District Rural Development Agency (DRDA).
- e) District Line Departments (DLDs)
- f) Lead Banks.
- g) Town & Country Planning Departments.
- h) Municipalities/Development Authorities.

5.3.4.1 District Plan Coordination and Action Committee (DPCAC).

The DPCAC is considered to be so-called technical cell in each district. It is purely a official committee constituted under the Chairmanship of District Magistrate (DM) to formulate district plans. The composition of DPCAC is as follows.

- i) District Magistrate-Chairman
- ii) Chief Development Officer, Additional District Magistrate, Development/District Development Officer-Member Secretary
- iii) Economic Officer-Joint Secretary

- iv) All Officers of district level line departments (DLDs)-Members.

The main functions of this Committee are as under:

- i) To formulate Draft District Plan in coordination with all the district level departments (DLDs) and information feed back from BDOs keeping in view the guidelines issued by SPC.
- ii) To formulate the allocation of funds for each of major schemes/ programmes according to the district plan.
- iii) To put up proposals and draft district plan with DPMC for finalisation.
- iv) To review the progress of the plan every month.v) To put up proposals to DPMC for reallocation of funds.

5.3.4.2 District Planning and Monitoring Committee (DPMC)

The DPMC is an immediate higher level committee to DPCAC under the chairmanship of a Minister of State. The composition of DPMC is as under:

- i) A Minister of State-Chairman
- ii) Chief Development Officer (CDO)/Additional District Magistrate (ADM) (Development) / District Development Officer (DDO)-Member Secretary
- iii) District Magistrate (DM) - Member
- iv) All Member of Parliament from the district - Member
- v) All Member of State Legislature from the district - Member
- vi) Any district level officer can be invited according to need - Member.

The main functions of this committee include :

- i) To finalise the district plan formulated and put up by DPCAC, keeping in view of guidelines issued by the SPC as well as the Plan outlays earmarked for the district.
- ii) To incorporate suggestions from Block Committees in the plan

as peoples representations.

- iii) To allocate departmental outlays between various blocks on the basis of norms prescribed by the State Government (SPC) from time to time to eradicate disparities.
- iv) To forward the finalised District Plan to DC for approval.
- v) To review the District Plan every two months.
- vi) To put proposals for reallocation of funds received from DPCAC with its recommendations for approval of the Divisional Committee.

5.3.4.3 Executive Committee (EC)

There is a provision for an Executive Committee at the district level under the chairmanship of District Magistrate with a composition as described under :

- i) District Magistrate - Chairman
- ii CDO or ADM (D) or DDO - Member Secretary
- iii) Senior most officials of Lead Bank - Member
- iv) Senior most officials of all the district level line depts (DLDs) -Member

The functions of EC include :

- i) To provide institutional finance for Integrated Rural Development Programme and other schemes assisted by institutional finance.
- ii) To coordinate schemes of district and State sectors.

5.3.4.4 Divisional Committee (DC)

The DC is the highest body at the district level playing a crucial role of approval of district plan and allocation of funds. The composition of DC is as under :

- i) A Cabinet Minister - Chairman
- ii) Divisional Commissioner - Deputy Chairman
- iii) Joint Deputy Development Commissioner - Member - Secretary

- iv) Deputy Director Economic Statistics - Joint Secretary.
- v) All District Magistrates of the division - Member/
- vi) All officers of development departments at divisional level - Member
- vii) Representative of Lead Bank of division - Member

The main functions of this Committee are as shown below :

- i) To review and approve the District Plan drawn up by District Committee;
- ii) To review the progress of implementation of District Plan;
- iii) To establish coordination between various departments, fix priorities and assign responsibilities to various agencies and departments for a time bound implementation of the programmes;
- iv) To monitor and supervise the achievement various departments in context of their targets and service capacity; and
- v) To draw up appropriate credit plans for mobilising maximum amount of institutional finance for implementation of District Plans.

5.3.4.5 District Level Line Departments (DLDs)

The main functions of district level officers are as under:

- i) Identification of schemes/programmes at the block as per the guidelines received from SLDs.
- ii) Coordination with DPCAC in formulating draft district plans.
- iii) Co-ordination with Divisional Committee and Executive Committee in case of any scheme/programme to be financed by financial institutions.
- iv) Implementation of both state sector as well as district sector schemes finally approved by DC and inturn SPC.
- v) Review of implementing the schemes.

5.3.4.6. Lead Banks (LBs)

Every district has identified a major commercial bank has large branches and credit operation as Lead Bank. For an instance, Punjab National Bank

(PNB) is the lead bank in case of Bulandshahar district. These lead banks prepare annual credit plans as per the request of Divisional Committee which generally indicate appropriate credits for mobilising maximum amount of institutional finance for implementation of District Plans.

5.3.4.7 Urban Local Bodies/Development Authorities

The urban local bodies mainly look after implementation of development and welfare schemes and programmes besides building regulations and control. The development authorities are responsible for planning, implementation and development control of various uses within their jurisdiction.

5.3.5 Machinery Below District Level

The districts are the lowest unit in Uttar Pradesh as far as planning activities are concerned. All the other machinery operating below district level are mainly responsible for implementation of various state and district sector schemes and programmes. Below district level, there exists the following organisations in Uttar Pradesh.

- a) Block development Officer (BDO).
- b) Tehsildar at Tehsil Level.
- c) Naib Tehsildar at Sub-Tehsil Level.
- d) Village Development Officer (VDO)

The District Magistrate is whole incharge of the revenue administration and law and order at the district level. Below district level, the DM is assisted by Tehsildar at Tehsil level and Naib Tehsildar at the sub-tehsil level, the Patwari for group of village and the village development officer (VDO) at the every individual village level. On the other hand the Block development officer (BDO) at the every development block is directly responsible for implementation and supervision of all the programmes of district sector and centrally sponsored schemes routed through both DM as well as DRDA. The BDO is also closely associated with Block Committee (BC). Parallely, there exists a several block level officers concerned with District line or development departments who generally look after the implementation of

schemes as per the direction received from their district Headquarters.

The district level machinery in Uttar Pradesh is being assisted by a pronounced PRI system. The Panchayati Raj Institution (PRI) system has three sub units functioning at different levels viz.,

- a) Gram Sabha (GS) at village level
- b) Block Committee (BC) at block level.
- c) Zilla Parishads (ZPs) at District level.

By and large the felt needs of Gram Sabhas of Gram Panchayats are compiled at Block Committee (BC) to be incorporated in the Draft District Plan which is discussed in the DPMC meetings. The Chairman of BCs i.e. Pramukhs generally carry the proposals to Zilla parishads through which the representations to incorporate such proposals in district plan in DPMC meeting is being done. DPMC considers the representations and incorporates wherever necessary in the District Plan to a large extent depending upon the resource availability.

5.4 PLANNING PROCESS

At present the grass root level is manned and managed by the village level functionaries; The Village Development Officer, Panchayat Sewak, and Cooperative supervisor. In development blocks, block level officers supervise the work relating to District plans. At the district level it is the District Magistrate who is overall incharge of the programme, and at the State level the work relating to finalisation of the District Plan, its coordination and reappropriation are entrusted to the Planning Department. Because in Decentralised Planning, local initiative and needs have to play a vital role, the district level functionaries will be greatly benefited under this pattern since they will no longer wait for orders and instructions from state Headquarters. Which is why their responsibility have also increased, but at the same time responsibilities of Heads of Departements have not decreased in any way, for they will reformulate the programme in such a manner so

as to make them more useful and effective, and they will be required to be more vigilant and watchful. At the Government level it the Planning Department which finalise the District Plan schemes, decides policy matters, issues necessary instructions, scrutinizes proposals for reappropriations and monitors progress.

The plan exercise in the State has been bifurcated in two sectors, Viz., State and District, and the procedure of allocating fund to Heads of Departments have been given up in respect of District Plans. District plans are formulated with the help of departmental officers by a Committee at district level which is headed by a Member of the Council of Ministers, which not only raised the stature of the Committee, but also enables the district to have an idea of the thinking and policy of the Government on various issues and the people have a channel to convey the Government their aspirations and needs. Thereafter, District plans are processed at the divisional level by a Committee headed by a Cabinet Minister, and detailed discussions are held at Divisional level meets, where the representatives of the Planning Departemnt are required to be present to provide information and clarification whenever necessary. On reaching the state Government, the District Plans are thoroughly examined, left over schemes are included with little pruning through the various administrative departments, which carry it to State Budget. Since 1982-83 approximately 30 percent of planned expenditures is earmarked for District Sector schemes.

District Heads of Departments (DLDs) assisted by their regional Officers prepare the sectoral plans, which are examined at the level of ADM(D)/DDO assisted by Planning Cell Officers, Officials. Department Officers are also conventionally required to activity associate themselves with the planning process. The District Magistrate and Collector holds a meeting of District plan Co-ordination and Action Committee as its Chairman and Dfart Plan is finalised.

Table 5.1 Formula for Disaggregation of Plan Funds to District in U.P.

Factors	% allocation
1. Total population	50
2. Population of scheduled castes and scheduled tribes	5
3. Number of marginal farmers and landless laborures	10
4. Backwardness in	
a. agricultural production	5
b. industrial production	5
c. Roads	5
d. number of beds in hospitals	5
e. drinking water	5
f. electrified villages	5
5. Special problems	5

30% of the small savings deposit goes to the district for implementing district sector schemes and programmes. This 30% is based purely on the profit made by the small savings deposits. There are also several central sector schemes which operate in the district. These schemes are under the Jawahar Rozgar Yojana (JRY) where 80% comes from Central funding and 20% from state funding. There are also schemes under the IRDP programmes, where the funding is 50:50 by the central and the State Government.

All the above Central sponsored schemes are directly routed through the District Rural Development Agency (DRDA) headed by the Development Commissioner and the Project Officer. The State and District sector schemes are implemented through the District Collectorate who in turn designates/funds to the lower bodies at the Tehsil/Block level through the Block Development Officers.

Table 5.2 Existing District Sector Schemes in Uttar Pradesh

Sector	Budget Code
1. Agriculture & Allied Activities	101
Crops husbandary	2401
Extension farmer training	2401
Storage ware houses	2401
Assistance to small & medium farmer	2401
Soil & Water conservation	2401
Animal Husbandary	2401
Dairying	2401
Fisheries	2403
Forest	2406
Cooperation	2425
2. Rural Development	102
Special programme	2501
DPAP	2501
IRDP/NREP	2501
Land Reforms	2505
Community Development	2515
Panchayati Raj	2516
CADP	2501
3. Irrigation/flood control	104
Minor Irrigation	2702
Water Resource Development (Medium project) in District	2702
Flood Control work (local)	2702
4. Power	105
Rural Electrification	2801
5. Industries	106
Village & Small Industry	2851
6. Transport	107
Village Roads	2054
Other District Roads	3054
7. Education	221
General Education	2202

Sector	Budget Code
Primary	2202
Secondary	2202
Adult	2202
Technical	2202
Polytechnical	2203
8. Medical & Public Health	222
District Hospital	2210
PHC	2210
Sub Centre	2210
Public Health	2210
9. Water Supply, Sanitation Urban Development	223
Water Supply and Sewerage	2125
Urban Development	2125
Housing	2125
10. Information & Publicity	224
Publicity	2220
11. Welfare SC/ST	225
Welfare SC/ST, BC	2225
12. Labour & Employment	226
Labour & Employment	2230
Labour welfare	2230
Employment Service	2230
Craftsmen Training	2230
13. Social Security Welfare & Nutrition	227
Social Security	2235
Nutrition	2236

Source: UP Draft Plan 89-90

5.5 CRITICAL ISSUES

It is obvious that Uttar Pradesh being one of the biggest state in the country has taken some of the bold measures in decentralised planning and particularly planning at district level. *Some of the positive features of district planning process are as under :*

- a) Setting up of district planning machinery such as DPCAC, DPMC, EC and DC for formulation and implementation of district plans.
- b) Division of Schemes into State sector and district sector and devising a formula for allocations of district sector outlay among districts with minimum delay.
- c) Advance intimation of financial outlays to districts and prompt release of funds in advance.
- d) The formula adopted for allocation of funds to district level takes note of the extent of backwardness of districts in agriculture, industrial development and social infrastructural facilities as well as upliftment of EWS of the society.
- e) While the functional and financial approaches to decentralisation follow by and large the models adopted in Gujrat and Maharashtra, the introduction of an additional tier at divisional level in the total machinery is an innovation and peculiar to U.P.

In spite of its comparatively well established district planning system, there appears a few deficiencies in the system and process looking from the concept of Integrated District Development Planning and Spatio-Economic Planning point of view. Some of the central issues are as follows:

- a) The District Planning Cell in the district by and large is headed by CDO who is also the vice-chairman of DRDA. The so called district plan being formulated at the district level is just an allocation plan for each sectors and schemes thereby titled as Annual Action Plan. The District Statistical Officer (DSO) in his capacity invites proposals and schemes to be implemented from all the line departments (DLDs) of the district. The information is then compiled by the DSO which is called as District Plan and then put up for approval with DPMC. Hence, there is no proper discussion and scientific rationale in formulating district plan.

- b) In view of the absence of a competent planning cell at the district level, no schemes or projects are formulated at the district level. The result is that the sectoral departments either include the continuing or new schemes in the district plans as have been formulated at the State level, without giving any consideration to specific area requirements.
- c) According to the procedure adopted in the State, the District Plan Coordination and Action Committee (DPCAC) makes the sectoral allocations. How the inter sectoral priorities are determined are not clear? As no independent analysis is made by the District Planning team, one should conclude that the logic is incremental, based on subjective perception. However, it cannot be denied that the conferring of powers to allocate funds is in itself an important decision. But, though this may look attractive on paper by itself, this may not achieve much in concrete terms unless this is accompanied by measures to bolster the planning capacity of the district. In the absence of such measure, only subjectivity percolates from the top to the bottom.
- d) As one of a range of devices to ensure local decision-making, the State Government has decided that normally no changes can be made in the district plan by the Heads of Departments, but where the Heads of Departments have objections, these will be considered by the Committee of Secretaries and a decision taken finally at the State level. This procedure intended to encourage local decision making however, does not go far. In fact, it negates the principle of decentralisation. The more appropriate method would be to evolve communication system which would facilitate mutual interaction, exchange of information, cooperation and conflict resolution rather than direct arbitration from above. The aim should be to evolve healthy multi-level planning procedures, rather than centralise decisions. (K.V. Sundaram, 1984).
- e) One of the important functions which the District Planning and Implementation Committee was given to assess the on-going programmes

at the district level. Thus the district level body has been made competent to suggest dropping the unsuitable district sector schemes and to induct new schemes in their place. Discussions showed that the district level bodies have not adequately exercised their right in this regard. Further while assessing the on-going programmes at the district level, only the district sector plan schemes have been assessed. The non-plan schemes, which in several cases are continuing with similarity of objectives as those of plan schemes have not been assessed for their relevance to the district level.

- f) The so called district plans formulated at the district level emphasise only rural development oriented programmes with a very small component as urban development schemes.
- g) The district plan ideally should take a note of both rural and urban areas. While the Town & Country Planning Department of U.P. prepares urban development plans and regional plans, the district planning machinery makes no effort to integrate these plans in formulating the district plans.

5.6 CONCLUSIONS

It can be concluded that the State of Uttar Pradesh has although well established planning machinery at the district level, no scientific way of comprehensive plan formulation considering the needs of the local people is attempted due to absence of technical personnel. The result is the present day district plan remains sectoral plan as a consequence of information gathered from various sectoral departments whereagain it is dictated by their state level headquarters. *Secondly*, although an advance devolution of funds are being released against State level and district schemes, no rational in allocation according to priority is being made. *Thirdly*, most of these schemes remained rural schemes and no integration with urban development schemes are conceived as part of district plan.

CHAPTER - 6

6.0 INTEGRATED DISTRICT DEVELOPMENT PLANNING: SUGGESTED APPROACH AND METHODOLOGY IN THE CONTEXT OF CONSTITUTION (SEVENTY - THIRD AND SEVENTY - FOURTH AMENDMENT), ACTS

6.1 INTRODUCTION

6.2 SUGGESTED APPROACH TO FORMULATION OF VILLAGE DEVELOPMENT PLAN

6.2.1 The Context and Need for Village Development Plans

6.2.2 Physical Structure

6.2.3 Stages of Village Development

6.2.4 Planning for Village Development: Basic Premises

6.3 EVOLVING A METHODOLOGICAL FRAMEWORK FOR PREPARATION OF INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) AT DISTRICT LEVEL.

6.3.1 Formulation of District Plan

**6.3.2 Suggested Approach and Methodology for Formulation
of Integrated District Development Plan (IDDP)**

6.0 INTEGRATED DISTRICT DEVELOPMENT PLANNING: SUGGESTED APPROACH AND METHODOLOGY IN THE CONTEXT OF CONSTITUTION (SEVENTY-THIRD AND SEVENTY-FOURTH AMENDMENT) ACTS.

6.1 INTRODUCTION

In order to translate the concepts of "*Planning from below*" into action, the district plans have to be based on the principles of integrated area development. It should be able to portray the existing level of economic and social development, resource potentials available, the short-term and long-term development needs of the people and area, spatial patterns and the development strategy to be adopted alongwith the proposed programmes with physical targets and financial outlays as well their spatial linkages.

An attempt has been made in this chapter to suggest on approach to Integrated District Development Planning in the context of constitutional amendments. The approach followed is "*Planning from Below*" i.e. Village, Development Block and District Level and Vice-versa i.e. "Planning from Top" where in people will prepare plans for "Economic Development and Social Justice", at Panchayat and Municipality levels of respective jurisdiction. District Planning Committee (DPC) will prepare a Draft Development Plan for the District as a whole by consolidating the plans prepared by Panchayats and Municipalities in th District and implement schemes as listed in the Eleventh and Twelfth Schedules of the Constitution respectively.

6.2 SUGGESTED APPROACH TO FORMULATION OF VILLAGE DEVELOPMENT PLAN

6.2.1 The Context and Need

The 73rd Constitutional Amendment says that the village Panchayat will have to perform basically two functions:

- (a) The preparation of plans for economic development and social justice;
- (b) The implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the Eleventh Schedule, (Government of India)

It is imperative, therefore, to have a village development plan not only because it is mandatory in the act, but also to reflect people's felt needs and perceptions. From the environment point of view, it is desirable to take each village to draw up a plan to ensure eco-balance and sustainable development. The first task of every village panchayat will be to have a plan to guide development of the village. The occupation of agriculture and allied activities of cattle keeping, horticulture, village artisanary and handicrafts call for a different approach to Village development than the conventional urban planning approach (H.B. Singh, 1995). The planners have to identify, prioritise, and study their target groups or sub-groups to emphasise their welfare in the village plan considering the ground realities.

6.2.2. Physical Structure

The structure of the village has to include the built-up abadi area, agricultural farms, movement channels, pasture lands, orchards, waste lands and water bodies within its revenue boundary. The living, working, socialising and movement in villages are so interlinked that they cannot be segregated. All these elements form the indispensable part of settlement structure of a village and should be taken together for any planning purpose (H.B.Singh, 1995).

6.2.2.1 Land Uses

There are no standard land use categories in villages as in case of urban areas. However, there are six discernible land use categories within which many linked subsidiary uses can be identified (H.B. Singh, 1995). These are as under:

(a) Village Abadi Area

- * Residential-houses, compounds, cattle sheds, community

facilities - wells, chaupals, panchayat ghar, religious places.

- * Commercial-provision and service shops, periodic market place(s).
- * Rural Industrial - artisans' workshops, cottage and agro-based industries.
- * Movement Nodes - bus stop, railway station, etc.
- * Public facilities and services - schools, medical and veterinary clinic, post office, police station etc.
- * Open spaces for occasional social events.

(b) Multi-purpose/Transitional Area

Buffer area around the abadi, poultry farms, dairy farms pastures, orchards, forests, harvesting places, burial/cremation grounds, wastelands, etc.

c) Agricultural Farms

Irrigated multicrop area, dry farming single crop area, fallow lands, horticulture and vegetable growing areas.

d) Movement Channels

Railway lines, roads, tracks, foot paths etc.

e) Water Bodies

Streams, canals, lakes, ponds, fish-ponds and water-logged areas, rivers etc.

f) Others

Forest and other government lands.

The landuse pattern in the villages is not segregated and hence cannot be measured accurately. To identify an area of a particular landuse, which is a street as well as an extension of a compound and also a community meeting place, is difficult. The same place is utilised for transport channel, residential use as well as public use at different times, apparently without causing any problem to any one. Though land-use categories mentioned here remain almost common throughout the country, their pattern and configuration changes considerably in nucleated villages of the northern

plains, to dispersed settlements in tribal areas, and to the linear disjointed developments along the transport channels as in Kerala.

6.2.3 Stages of Village Development

Rural Development is conceived as an involved process for the people and by the people at all levels. From the experience of rural development programmes so far, it is obvious that optimal production in agriculture is not good enough in itself. It may only be a threshold and must be followed by the next stage of a proper utilisation of the additional produce, creating new kinds of jobs for the villagers. Poverty alleviation without creating employment opportunities, may not be of much use in the socio-political context. Increase in agricultural produce may ensure only food supply, but for better quality of life, many other things are needed. Every-one should have a worthwhile job to contribute constructively to community development and social upliftment. Various stages of village development have been given below. (H.B. Singh, 1995).

a) First Stage of Village Development in Primary Sector Activities

The most basic requirement for the process of development is the quality of human resource. So the first step is : *"Making People Aware and Motivated to Improve Environmental Support Systems (ESS)*-land, water, vegetation and cattle, also referred to as the life support systems. Thus, with the help of various government departments, banks, non-government organisations, research institutions and their own community-based organisations, well-planned improvement programmes related to soil conservation, land reclamation, water harvesting, forestation, and animal husbandry have to be started effectively.

After improvement of basic natural resources, inputs to agriculture, horticulture, cattle rearing and forestry in the form of irrigation, provision of seeds, fertilizers, dairy, poultry, fishery, sericulture, vegetable/fruits and flower growing, have to be made available to the villagers. Such a diversification in agro related activities will not only increase production in

the primary sector but will also create more employment opportunities for economically weaker sections and the landless in the village community.

With diversification in different primary sector related activities, and requisite infrastructure availability will lead to optimal use to land, water, flora and fauna and other material and non-material resources available in the village, increasing the wealth generation, poverty alleviation, job creation and enhancement of the quality of life in the village. This will also instill the much needed confidence in the villagers in their effort to progress.

b) Second Stage Development in Secondary and Tertiary Sector Activities

The full utilisation of natural resources resulting in optimal production in primary sector, makes the beginning of the next stage of development of the village. This is the crucial stage because if it is not planned carefully, the wealth generated in the first stage may go waste in socially undesirable activities.

Villagers have to be prepared to face new challenges posed by the necessity of value addition, processing, and handling their produce profitably by themselves. It is imperative, therefore, to have vocational training in related fields like small scale entrepreneurship, processing/packaging technology, marketing and management. Such training may be made available in nearby urban or growth centres to enable villagers to benefit without the problem of longer distance and cost in New Skill Generation Programmes. The role of NGOs in this regard will also be quite considerable.

Apart from the provision of basic infrastructure of water, power, transport and tele-communication needed for establishment of small and cottage industrial establishments, the inputs like banking, co-operatives, market and business support system will have to be planned to initiate the provision of Inputs of Value Addition and Marketing to strengthen the development of village.

Thus, when all the produce is value added, handled and managed by trained villagers themselves, the primary, secondary and tertiary sector may start a process of self sustaining growth. This will generate multiplier effect in various aspects of development leading to a take off stage of local economy, thereby enhancing the quality of life of village people, thereby achieving the objectives of sustainability.

6.2.4 Planning for Village Development : Basic Premises

- a) The village as a whole, not only Abadi area but including agricultural firms and other areas within its revenue boundary, has to be taken for planning and development.
- b) Improvement and diversification of the production system is the 'Prime mover' of the development process. Other aspects may built around this core issue while moving along the path of development, in a planned manner (Singh, 1995).
- c) The approach to plan a village for its development has to be different from an urban area. Here, Abadi and the extensive farm lands are to be planned together, as a meaningful habitat for people and their cattle with predominant primary sector occupations, which is entirely different from the urban scene.
- d) The plan has to be inter-related in time and space, to enable its integration with long and short term needs of the villagers, as well as the requirement of block and district plans in their policy and programme aspects (Gupta, 1992).
- e) Professional expertise and help lies in making the plan easier and simpler, to ensure people's participation. This should also save time and meagre resources of the village Panchayat.

6.2.5.1 Methodology for Village Development Plan

The important thing is to involve the people in drawing the plan for their Village's development. It is imperative, therefore, to have a simple methodology which is understandable by the people so that they can

contribute to its preparation, approval and implementation. Accordingly, the following methodology is being suggested.

I) Formulation of Objectives

The objectives of the plan should primarily be the reflections of people's needs and priorities. It should also take into consideration the items mentioned in the district development plans with regard to the village. Going by experience of rural priorities and items listed in 11th Schedule, it may be worthwhile to consider -

- (i) Poverty alleviation and Employment generation,
- (ii) Community Welfare,
- (iii) Infrastructure Development
- (iv) Resource Development, and land use.
- (v) Sustainability;

as the obvious objectives of any village plan for economic development and social justice in the context of 73rd constitutional Amendment Act.

II) Data Base

Generation of data base may be easily done enlisting the help of village youths. But the questionnaire and method of investigations has to be detailed out professionally by the experts. The data generated should be regarding population characteristics, environmental support system, social and physical infrastructure, maps, plans and details of development programmes carried out or currently going on in the village (Planning Commission 1984).

III) Preparation of Inventory and Thematic Maps

Based on the data collected, there is a need to prepare an inventory of the resources and to have spatial maps prepared with latest cartographic techniques. The information used shall be utilised in such a way that spatial deductions are possible to be understood by the villagers and they are used effectively in the analysis to be undertaken in the next steps.

IV) Study of Development Status, Projections, Potentials and Issues

This is the main stage of the analysis to be undertaken in such a way that its results may be explained to the villages to make them understand the problems. However, the emerging points of this stage are -

- a) Short term and long term needs,
- b) Problems and potentials, and
- c) Issues and Thrust areas.

V) Evolving a Village Development Plan

The development plan for the village should have following time dimensions-

- a) A long term Spatio-Economic Plan with 20 years' development policy has to be evolved, particularly with the help of the elders of the village and they should be involved to see that their reviews are undertaken to ensure continuity over a long period of time.
- b) A more detailed Integrated Village Development plan of 5 years duration has to be drawn up in line with the state government schemes/ programmes.
- c) The Annual Action Plan has to be detailed out based on the priorities and financial availability in a particular year to actually get implemented on the ground. As a continuous process, the annual action plan gets reviewed every year for better performance next year. These annual reviews should be helpful in drawing up of a new five year plan for the next in office for the Panchayat Raj. These three plans are inter-linked in space and time with higher level plans at the block and district levels.

6.3 EVOLVING A METHODOLOGICAL FRAMEWORK FOR PREPARATION OF INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) AT DISTRICT LEVEL

6.3.1 Formulation of District Plan

The district planning process must proceed on the basis of the existing

planning practices and realities and at the same time it must so orient itself to subregional planning by adapting itself to the spatial-regional dimensions of planning. In this process, it must link sectoral plans with sub-regional plans. Besides, in view of the fact that Central Sector and the sector plans are all implemented at the district level (except in the case of some metropolitan urban development plans), sub-regional planning at the district level should be a vertically as well as horizontally integrated. The district plan should take into account the implications and consequences of the central and state projects located within the district and also such projects in nearby districts which have a direct bearing on the development of the district. Suggested attributes will be followed for Haridwar district.

The first step in the formulation of a district plan will be the demarcation of development activities which will go into the district plan. The district plan conceived here is a rationalised scheme of development programmes which are of district's importance and are confined to the administrative boundaries of a district. A district plan is primarily intended to promote the socio-economic interests of the people living in the district.

a) Formulation of Objectives

In the formulation of district plan, certain broad objectives in conformity with, the objectives of the national and state plans have to be determined. Therefore, the initial general objectives have been considered as the broad objectives of a prespective plan of a district. The specific objectives of a Five Year Plan of the district will be formulated on the basis of an assessment of the immediate specific needs of the people of a district. While the objectives of a district plan will be broadly identical with the national macro-plan objectives, the programmes of district plan which differ from district to district, will depend upon the reasource potentials and priority needs of Haridwar district.

b) Resource Inventory and Analysis

One of the most important exercise involved in formulating a district plan is an inventory of the district's resources-natural, human and economic both existing and potential. Then a assessment will be made of the levels of economic development as well as socio-economic infrastructure facilities reached in the district in terms of certain comprehensively defined spatio temporal plans with due consideration on beneficiaries according to various sections of the society. Assessment of natural, human and economic resources will be done from the points of view of their viability for productive development and their importance in catering to the immediate specific needs of the people and for developing the resources of the district on the basis of comparative economic advantage.

c) Needs Assessment

Then an assessment of the needs of the district will be made; both according to the needs of the people of the district and needs of different villages/ areas within the district. Besides, these needs of the district, we can identify (i) nationally recognised needs of the people, (ii) needs with specific reference to the district and (iii) felt needs of the people of the district (expressed through their own demands or through their leaders' demands). After identifying the needs, the extent to which they can be met will be considered. The assessment of the needs of the Haridwar district is in progress.

d) Targets and Programmes

It is necessary to specify a standard for each need, for the purpose of setting targets and determining programmes, projects and assessing required financial resources. Need based objectives of district plans will be translated into specific sectoral targets and programmes. Once the sectoral specific targets are determined, the Investment requirement of each programme will be worked out having due regard to the problems of consistency with the specific and general objectives of district plan. The programmes and projects

in turn will be located in different areas on the basis of specific objectives to be achieved and according to the needs of the people in different areas of a district. The targets and programmes for Haridwar district are to be finalised.

The spatial distribution of different projects within a district will also take into account with the concentration of the poorer sections of the district. This will be necessary to fulfill the objectives of achieving growth with social justice.

e) Investment Planning

After determining the total amount of investment required for the district plan over a five year period (as well as annually) and its sectoral allocations, an attempt will be made to assess the financial resources available within the district and estimate the financial resources gap to be filled up by the central and state governments.

6.3.2 Suggested Approach and Methodology for Preparation of Integrated District Development Plan (IDDP)

In the basic approach to District Planning conceptualised herein, incorporating provisions of the Constitution (73rd and 74th Amendment) Acts, five stages of plan preparation have been identified They are:

- I) Conceptualisation of Integrated District Development Plan (IDDP);
- II) Data base and Surveys (Spatial and Non-Spatial);
- III) Analysis of various socio-economic and spatial aspects at different levels.
- IV) Identification of Issues, Potentials and Thrust areas; Projection and Formulation of Scenario; and
- V) Formulation of Integrated District Development Plan; Programme Implementation, Monitoring and Evaluation.

Within the above broad stages, specific tasks have been identified at each stage. The definition of each task has been detailed below.

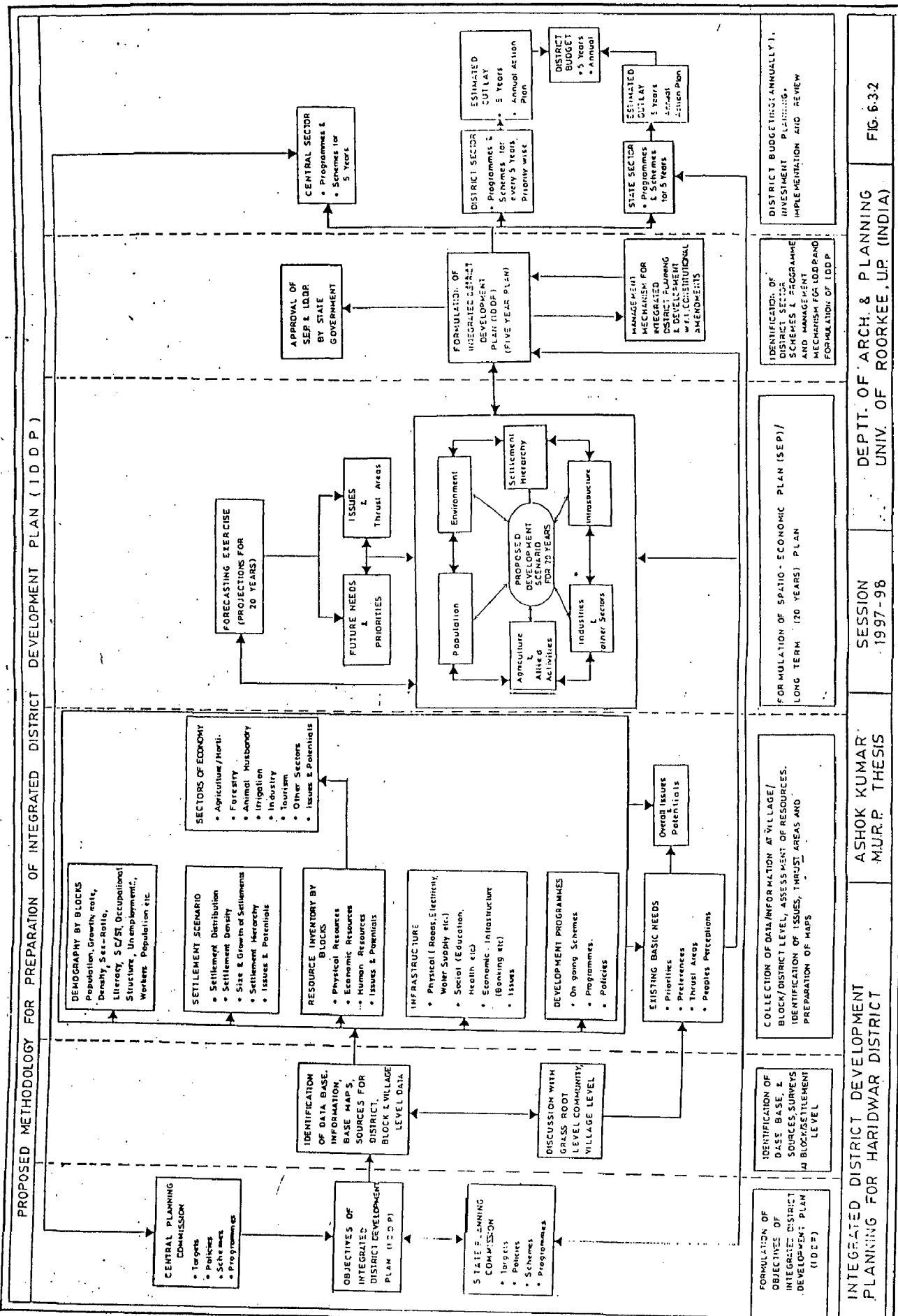


FIG. 6.32

DEPT. OF ARCH. & PLANNING
UNIV. OF ROORKEE, UP. (INDIA)

SESSION
1997-98

ASHOK KUMAR
M.U.P. THESIS

INTEGRATED DISTRICT DEVELOPMENT
PLANNING FOR HARIDWAR DISTRICT

Under social infrastructure - education, medical, posts and telegraph, social and cultural facilities.

Under economic infrastructure - banking, markets, cold storages, and godowns.

c) Population and Settlements - settlement pattern, size, growth and dynamics leading to hierarchy of settlements, functional attributes of settlements, Urban and Rural.

d) Development Programmes Organisation and Management- under which all the development programmes in the district were identified and reviewed in order to analyse and evaluate subsequently the application and utility of these programmes at the grass root level. The needs and priorities of the people at the grass root have also been analysed.

Detailed information collected regarding existing District Planning, Development and Implementation, Management Structure, Population characteristics, Resource endowments, infrastructure provisions etc. will be shown in the subsequent seminar in the form of maps using Cartographic Techniques; part of which are shown here.

Stage III: Analysis of Various Socio-Economic And Spatial Aspects At Different Levels

From the data collected and tabulated from the various departments in the district, analysis would be done at all levels under the following heads:

a) **Sectors of Economy** - under which *agriculture* wherein analysis would be done for landuse, landholdings, cropping pattern, cropping intensity, productivity and yield, agriculture infrastructure and development imperatives; *allied activities* wherein *horticulture*, *animal husbandary* and *others specific* to the concerned district would be done as for agriculture; *irrigation* wherein area under irrigation under different crops, sources of irrigation, problems and potentials; *industries* wherein location and distribution, employment and investment, production, sources of getting raw materials and marketing the finished goods, industry infrastructure, problems and potentials would be

done for small, large and medium scale units.

b) **Settlement Pattern** - All economic sectors analysis shall tend to be interpreted and analysed spatially, as well as analysing the distribution and growth of settlement; functional status of settlements, hierarchy of settlements, settlements dynamics, problems, issues and potentials for both urban and rural settlements.

c) **Infrastructure** - shall involve identifying the location, sources of availability, gaps, problems and potentials for all physical infrastructure: and location, area and population served, identification of gaps, problems, issues and potentials for each type of social and economic infrastructure.

d) **Development Status** - this study shall assess the levels of sectoral development as well as overall levels, to bring out sectoral disparities areawise. Related to projected needs and potentials, it shall lead to prioritisation of programmes.

e) **Environmental Status** - this study shall identify areas of environmental sensitivity in order to suggest environment guidelines for compatible and sustainable development.

Stage IV: (A) Identification of Issues, Potentials and Thrust Areas.

From the third stage of analysis, Developmental issues shall be identified in this stage under the following heads:

a) **Land Utilisation** - Resulting from the analysis of the landuse pattern and resource base in district.

b) **Existing Settlement Hierarchy** - Resulting from the analysis of the settlement pattern.

c) **Identification of Critical Issues by Sectors (Block, Area and Settlement Level)** - Resulting from the analysis of the sectors of economy, infrastructure, population, employment and levels of development.

d) **Identification of Potentials by Sectors (Block, Area and Settlement level)** - Resulting from the analysis done at the *third stage* leading to identification of the resource and development potentials.

- e) **Existing trends of growth** - Resulting from the analysis of the settlement pattern and population and employment patterns and distribution.
- f) **Identification of thrust areas** - Resulting from amalgamation of all the results derived from *stage three*, which shall be area specific.

The selected identified issues and thrust areas will then be considered in relation to the potentials for employment generation, diversification of economic activities in rural areas, industrialization, provision/betterment of infrastructure and welfare measures based on the needs, priorities, aspirations and perceptions of the people for "Economic Development and Social Justice".

(B) Projection and Formulation of Development Scenario

This sub-stage is the result of the analysis done in the earlier stages and the subsequent results in stage IV(A). Under this sub-stage, the first and foremost step is the projection of population, economy and occupational structure in relation to the resource base of the Haridwar district which would also be projected for its operational utilisation giving due consideration to economic feasibility and environmental compatibility.

The second step is formulation of a District Perspective Plan (DPP)/Spatio-Economic Plan (SEP) which is a perspective plan, for 20 years. Simultaneously, the ongoing and committed programmes and projects (central and state level) at all levels would be reviewed. All these will lead to formulation of strategies for development.

Stage V: (A) Formulation of Integrated District Development Plan (IDDP)

(B) Programme Implementation, Monitoring & Evaluation

This stage shall be the culmination of all the earlier stages of strategies for development. Based on the DPP/SEP, it would cover formulation of proposed Resource utilisation and landuse plan, proposed settlement scenario, settlements and infrastructure development strategy. Industrial and commercial development strategy transport network development, tourism

development and related sectoral programmes at Area (Block), nodal settlement levels, at village levels and fulfilling all other objectives of the Thesis mentioned in the first chapter.

It will lead to location of the infrastructure network within the district, wherein prioritisation of settlements, schemes and programmes would be identified. Simultaneously, based on resource mobilisation, the identified programmes at the block and settlement levels, in accordance with the 9th five year plan would be implemented, monitored and reviewed through Annual plans.

CHAPTER - 7

7.0 INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) FOR HARIDWAR DISTRICT, UTTAR PRADESH

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- 7.1.4 Climate**
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SECTION - I

(ASSESSMENT OF EXISTING DEVELOPMENT)

7.0 INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) FOR HARIDWAR DISTRICT, UTTAR PRADESH

7.1 PHYSIOGRAPHY

7.1.1 Geography

The district Haridwar lies on the right bank of the great river Ganga at the foot of Shivalik Ranges between 22°30' North and 78°10' East. The district is surrounded by Dehradun District in the North, Muzaffarnagar District in the South, Pauri Garhwal in the East and Saharanpur District in the West.

Haridwar became a district on 28-12-1988 by carving out Roorkee and Haridwar Tehsils of Saharanpur district, 53 villages of Sadar Tehsil of Muzaffarnagar district and 25 villages of Najibabad Tehsil of Bijnor district respectively. The total area of the district is 1994.0 sq.kms. which is 9.3% of the total area of Meerut division and 0.7% of the total area of Uttar Pradesh state.

7.1.2 Administrative Structure

District Haridwar is divided into three tehsils namely Roorkee, Haridwar and Laksar. Roorkee Tehsil consists of three Development Blocks Bhagwanpur, Narsan & Roorkee, Haridwar Tehsil has only one Development Block i.e. Bahadrabad and Tehsil Laksar has two Development Blocks Laksar and Khanpur.

Bhagwanpur Block has a geographical area of 315.0 sq.km. and there are 82 inhabited villages in it. Narsan Block has a geographical area of 275.6 sq.km. and there are 91 inhabited villages. Roorkee Block has a geographical area of 222.4 sq.km. and there are 91 inhabited villages in it. Thus, there are 264 inhabited villages in Roorkee Tehsil, Bahadrabad Block has a geographical area of 457.3 sq.km and there are 103 inhabited villages in it, which is the only block in Haridwar Tehsil. Laksar Block has a geographical area of 269.0 sq.km. and there are 84 inhabited villages. Khanpur Block has a geographical area of 127.0 sq.km and there are 47 inhabited villages in it. Thus, there are 131 inhabited villages in Laksar Tehsil. 5 forest villages

are located in Reserved Forests (RF) area.

There are 8 town and town in the district, where Haridwar, Roorkee and Manglaur have municipalities, Landhora & Zhabreda have town area, BHEL Haridwar has Notified Area and Roorkee Cantt. has cantt area. These 8 towns combined together have a geographical area of 64.6 sq.km. as Urban Area. Rural Area of Haridwar district is 1666.5 sq.km. In addition to this, 262.9 sq.km. is reserved forest. Thus in all, the district has a total geographical area of 1994.0 sq.km. There are total 627 villages. Out of which 503 villages including 5 Forest villages are inhabited and 124 villages are uninhabited. There are 46, Nayaye Panchayats, 53 Village Development Office areas and 359 Gram Sabhas. There are 12 Police Stations in which 3 are in Rural areas and 9 police stations are in Urban areas.

7.1.3 Topography

This district presents a variety of features; firstly the Shivalik range; secondly submountain belt and thirdly plains.

The Shivalik Range extends along the northern border of the district in North-East direction. The whole of Shivalik is covered with Reserved forests having thick growth of sal, Sheesham, with chir on the highest levels. The Submountain belt is immediately below the Shivalik Range in varying widths. The greatest elevation is 750-900m and lowest being 150-300m. The Plains, most of the area is under plains and the plain areas are fertile and well irrigated.

7.1.4 Climate

The climate of Haridwar district is generally cold in winter and hot in summer with temperature ranging from 1.5°C to 42°C and annual rainfall of about 1050 mm. In the 1992, the annual rainfall was 1182 MM.




7.1.5 Soils

Several varieties of natural soils are recognised in Haridwar District and can be divided into three major types namely i) Bottom Hill Soils, ii) Tarai

TOPIC: LOCATION OF HARIDWAR DISTT.

LEGEND

- 1 MUZAFFARNAGAR
- 2 GHAZIABAD
- 3 FIROZABAD
- 4 MAINPURI
- 5 KANPUR DEHAT
- 6 KANPUR NAGAR
- 7 SIDDHARTH NAGAR
- 8 MAHARAJ GANJ
- 9 GORAKHPUR
- 10 MAU


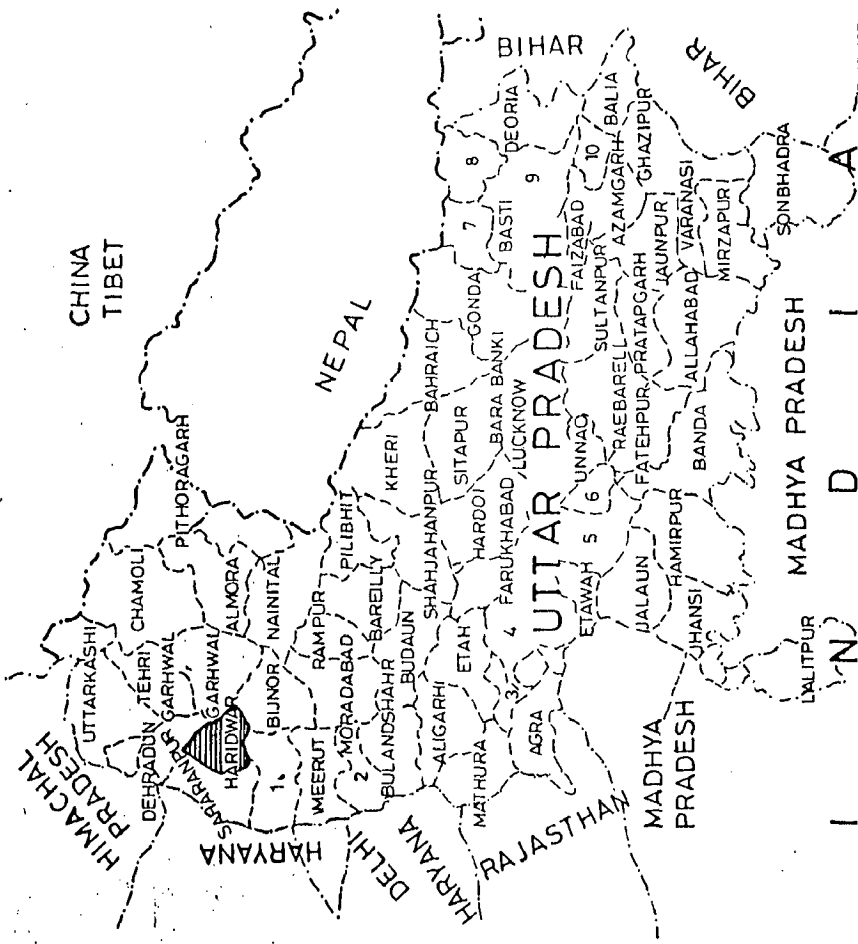
 STATE BOUNDARY
 DISTRICT BOUNDARY
 HARIDWAR DISTRICT

TITLE: - MAP OF UTTAR PRADESH

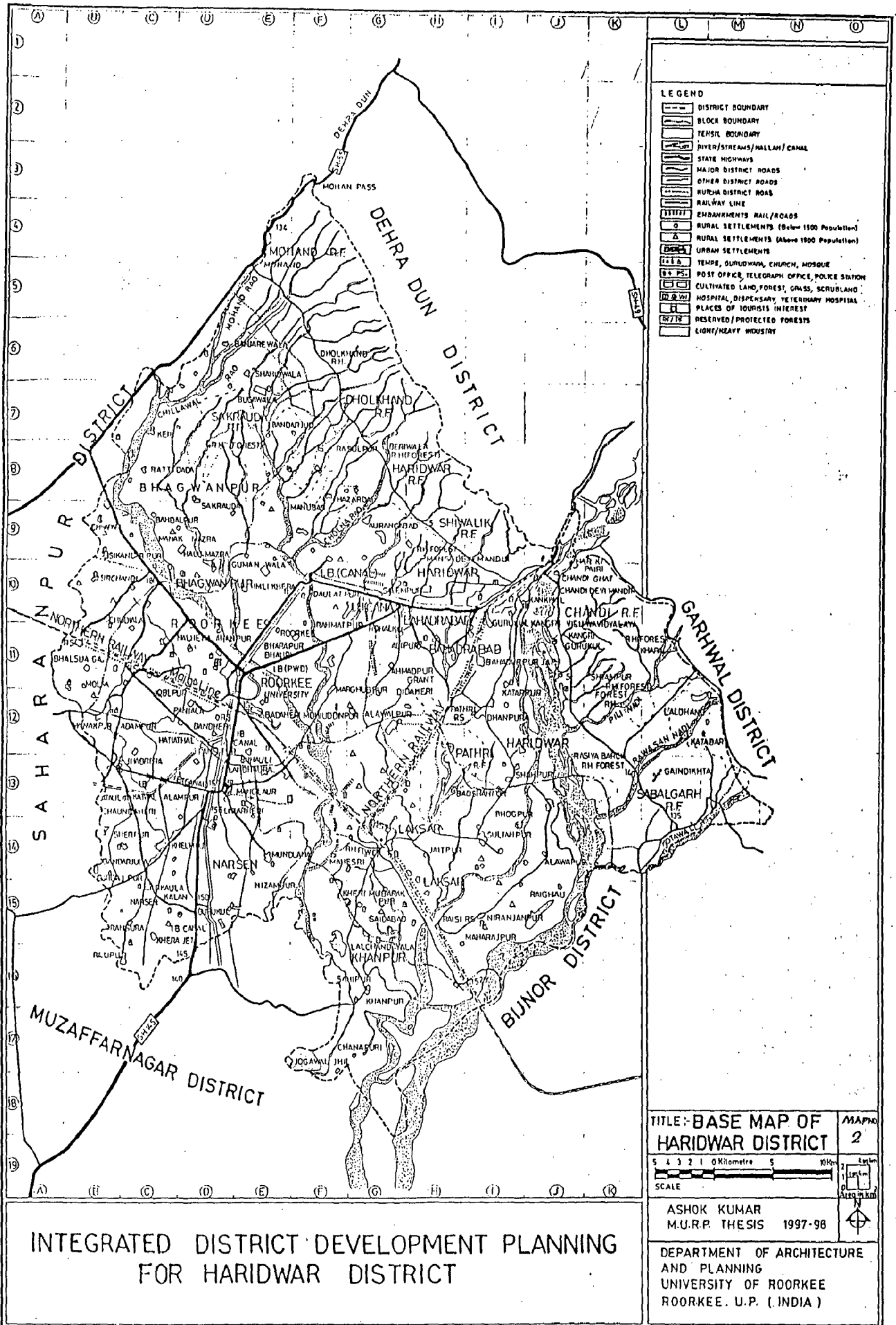
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SESSION
1997 - 98
MAP-1

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INTEGRATED DISTRICT DEVELOPMENT PLANNING
FOR HARIDWAR DISTRICT



- LEGEND**
- DISTRICT BOUNDARY
 - BLOCK BOUNDARY
 - TENSIL BOUNDARY
 - RIVER/STREAMS/NALLAH/CANAL
 - STATE HIGHWAYS
 - MAJOR DISTRICT ROADS
 - OTHER DISTRICT ROADS
 - RUCHA DISTRICT ROAD
 - RAILWAY LINE
 - EMBANKMENTS RAIL/ROADS
 - RURAL SETTLEMENTS (Below 1100 Population)
 - △ RURAL SETTLEMENTS (Above 1100 Population)
 - URBAN SETTLEMENTS
 - TEMPLE, GURUDWARA, CHURCH, MOSQUE
 - POST OFFICE, TELEGRAPH OFFICE, POLICE STATION
 - CULTIVATED LAND, FOREST, GRASS, SCRUBLAND
 - HOSPITAL, DISPENSARY, TERTIARY HOSPITAL
 - PLACES OF TOURISTS INTEREST
 - RESERVED/PROTECTED FORESTS
 - LIGHT/HEAVY INDUSTRY

TITLE: BASE MAP OF HARIDWAR DISTRICT

MAP No. 2

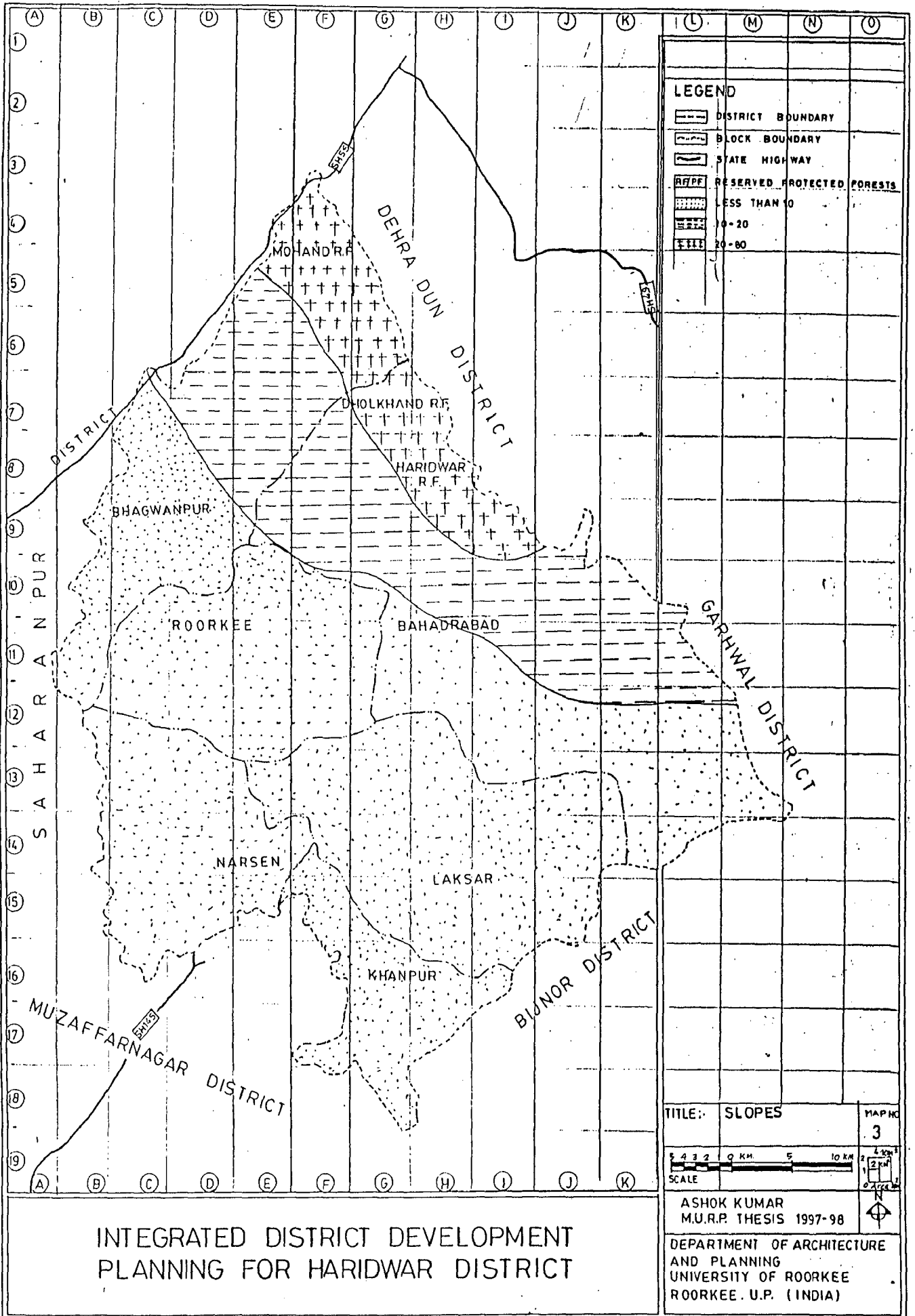
5 4 3 2 1 0 Kilometre 5 10 0

SCALE

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INTEGRATED DISTRICT DEVELOPMENT PLANNING FOR HARIDWAR DISTRICT



LEGEND

	DISTRICT BOUNDARY
	BLOCK BOUNDARY
	STATE HIGHWAY
	RESERVED PROTECTED FORESTS
	LESS THAN 10
	10-20
	20-60

TITLE: SLOPES

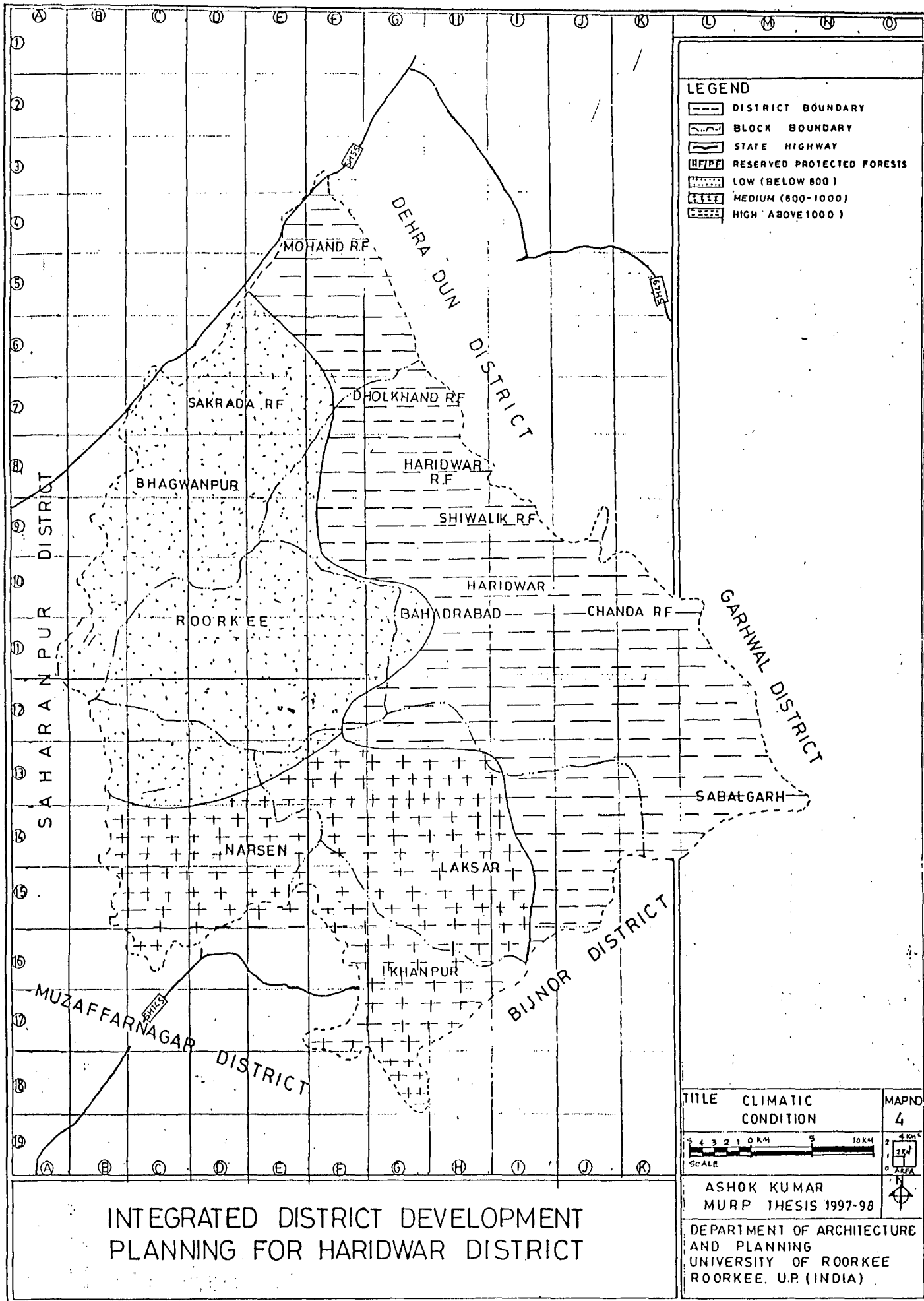
MAP NO. 3

SCALE: 1:50,000 (0 2 4 6 8 10 KM)

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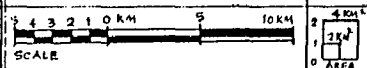
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PLANNING FOR HARIDWAR DISTRICT



- LEGEND**
- DISTRICT BOUNDARY
 - BLOCK BOUNDARY
 - STATE HIGHWAY
 - RESERVED PROTECTED FORESTS
 - LOW (BELOW 800)
 - MEDIUM (800-1000)
 - HIGH ABOVE 1000

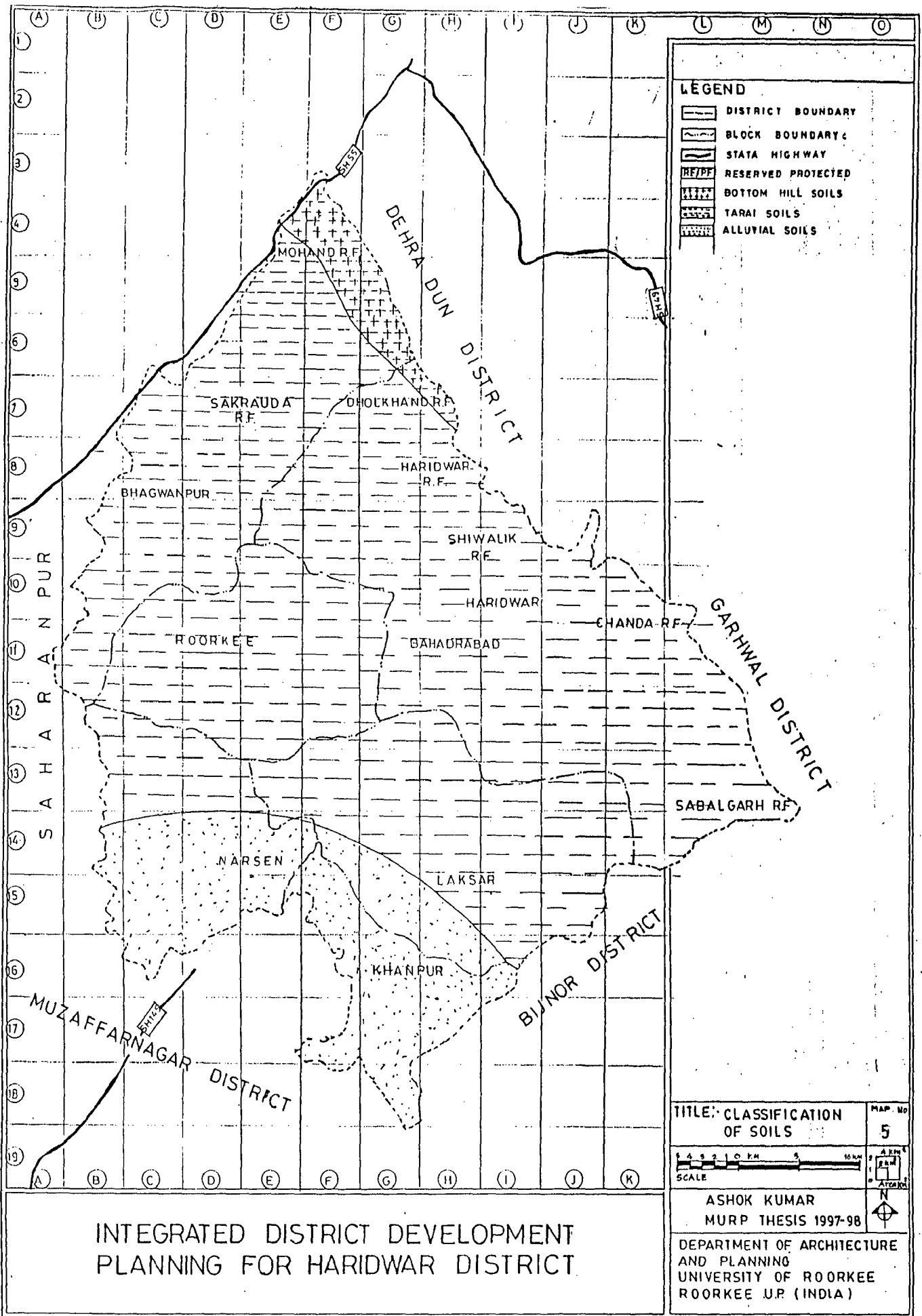
TITLE CLIMATIC CONDITION MAP NO. 4



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7.2 RESOURCE INVENTORY BY BLOCKS

7.2.1 Physical Resources

Haridwar district occupies a total area of 1994.0 Sq.Km. The total sown area is 121210 (Ha) out of which 43,388 (Ha) is under forests, 2594 (Ha) under Agriculturable waste, 3262 (Ha) Pasture land, 2077 (Ha) Waste Land, 14471 (Ha) Land used for other purposes. 882 Ha for Trees Groves Net sown Area is 63.51% of total area.

A) Water Resources

This zone has the benefit of the Ganges River in 1991-92, the Net Irrigated Area was 86032 Ha and Gross Irrigated Area was 117569 Ha. About 17644 Ha (20.5%) was Irrigated by canals, 68245 Ha (79.3%) was Irrigated by Tubewells, and 0.2% (138 Ha) supported by other sources.

- * Irrigation by canals is done mostly in Narsan and Bahadrabad Blocks.
- * There were 233 Govt. Tube wells, 25006 Ground Water Sources, Boring. Pump sets and Personal/Pvt. Tubewells.
- * There exists an Integration of programmes in the area/distt. such as
- Water Resource Development, Flood control works, soil conservation, Water conservation, Minor Irrigation and Environmental Protection Programmes so that agriculture in this zone is sustainable.

7.2.2 Economic Resources

- A) Forest Resources
- B) Mineral Resources
- C) Human Resources

A) Forest Resources

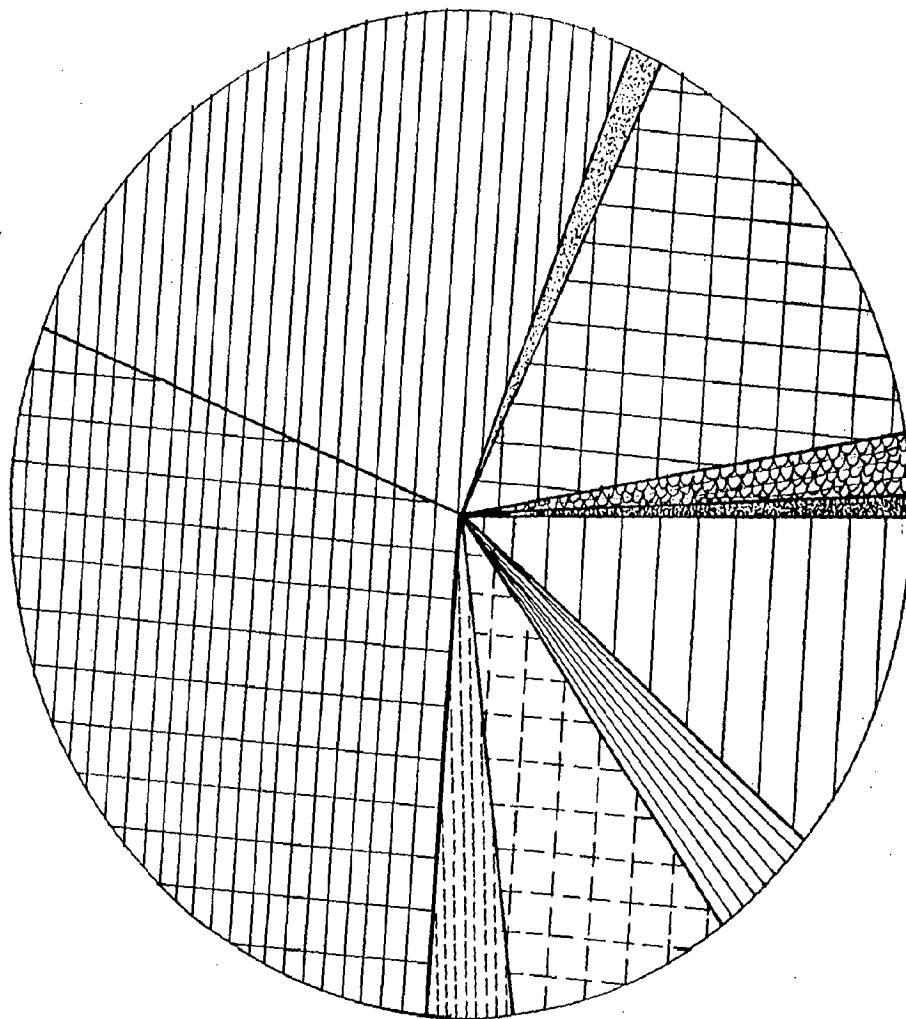
Forests cover 43388 Ha (22.73%), area of the total area of the state. In which 32078 Ha area is reserved forest and 11310 Ha area unreserved forest. Ayurvedic Medicinal plants, Teak, Sheesham, Tun, Sample, Agana, Gudana, Neem, Sarmatgula, Shahtoot, Khair and other variety of trees are found in the district so forest wealth is one of the important source of economy to distt. but to state as well.

Table 7.3.1: Demographic Status of Blocks, District, Division and State (1991)

Block/Distt./ State	Population 1991	Decadal Population Growth 1981-91	Population Density	Female Pop./1000 Male	SC/ST Pop.to Total Pop. %	Lit. %
1	2	3	4	5	6	7
Bhagwanpur	141581	21.6	499	848	27.2	38.4
Narsan	159082	43.4	577	841	30.1	40.2
Roorkee	147040	35.1	661	855	24.4	34.7
Bahadradad	179684	29.1	393	854	27.1	37.5
Laksar	109224 (-)	7.6	406	855	24.9	39.2
Khanpur	31868	22.5	251	820	22.2	30.6
Total	768479	24.0	461	849	26.7	37.7
Forest Villages	7867 (-)	12.3	30	792	27.2	16.5
Total Rural	776346	24.0	402	849	26.7	37.4
Total Urban	348142	31.7	5389	841	10.7	71.3
HaridwarDistt.	1124488	26.0	564	846	21.8	48.3
Meerut Div.	15277764	28.0	731	850	18.5	47.8
U.P	139112287	25.5	473	879	21.2	41.6

Table 7.3.2 : Urban Settlements by Size, Area, Population, Density (1991)

Sr. No.	Population Range	Town Area & Type	Geographic Area (Sq.km.)	Area	Pop. Density
1	2	3	4	5	6
1.	Grater than 100000	Haridwar	15.07	149011	9888
2.	50000-99999	Roorkee	7.74	80262	10370
3.	20000-49999	1. B.H.E.L.Ranipur 2. Manglore Municipality	26.94 1.32	38381 34161	1425 25880
4.	10000-19999	1. Laksar Town Area 2. Roorkee Cantt	3.32 9.30	10877	1170
5.	5000-9999	Zhabreda Town Area	0.09	7633	84811
6.	Less than 5000		--	--	--
Total Urban Area			64.60	348142	5389



LEGEND:-











	Farmers 28.27%
	Agri. labours 26.58%
	Household Manufacturing 1.76%
	Tree planting, Forestry, Cattle 2.27%
	Mining 0.19%
	Transport & Tele-Communication 2.99%
	Trade & Commerce 9.02%
	Construction workers 3.80%
	Non-Household Industries 10.42%
	Other workers 14.70%

Fig.7.3.1 : Categorywise main workers population (%) Haridwar District

Table 7.3.4 : Blockwise Population Distribution in Haridwar District (1991)

Blocks	Population Distribution (1991)						Total	
	5000 and More	2000 To 4999	1000 To 1999	500 To 999	200 To 499	Less Than 200	Less than 1000 popn. No.	(%)
1	2	3	4	5	6	7	8	9
Bhagwanpur	2	26	22	17	7	8	32	39.02
Narsan	5	21	25	22	12	6	40	43.96
Roorkee	2	25	25	16	17	6	39	42.96
Bahadrabad	5	27	26	21	14	10	45	43.69
Laksar	2	16	20	22	14	10	46	54.76
Khanpur	--	--	13	13	9	12	34	73.34
Forest Villages	--	2	1	2	-	-	2	47.32
Distt. Haridwar	16	117	132	113	73	52	238	47.32
%	3.18	23.26	26.24	22.47	14.51	10.34	--	--

7.3.7 Human Resource Potential

The demographic scenario of Haridwar District, shows a sparsely settled area, with sex ratio of 10:8.46. The SC & ST component of the population occupies a small proportion of 21.8%, while Growth in Literacy rate is good. During 1981, literacy rate was 33.6% which rose to 39.3%.

- * The human resource potential of Haridwar Distt., therefore, may be identified in terms of a growing literate population.
- * The improvement in Literacy standards, with a growing skilled workforce which can be instrumental in the development endeavours. Therefore, efforts literacy become imperative in this context/
- * Efforts towards human resource development will also entail the diversification of economic activities in all model settlements.
- * Higher Level of employment is evident in Roorkee, Bahadrabad Blocks.
- * Development in employment opportunities in other blocks will be expected to bring about a faster growth in the district.
- * An occupational shift towards secondary and tertiary sectors envisages an economic development. Therefore, a literate of higher skilled workforce will pave the way for a high level of district development.

7.4 SETTLEMENT SCENARIO

(With Haridwar district comprising of 69.04% of rural population, Urbanisation is limited to certain pockets only. Settlement structure is scattered and the number of settlements in various blocks varies with area. Human settlements distributed over space, form one of the most crucial aspects of human organization, thus, a study of human settlements in its totality becomes imperative for future planning of human activities in space (R.C. Gupta).

7.4.1 Settlement Distribution

The settlement distribution of Haridwar district has greatly been influenced by the fertility of land, which has resulted in a scattered distribution of settlements, with a little tendency towards clustering.)

There are 627 settlements in total, of which 503 settlements are inhabited

and 127 uninhabited. There are 8 urban centres/Towns as per 1991 census. Out of the 503 inhabited settlements, 75.15% (378) have a population of 500 and above. The details of various settlements with population range / distribution have been given in the tables.

7.4.2 Settlement Density

The distribution of settlements in Haridwar district shows that how density of settlements in Haridwar district is 564 persons/sq.km. The highest density is 661 P/sq.km. in Roorkee Block, due to accessibility, infrastructure facilities and economic opportunities etc. The settlements density of various blocks is shown in the table.

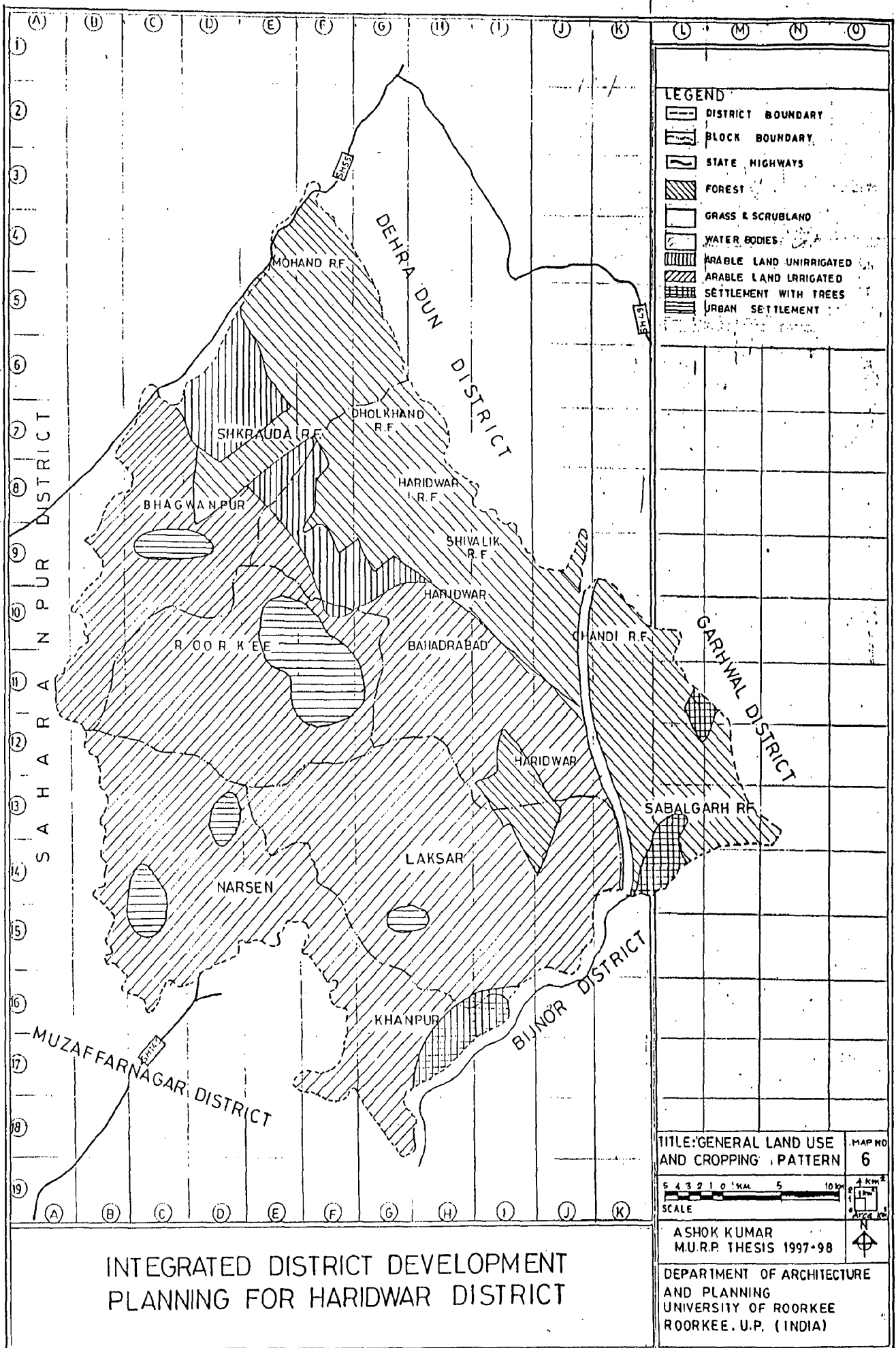
7.4.3 Growth of Settlements

(Growth of settlements over time is a function of many factors in a given social system relating to economic development of the area, availability of facilities and connectivity, thereby leading to migration and eventual growth (R.C. Gupta).)

Over the past decade (1981-91) a high degree of variations in growth rate of settlements has been a characteristics feature of Haridwar District, where growth rates in the settlements varied between 21.6% in Bhagwanpur Block and 43.4% in Narsan. Whereas a negative growth rate to the tune of -7.6% is in Laksar Block. The growth of settlements in different blocks is shown in the table.

The settlement system of Haridwar Distt. shows a distinct pattern of growth along. Three axis Major Axis lies along SH-45 in Roorkee, Bahadrabad and Narsan and Railway line along Laksar Block. Minor axis lies along State Highway Delhi-Dehradun-Mussuorie.

- * Urban status of Roorkee and Haridwar towns have been instrumental in attracting economic activities having maximum number of amenities among all settlements in the district.



INTEGRATED DISTRICT DEVELOPMENT
PLANNING FOR HARIDWAR DISTRICT

TITLE: GENERAL LAND USE AND CROPPING PATTERN
MAP NO 6

5 4 3 2 1 0 1 2 3 4 5 10 km
SCALE

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- * Fallow Land
- * Other Fallows
- * Waste land (culturable waste)
- * Land put to non-agricultural use
- * Permanent Pastures
- * Land under trees and groves
- * Net Sown Area

Out of the total area 190849 Ha of the district, 121210 Ha (63.52%) is reported to be Net Sown Area. The area under forests in the district is 43,388 Ha, in which 32078 is Reserved Forests (RF) and 11310 Ha is unreserved forests which is 22.7% of the total area of the district. Forest village occupy 100% area under forests. In blocks, Bahadrabad block has maximum area under forests 20.52%. whereas Roorkee and Narsan blocks have zero %. Other land use percentages have been given in table.

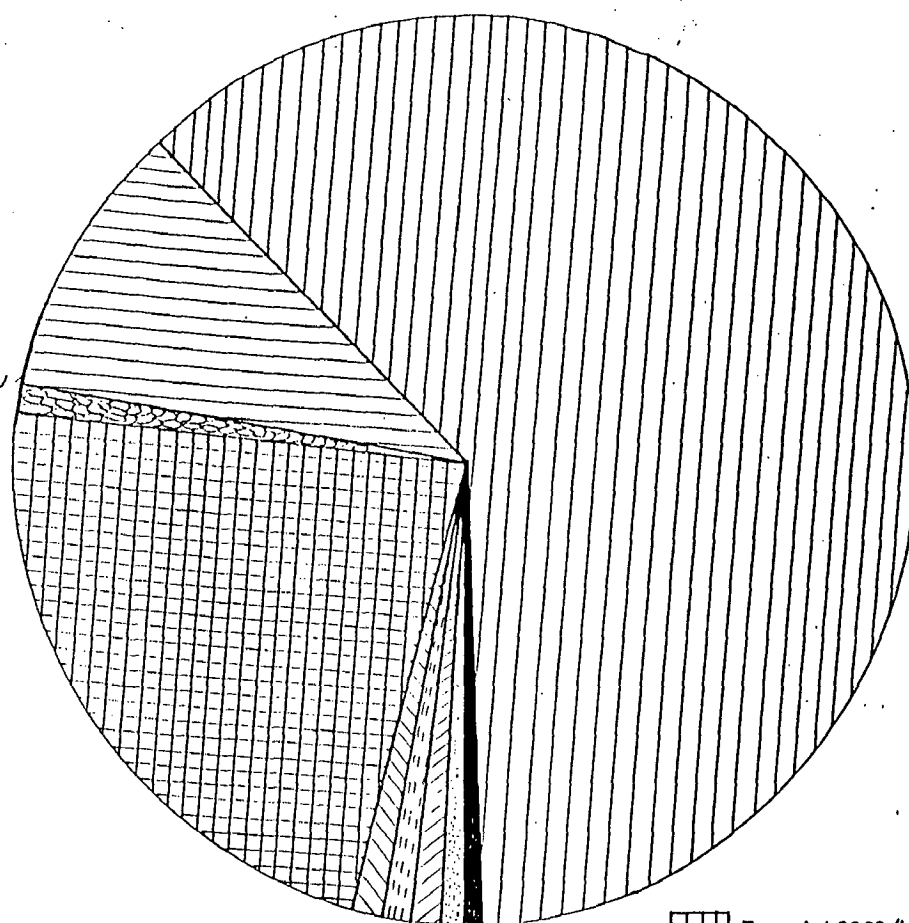
7.5.2 Agriculture

The Haridwar district is dominated by agriculture sector. From the total area under crops in Haridwar district the total cropped area is divided into two categories.

- i) Area under food crops,
- ii) Area under non-food crops 85506 Ha (59.44%) of the area is under food crops and the remaining is under non-food crops and the remaining is under non-food crops including sugarcane 58041 Ha (40.349%). The area under various crops, Net sown area, Gross cropped area etc. have been shown in the table.

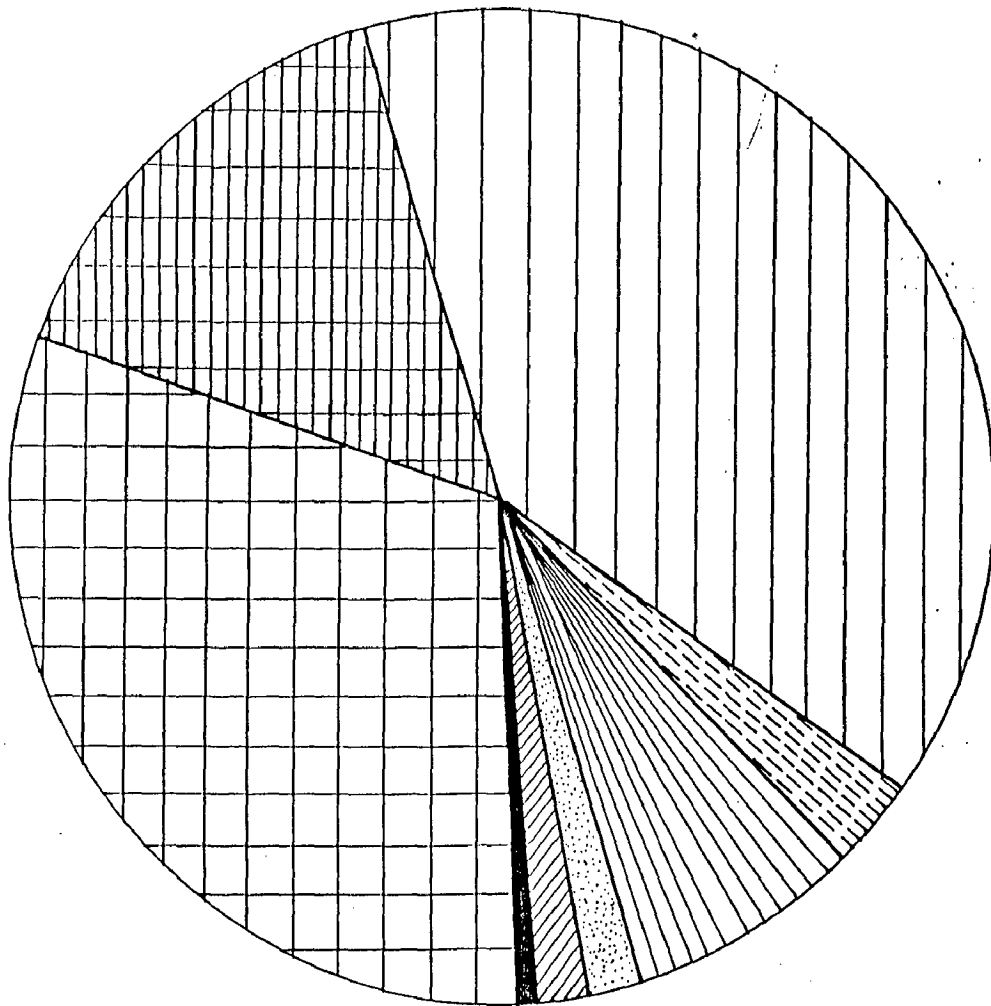
7.5.2.1 Cropping Pattern and Production

There are two cropping seasons viz. Kharif and Rabi Kharif season begins from the month of June during which food crops like wheat, barley, ginger, etc. grow. The harvesting season starts at the end of monsoon season. Rabi season starts at the beginning of winter. The food crops are rice, maize, potato, mustard, gram etc. and the harvesting period is the months of March and April.











	Forest 43388 (Ha)
	Current Fallow Land 3266(Ha)
	Land put to Non Agri.use 14471(Ha)
	Net Sown Area 121210 (Ha)
	Permanent Pastures 95 (Ha)
	Land Under Trees & Groves 882(Ha)
	Waste Land 2077 (Ha)
	Barren Land 2594(Ha)
	Fallow Land 2866(Ha)
Net Area 190847(Ha)	

FIG752:LAND UTILIZATION PATTERN IN DISTRICT HARIDWAR



LEGEND :-

	Wheat	46807 Ha
	Rice	20462 Ha
	Sugarcane	58041 Ha
	Malze	4147 Ha
	Pulses	7507 Ha
	Groundnut	2417 Ha
	Cotton	299 Ha
	Other crops	4166 Ha

TOTAL - 143846 Ha

Fig.75.2: LAND UNDER MAJOR CROPS (Ha) : 1991 - 92

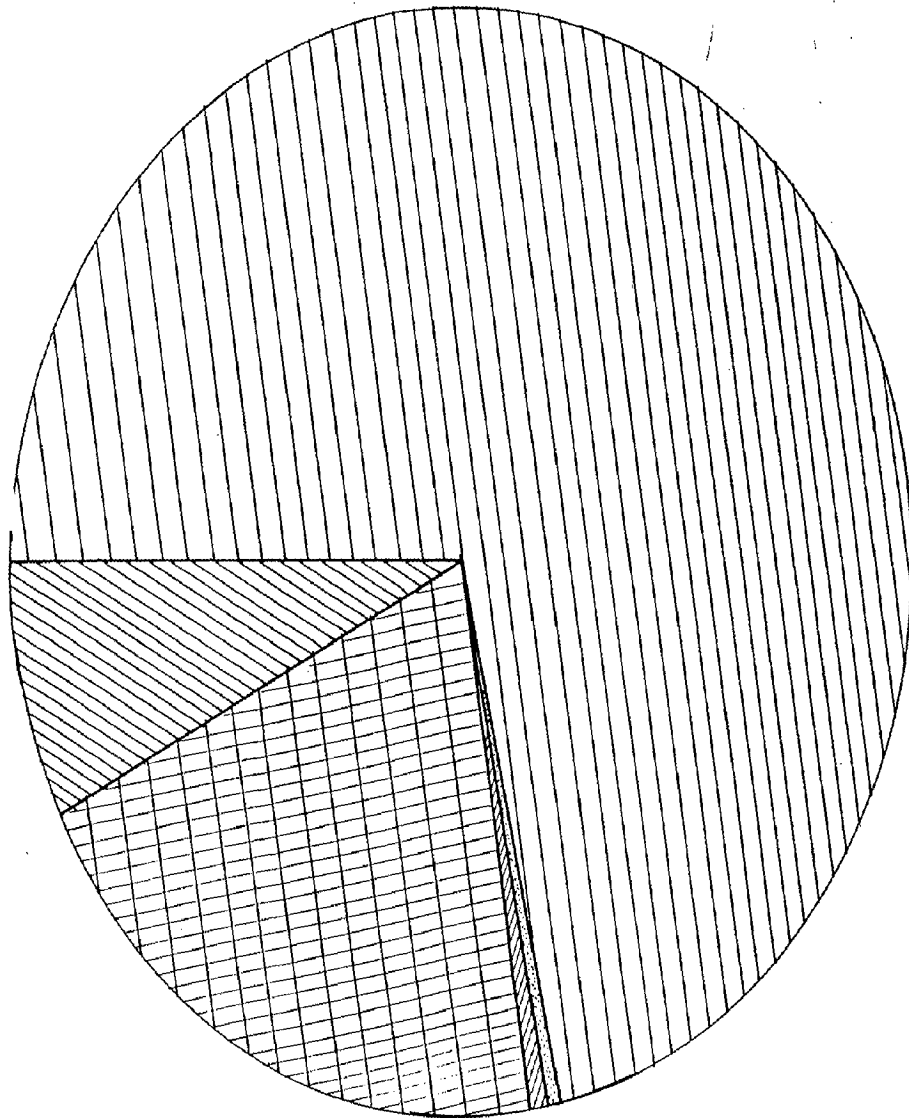


FIG.754: SOURCE OF IRRIGATION & IRRIGATED AREA(Ha)- 1991-92

Table 7.5.1 : Level of Agricultural Development in Haridwar District (1991)

Block	Net Irrigation		Cropping Intensity		Net Area sown		Level of Development	
	In Ha	Rank	In Ha	Rank	In Ha	Rank	Rank	Status
Bhagwanpur	14320	3	1.47	2	25056	5	10	Medium
Narsan	18688	5	1.489	4	22125	3	12	Medium
Roorkee	13248	2	1.499	5	16902	2	9	Low
Bahadrabad	19060	6	1.545	6	26575	6	18	High
Laksar	15377	4	1.496	3	20349	4	11	Medium
Khanpur	4931	1	1.37	1	9674	1	3	Very Low

7.5.4 Animal Husbandry

Animal Husbandry represents an alternative to agriculture which has developed in response to the adverse topographical and climatic conditions in the region and the district. The importance of animal husbandry can be judged by the fact that livestock including poultry represents an important source of livelihood for villagers as well as the district as a whole in terms of milk, milk products, eggs, meat, cowdung fertilizers etc. As per 1987 counting, 142842 cow family, animals are there, in which 46717 milk producing cows and 55334 oxen. Used for ploughing and transporting. There are 180420 Buffalo family animals in which 86243 milk producing Buffaloes and 24632 he-buffaloes used for transportation. Also there were 6029 sheeps, 2309 he-goats and goats, 2309 horses, 11536 pigs and 33220 other animals.

During 1992-93, the district had 16 veterinary hospitals, 15 animals development centres etc. 16 Maternity centres, 15 sub-centres and one poultry unit etc. 99673 one day chickens and 3600 chickens of four to 6 weeks were distributed.

7.5.5 Levels of Agricultural Development

To gain a factual insight to the existing inter-block level disparities, the following parameters have been selected :

- a) Net Irrigated Area
- b) Cropping Intensity
- c) Net Sown Area per agricultural worker.

To assess the relative agricultural development of the block, the Ranking Method has been used in which all the blocks have been ranked in the descending order of their respective value of parameters. These ranks are added and final levels of development have been identified.

7.6 INDUSTRIES

Industrialisation in the modern context of development endeavours is considered to be the backbone of the overall economic development of an area, settlement, district and the state. In this context, therefore, it becomes necessary to do the detailed analysis of industrial scenario of Haridwar district for a thorough understanding of the overall process of development. The state government of Uttar Pradesh has taken up drastic measures in promoting industrial development as training programmes for entrepreneurs, provisions of generating sets, reduction in sales-tax etc.

There is a need to promote small scale household manufacturing industries having great potential for employment generation. With the incentives presently made available by the state government to the entrepreneurs, the future growth of industrial sector would subsequently play a crucial role in the overall development of district.

7.6.1 Location and Type of Industries, Employment and Revenue Generated

Bharat Heavy Electricals Limited (BHEL) and Central Freezing Plant are located in Notified Area, BHEL, Ranipur, Haridwar, where Electricals equipments are manufactured and are classified as large scale Industries. Other industrial area is in Roorkee producing Electronic goods, Drawing and Survey instruments, etc. which are small scale industrial units.

In all, there were 3550 industrial units located in the district providing employment to 13629 people during 1992-93. According to Industrial Act 1948, 67 factories are registered where 8546 people/workers are working. During 1992-93, 55321 Lakhs revenue was generated. In 6 industrial estates, 29 sheds and 749 plots were unoccupied. In 29 sheds and 176 plots, 2045 people were employed and 416 Lakh rupees revenue was generated.

7.6.2 Identification of Nodal Industrial Settlements

It has been identified from the data sources that some settlements have

high workforce in the non-household industries having considerable industrial development prospects, which may be identified as nodes. Khanpur Block has maximum number of main workers 32.3%, while Bahadrabad and Laksar blocks have 30% main workers from the total population as per 1991 census, followed by Bhagwanpur 29.5%, Narsan 29.2%, Roorkee 27.9%. The workforce in household industries shows that, Roorkee block has maximum number of workers i.e 2.5% of the total workers 329532 (main workers 322713 and marginal workers 6819) while Narsan has 2.3% followed by Bhagwanpur 2.2%, Bahadrabad and Laksar 1.3% each and minimum number of workers are in Khanpur block 0.5% of the total workers (Main and Marginals).

Thus, it has been suggested that, as a measure of decentralised planning, smaller and less developed settlements need to be brought under the ambit of developmental endeavours to make them capable of sustaining the momentum of growth. So those settlements that have over 5% of its workforce as secondary sector workers have been earmarked as potential future nodes. The settlements with over 10% of secondary sectors accompanied by a high growth rate have been identified as established industrial nodes capable of sustaining an increased growth momentum in the form of secondary and tertiary sector employment.

7.6.3 Levels of Industrial Development

The industrial sector development contributes considerably for the economic growth. Thus, determination of the levels of industrial development over space becomes a necessary exercise for intra-district comparison as well as consequent policy options. The levels of industrial development in Haridwar district have been determined blockwise with the help of the following parameters:

- i) Percentage of main workers engaged in secondary sector.
- ii) Percentage of total settlements with more than 5% secondary sector workers.

These values have been ranked in an ascending order of importance and the cumulative rank has been considered as the final level of industrial development (Prof.R.C. Gupta). Bahadrabad Block, therefore, emerges as the most industrially developed block followed by Narsan and Roorkee, both having high level of development. Laksar shows a medium level of development. The rest of the blocks show a considerably lower level of industrial development.

Table 7.6.1 : Levels of Industrial Development

Block	% of Secondary Sector workers	% of villages & urban area with 75% Secondary Sector Workers			Cumulative Ranks	Status
		Rank	Rank	Rank		
Bhagwanpur	6.22	2	3.45	1	3	Low
Narsan	12.953	5	22.31	6	1	High
Roorkee	10.82	5	17.69	5	10	High
Bahadrabad	5.92	2	4.58	2	4	Low
Laksar	7.08	4	7.44	4	8	Medium
Khanpur	1.62	1	5.77	3	4	Low

The following table shows the level of industrial development in each block. Haridwar district, therefore, shows an inter-block disparity in the level of industrial development.

7.6.4 Industrial Infrastructure

Provision of adequate industrial infrastructure facilities is as crucial a factor in the location and efficient functioning of industries as procurement of raw

materials, production of quality products and marketing of finished goods. Provision of amenities like electricity, transport and communication, water etc. is also an important factor for location of factories.

Haridwar district has a concentration of small and large scale industries in industrial estates viz. Roorkee and Ranipur, Haridwar BHEL industrial area. Roorkee industrial estate has been established because of the large potential in Scientific and Technical instruments, Bharat Heavy Electricals Limited (BHEL), Ranipur with adequate industrial infrastructure linked with State Highways.

7.6.5 Emerging Issues

The industrial development of Haridwar district shows that rural industries as one of the important components of integrated rural development to tackle the problem of rural poverty and unemployment need to be promoted. The main objectives of the industrial development in the district development plan would be i) to promote small scale industries to optimise the use of locally available resources; ii) to enhance productive efficiency and income potentiality of rural artisans by developing artisan and other household industries, to make each family an economically viable unit; iii) greater and more efficient utilization of available physical, human and investment resources; iv) expansion and diversification of employment; v) location of industries in a manner which will lead to the dispersal of services and availabilities all over the district; vi) more equitable distribution of raw materials.

7.7 INFRASTRUCTURE

Infrastructure development is considered to be an essential tool for achieving economic and social development of an area. Thus, the study of available infrastructure facilities is a crucial factor in determining the level of overall development and identifying the lacunae that need to be rectified (Prof. R.C. Gupta). Various components of physical, social, and economic infrastructure development in Haridwar district have been discussed below.

7.7.1 Physical Infrastructure

Physical infrastructure includes Transportation, Electricity, Drinking Water.

i) Transportation

Transportation network plays an important and multipurpose role in the process of development by enabling the movement of people, raw material and finished products. Adequate provision of transport facilities is of basic importance to the allround economic development of any part of the country, be it a town, district, or a village.

Roads and Railways are the major means of transportation in Haridwar district. State Public Works Department (UPPWD) covers all the works of roads and bridges of the district, and Railways department maintains the Railway tracks. The district has a total length of 994 km of Pucca roads. State PWD maintains 636 km of road, as per 1991 census. Total Rural Road length is 748 Km and Urban Road length is 246 sq.km. Roorkee Block has maximum number of pucca roads, 70.4 km/for every 1000 sq.km. and Khanpur block has minimum number of pucca roads, 188 km/ for every 1000 sq.km. Haridwar district is served by State Highway no. 45, connecting Delhi, Meerut, Muzzafarnagar, Haridwar, Rishikesh etc. Passing through areas of Narsan, Roorkee and Bahadrabad blocks.

As per 1992-93 statistics, there are 14 Railway stations including halts in which 9 are in rural areas and 5 in Urban areas. The district has a total length of Broad Gauge line of 72 km. with 30.1 km line per every 1000 sq.km. Railway line. The details have been shown in the table.

Table 7.7.1 : Pucca Roads and Communication Facilities in Haridwar District.

Sr.No.	Type	
1.0	State District Roads (1990-91)	
1.1	Length (km)	83.00
1.2	% to total Pucca Roads	8.48
2.0	Other Pucca Roads of District	
2.1	Length (km)	896.00
2.2	% of total Pucca Roads	91.52
3.0	Post Offices (1991-92)	
3.1	Total Number	125
3.2	Post Office per Lakh Population	11.00
4.0	Post Offices in Rural Areas (91-92)	
4.1	Total Number	82
4.2	No. per Lakh Population	10.60
5.0	Telephone Connections (1991-92)	
5.1	Total Number	3424
5.2	No. per Lakh Population	304.50

Source : District Statistics Report (1993-94)

ii) Electricity

Electricity plays an important role for the economic development. In Haridwar district, electricity is produced on Ganga Canal at Bahadrabad and Mohammadpur Power houses. During 1992-93 there were 15 Electric Station/Sub station working which are of 100 MVA capacity. Upto 1992-93, 403 villages (80.1%) were electrified, with 94% villages in Laksar Block, as the maximum and 19.1% in Khanpur Block as the minimum. Table shows the use of electricity in different uses. It shows that 31.4% in Agriculture

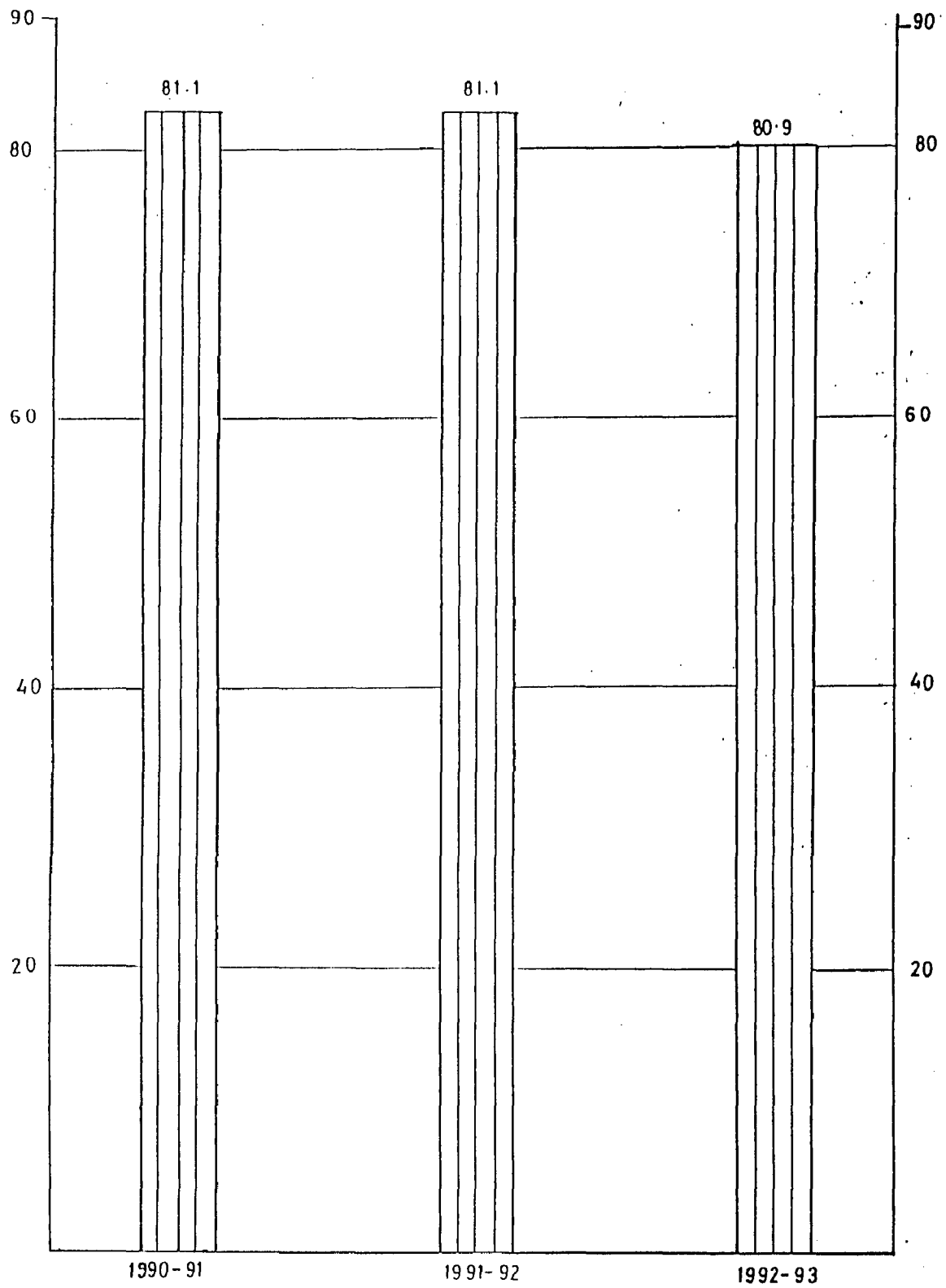


FIG.7.71: PERCENTAGE OF ELETRIFIED VILLAGES TO TOTALINHABITED IN DISTRICT HARIDWAR

sector, 31.0% in household sector, 30.8% electricity has been used. Electricity used per capita is 312.0 Killowatt Per hour.

Table 7.7.2 : Electricity Use in Haridwar District

Type	Electricity Used (Thousand Kilowatt)		Electricity Used (%)	
	1991-92	1992-93	Haridwar	
1.	2	3	4	5
1.	Household and Residential use	150572	108636	31.0
2.	Commercial use	18196	14761	4.2
3.	Industrial Use	128285	108079	30.8
4.	Office use	1413	2218	0.6
5.	Rail/Traction	-	2846	0.8
6.	Agriculture Use	99044	110124	31.4
7.	Infrastructure Use	4434	4134	1.2
Total		4019144	350798	100.0

Source : District Statistics Report (1993-94)

iii) Water Supply (Drinking Water)

Provisions of safe and good quality drinking water is one of the most important facilities for a healthy population. As per 1992-93 statistics 142 villages had Handpumps and 351 villages had drinking water facility with Tap/Handpump India Mark-2, 28 villages of Bahadrabad block with 35856 population, 8 villages of Roorkee Block with 12594 population, 3 villages of

Bhagwanpur Block with 3844 population have been provided drinking water Taps. There are 10 Tubewells and 30 other sources having a capacity of 3301 Kilolitre. 7 Urban areas with population of 243976 have been provided Tap drinking water supply.

7.7.2 Social Infrastructure

Provision of adequate social facilities for the people has been accepted as a constitutional goal and Planning Commission has also emphasized the need for provision of these facilities under the Minimum Needs Programme (MNP). Social infrastructure here, includes Education, Health etc.

i) Education

Provision of education facilities is one of the most important inputs for social upliftment, poverty alleviation, skilled human resource development etc. Thus, educational facilities starting from - the primary school to specialized training centres is an urgent step towards a better future and social upliftment. Haridwar district has 698 Junior Basic schools in which 515 are located in rural areas and 183 in Urban areas as per 1992-93 statistics. There are 148 Senior Basic schools, in which 92 are located in rural areas and 56 in Urban areas. 28 S.B. schools are for girls in which 16 are located in rural and 12 in Urban areas. There are 49 high schools and intermediate schools of these 10 are for girls located in Urban areas, 22 schools are located in rural areas and 27 in Urban areas. As per 1992-93 statistics, district has 7 colleges in which only one Agriculture college is located in rural areas. There are two Universities; one at Haridwar, Gurukul Kangri University, and one at Roorkee, University of Roorkee.

As per 1992-93 statistics, there are 62.1 Junior Basic Schools per lakh population, 13.2 Senior Basic Schools, 4.4 Hr. Secondary school and 0.6 Degree Colleges per lakh population. 85762 Boy students were studying in Junior Basic Schools, in which 15598 (18.2%) students are of SC/ST. There were 49881 girl students in which 7559 (15.2%) belonging to SC/ST. 73.3% boy students of rural areas and 26.7% of Urban areas. 65.8% girl students

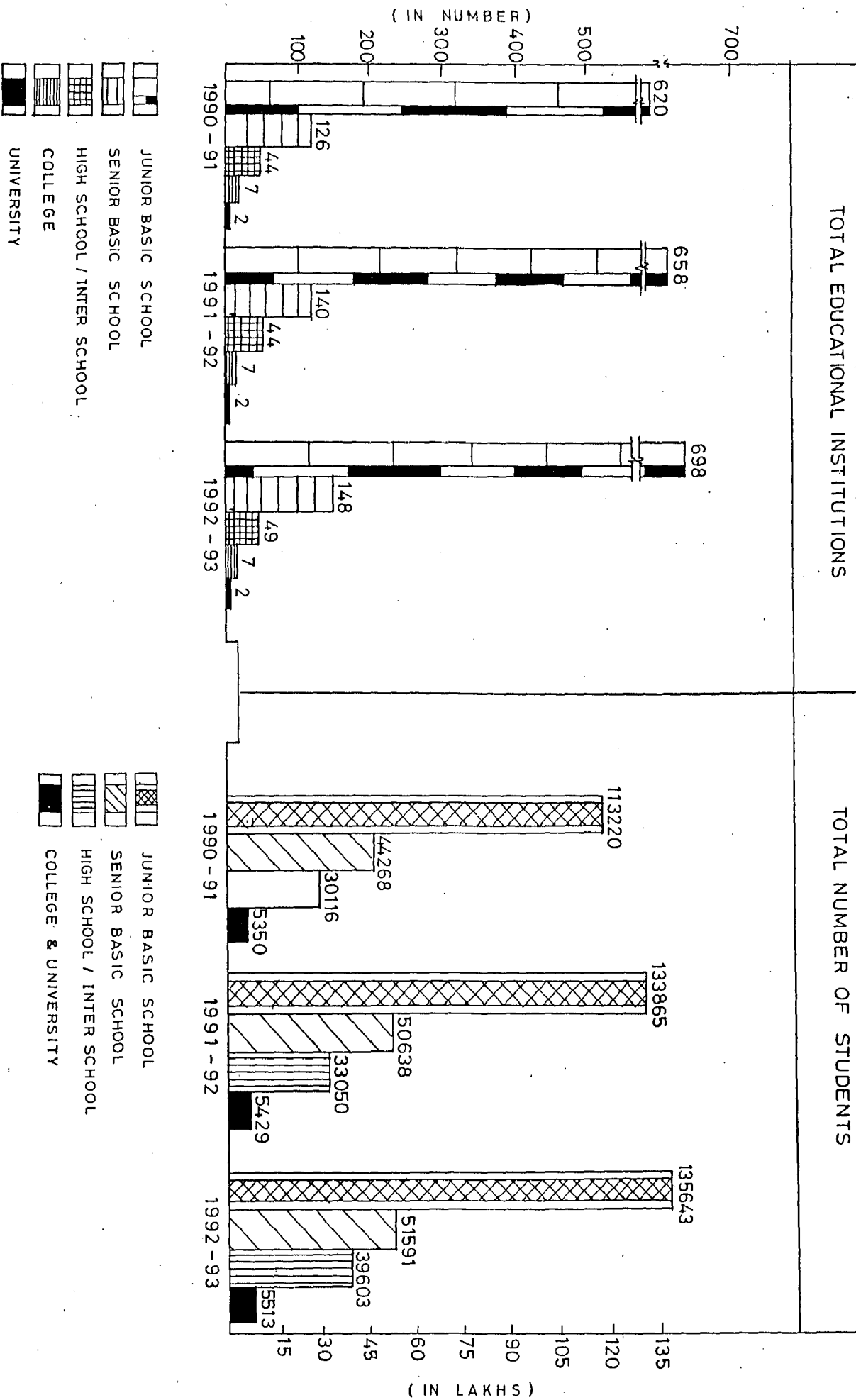
of rural and 34.8% of Urban areas. 36055 students were studying in Senior Basic Schools in the district in which 38.2% students from Urban areas and 61.% from rural areas. 26033 students were studying in Hr. secondary, of which 64.6% students from Urban areas and 35.4% students from rural areas.

Table 7.7.3 : Comparison of Educational Facilities in Haridwar District With Uttar Pradesh (1991-92)

Sr.No.	Name	Haridwar Distt.	U.P.
1.0	No. of Schools per Lakh Population		
1.1	Junior Basic Schools	58.5	55.7
1.2	Senior Basic Schools	13.2	10.7
1.3	Hr. Secondary Schools	3.9	4.4
1.4	Degree Colleges	0.6	0.3
2.0	Teacher-Students Ratio		
2.1	Junior Basic Schools	47.5	55.3
2.2	Senior Basic Schools	54.5	36.1
2.3	Hr. Secondary Schools	25.8	49.6
2.4	Degree Colleges	56.6	Not Available
3.0	Polytechnic	1	81
4.0	Students capacity in Polytechnic		
4.1	Total Strength (No.)	180	7615
4.2	Number Per Lakh Population	16.0	5.5
5.0	Industrial Training Institute (ITI)	2	215
6.0	Students Capacity in ITI		
6.1	Total Strength (No.)	472	52084
6.2	Strength per Lakh population	42.0	37.4

Source : District Statistics Report (1993-94)

FIG. 7.7.2 : TOTAL NUMBER OF EDUCATIONAL INSTITUTES AND STUDENTS IN HARIDWAR DISTT.



There were 2185 students in degree colleges where 83.4% from Urban and 16.6% students from rural areas. As per 1992-93 statistics, Ratio of Teacher and student was, 49.2 in Junior Basic School, 66.6 in Senior Basic School, 29.1 in Hr. Secondary School and 50.6 in Degree Colleges.

In Haridwar district, Informal Education in assistance of Central Government is being given to those children in the age group of 914 who are poor and due to some other circumstances could not complete Primary and Middle School education. There are 400 such Informal Education Centres.

The district has two Government Ayurvedic colleges in which admission is sought through C.P.M.T. As per 1992-93, there are two Teachers Training Institutes as well.

ii) Health

Provision of health facilities is also considered to be one of the most important inputs for human and economic development. It is the responsibility of the state government to create and maintain Medical Health facilities and eradicate diseases. Under the minimum Needs Programme (MNP) certain Norms have been evolved by Planning Commission to provide Medical and Health facilities for all. During 1993-94, 63.71 Lakh rupees were spent for Medical and Health, in District Plan. The district has 9 Govt. Hospitals. Out of 27 hospitals and Medical centres, one is in Bahadrabad block and 26 are in Urban areas. As per 1992-93 statistics, 20 Family and Mother-Child care centres and 139 Sub-centres were located in rural areas. 14 Family and Mother child care centres were located in rural areas and 6 in urban areas. Out of 17 Ayurvedic hospitals and medical centres, 13 were in rural areas and 4 were in Urban areas as per 1992-93. The district has 4.7 Hospitals (Allopathic)/Primary Health Centres per lakh population.

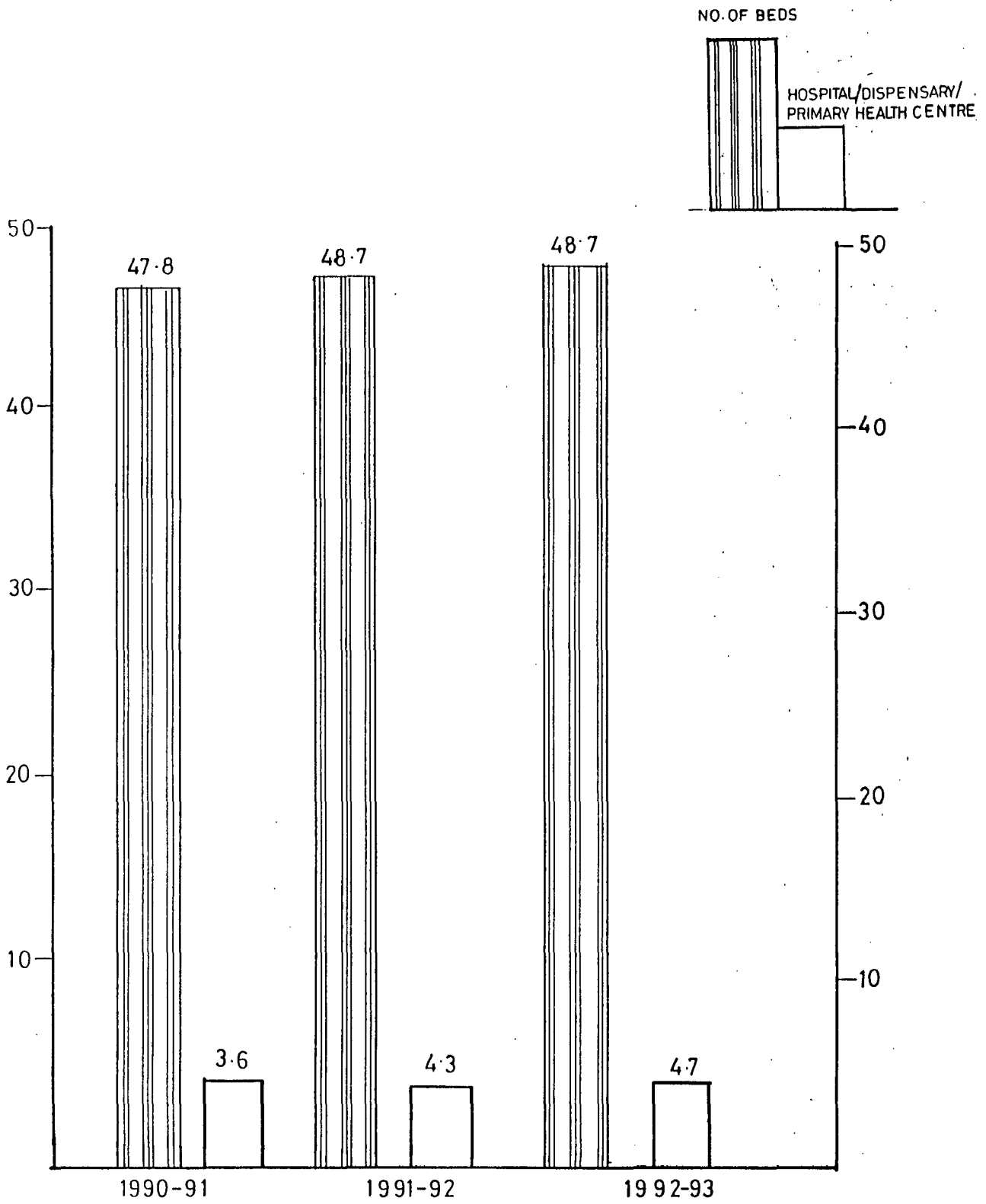


FIG.7.73: NO. OF HOSPITAL/DISPENSARY/P.H.C. PER LAKH POPULATION IN HARIDWAR DISTRICT

Table 7.7.4 : Comparison of Available Medical Facilities in Haridwar District to U.P.

Sr.No.	Name	Unit	Haridwar	Uttar Pradesh
1.0	Health Facilities per Lakh Popn..			
1.1	Allopathic Hospitals/ Medical centre/Primary Health Centre	No.	4.3	3.4
1.2	Beds	No.	48.7	42.9
1.3	Doctors		6.4	7.2
1.4	Paramedical staff		21.2	19.7
2.0	Family & Mother-Child Welfare centre/subCentre per Average Population		7072	Not Available
3.0	Per Lakh Population			
3.1	Ayurvedic Yunani Hospitals	No.	1.9	1.6
3.2	Beds	No.	28.8	7.3
3.3	Doctors	No.	5.9	1.7
4.0	Per Lakh Population			
4.1	All types of Medical Facilities	No.	6.4	5.7
4.2	Beds	No.	77.6	50.6
4.3	Doctors	No.	12.5	9.7

Source : District Statistics Report (1993-94)

7.7.3 Economic Infrastructure

Provision of economic infrastructure is a pre-requisite for accelerating the pace of development and is one of the most important aspects of overall

district development. Economic infrastructure here includes Banking and cooperative facilities etc.

i) Banking

Extension of the banking facilities in rural areas is necessary not only for supplying credit to small and marginal farmers and other weaker sections of the village communities but also to tap savings from the rural areas for provision of capital for further developmental programmes of the district.

Table 7.7.5 : Money Deposited in Bank and Loan Distributed (in 000Rs.)

Sr.No.	Name	1991	1992	1993
1.	2	3	4	5
1.0	Money Deposited	3511379	3977948	4355229
2.0	Total Loan Distribution	1230846	118066	1032414
3.0	% of Loan Distribution to Total Money Deposited	3.50	28.1	23.7
4.0	Loan Distribution in Primary Sector			
4.1	Agriculture and Agriculture related works	233792	293737	332500
4.2	Small Scale Industries	113218	127488	129652
4.3	Other Primary Banks	128594	133834	126927
5.0	% of Primary Sector to Total Loan distribution	38.7	49.1	57.1
6.0	Money Deposited Per head	3127	3547	3873
7.0	Loan Distribution per head	1096	997	918
8.0	Loan Distribution per head in Primary Sector	424	490	524

Source : District Statistics Report (1993-94)

As per 1992-93 statistics, the district has 82 branches of nationalised banks, one branch of Regional Rural Bank and 2 branches of Non-Nationalised Banks. In all, there are 85 banks, in which 32(37.6%) are located in rural areas and 53 (62.4%) in Urban areas.

Thus, it is clear from the table that, there was an increase of money deposited of 9.4% in 1993 from 1992 and decrease of 7.7% in Loan distribution. The percentage of Loan distribution from the deposited money was less by 15.6% in 1993 compared to 1992, but loan distribution in Primary sector was 6.1% more in 1993 as compared to 1992.

ii) Cooperatives

The role of cooperatives is increasing day by day for general economics development particularly of rural areas in the district. Cooperatives have contributed a key role in the development of Agriculture and allied activity plans.

As per 1992-93 statistics, the district had 10 branches of co-operative banks having 975 members, and 3 branches of Land development banks having 6288 members. The district has a combined Agriculture committee with 200 members having 400 Ha area and 3 sugarcane cooperative committees having 63825 members.

7.7.4 Levels of Infrastructure Development and Emerging Issues

The availability of basic amenities and facilities is an important factor in sustaining the growth momentum, thereby necessitating a spatial comparison in the study area. Inputs for the development of the sectors of economy can be maintained only with an adequate infrastructural support. Thus, the level of infrastructure development (high, moderate or less) becomes necessary as a prelude to infrastructure planning.

For a general assessment of blockwise levels of infrastructure development in Haridwar district, the following parameters have been taken into consideration for physical, social and economic infrastructure as suggested

by Prof. R.C. Gupta, Sh. R.P. Misra and Dr. K.V. Sundaram.

- * Road Length/100 sq. km.
- * Percentage of villages with adequate drinking water supply.
- * Percentage of Electrified villages.
- * Number of educational facilities/100 sq.km;
- * Number of health facilities/100 sq.km;
- * Number of Banks/100 sq.km;

In addition to above, the Norms for infrastructure facilities at District Level specified in VIth Five Year Plane by Govt. of India, have also been taken into consideration. These parameters have been ranked in the ascending order of importance and the cumulative ranks have been considered as the final levels of infrastructural development. Bahadrabad block has emerged as the most developed block followed by Roorkee and Narsan as 2nd 3rd most developed blocks. Laksar and Bhagwanpur is the lowest developed block in the district. Thus, an effort to achieve an overall district development has been made in the provision of adequate infrastructural facilities required for different blocks to remove inter-block disparities.

7.8 TOURISM

Tourism industry plays an important role for the promotion of economy of any region/district. It not only contributes a substantial share to the overall revenue generated in a region but also generates a large amount of employment.

7.8.1 Tourism Resource Inventory

Uttar Pradesh is one of the states of India which has many beautiful scenic as well as religions places and there has been a lot of influx of Indian and Foreign Tourists to various places in Uttar Pradesh. Haridwar district is one of the districts in U.P. where it has a tremendous scope for the promotion of tourism industry. Haridwar District is the gateway to the religions places like Haridwar, Kedarnath, Badrinath, tourist spots like Mussorie, Dhanolti, Kempty falls etc. Haridwar is a major place for pilgrims. Another major place

of tourists interest is Piran-Kaliyar near Roorkee where people from different religions come from different parts of the world particularly all Arab countries.

The major attraction of this place is a Mela (Fair) during the months of July-August every year, after Id-UI-Juha. The biggest crowd generally is gathered on Id-E-Milad in which about 10 to 12 Lakhs people from various corners of India and abroad visit the Holy shrine of - Hazarat Mohammed and offer prayers.

7.8.2 Tourist Flow

The total visiting tourists for different year are 39, 16, 291 in 1981, 45, 89, 653 in 1986, 58, 97, 288 in 1991 and 72, 34, 124 in 1996. Monthwise tourists population shows that, the tourists population increases during January to July and there after decreases will December. It is maximum in the month of June except during Ardh Kumbh and Purna Kumbh.

The year 1998, will be another attraction of the century, where **over one crore** pilgrims from all over the country are expected to visit this holy town on the banks of the Ganga for the last Kumbh of the millennium, the **Purna Kumbh**. It is scheduled to take place from January 1, 98 to April 30, 1998. Traditionally, Purna Kumbh and Ardh Kumbh are held in Haridwar in 12 yearly and six-yearly circles, respectively. The previous Purna Kumbh mela was held in 1986 and Ardh Kumbh in 1992. According to Hindu mythology, the Kumbh takes place on the banks of Ganga because Jayant, the son of rain god Indra, who was pursued around the earth for 12 days by asuras (demons) hid the amrit kalash (vessel containing the nectar of immortality) from them.

The mains bathing days during the Kumbh are April 13 (Baisakhi day) and April 14, while other days considered auspicious are January 1, Jan. 14, Feb. 1, Feb. 25, March 25 and 28. On these days, the five lakh population of the town is expected to swell by millions. Such a huge gathering of people from different backgrounds will pose a threat to law and order, and infrastructure. Besides the Kumbh, there are so many other parvas and fairs

which attract the tourists and these are Shiva Ratri, Baisakh Purnima, Chaitra Amavasya, Baisakh Akadashi, Mesh Sankranti, Baisakh Amavasya, Ram Navami etc. Thus, it is clear that Kumbh attracts the maximum number of pilgrims and needs some special arrangements, infrastructural and community facilities.

7.8.3 Tourism Infrastructure

Haridwar being a pilgrimage town, has Hotels, Dharmshalas, Ashrams, Guest Houses etc. All Dharamshalas charge a very nominal rent which varies from Rs. 25/- to Rs. 100/- depending upon the facilities available. Ashrams give free accommodation to their followers, Dharmshalas accommodate about 60%, Ashrams about 20%, Hotels, 18% and Guest Houses accommodate about 2%. Thus, the maximum percentage of tourists stay in Dharamshalas, followed by Ashrams, Hotels, etc. But due to the floating population there is a pressure on land. Residential areas are congested with various mixed activities. For catering the needs of the increased population, commercial activities are coming up. Commercial activities also concentrate along the vehicular spine. There is impact on community facilities due to ever increasing floating population and permanent population and we find that the community facilities are far less than the required. Major problem is the volume of traffic, which is hapazard and highly congested due to encroachment of shops on the roads and public spaces, and narrow width of roads.

7.8.4 Development Potential for Tourism and Emerging Issues

Since Tourism has a great potential in Haridwar it is facing many problems. Firstly, the tourist spot of Piran-Kaliyar is a seasonal activity where lakhs of people visit the place only once in an year but due to the lack of infrastructure facilities in this place there are always health hazards. Place becomes too congested. There are no provisions of permanent shelter, Dharamshalas, Guest Houses etc., toilets, no adequate drinking water supply, no health facilities, no waste disposal. The natural environment gets

affected by Traffic and crowded population. The Ganga canal passing through Piran - Kaliyar gets polluted because of human excreta since there are no toilets to serve the large influx of people. The temporary provisions of infrastructure facilities are not at all sufficient. This requires an efficient planning which has been covered in the planning proposals of the thesis.

Haridwar also has similar situation. Because of many parvas and fairs which attract lakhs of pilgrims with Kumbh attracting millions of pilgrims, it is very clear that such a huge gathering from different backgrounds poses a great threat to available infrastructure, law and order, which requires an efficient planning effort.

7.9 APPRAISAL OF ONGOING PROGRAMMES AND SCHEMES

An attempt has been made to appraise the ongoing schemes under various sectors viz., agriculture sector schemes, all the social welfare schemes and others listed in the 20-point programme of the district upto Dec., 1996.

Haridwar being a new district, still it has achieved progress in 20 areas as class 'A', in one area as class 'c', and in another area as class 'D' as per 1992-93. 2661 (108.3%) families instead of a target of 2459 families were profited by Integrated Rural Development Programme. 9.13 Lakh people were benefited from Manav Divas (Human Day) Employment Generation. 337 small scale industrial units were established. 5080 Ha of land was irrigated through Minor Irrigation Programme. 59 villages of 54130 population were benefited from pure and safe drinking water supply by Jal Nigam. 39850 children were given Polio, D.P.T. and B.C.G. vaccination to prevent dreaded diseases. 2957 Men/women were operated for family planning. 2848 families were given financial assistance through the sterilization programme. 255 families were given House plots. 765 families of EWS category were given houses. 166 families were given houses through Indira Awas Yozana. 37.11 Lakh plants were planted as a forestation measure. 3 villages were electrified. 167 Bio gas plants were established through Non-conventional Energy sources programme. 1440 Chullahs were distributed through Rural

Development Department. Rs. 930.25 Lakhs were deposited in National Savings programme.

I) District Sector Plan

Decentralized Planning was used to remove inter-district disparities and 70% of the total outlay for state sector and 30% of the outlay was put for the district sector plan as per 1982-83. For 1992-93, the total expenditure under District Sector plan was Rs. 498.5 Lakhs and Rs. 513.7 lakhs were sanctioned for 1993-94. The details of the expenditure for the year 1993-94 for various programmes and schemes are given in the Table 7.9.1.

Table 7.9.1 : District Sector Plan Year 1993-94 (Rs. '000)

Sr.No.	Sector/Deptt.	Year 1992-93	Year 1993-94		
		Expenditure	Approved Money by P.C.	Money Released	Money Received
1	2	3	4	5	6
1.	Agricultural Deptt.	100.0	150.0	150	150
2.	Horticulture Deptt.	175.0	125.0	125	100
3.	Sugar Cane Deptt.	320.0	80.0	80	80
4.	Animal Husbandry Deptt.	950.0	1055.0	1055	1007
5.	Fisheries Deptt.	5.0	75.0	75	75
6.	Forest Deptt.	1865.0	3300.0	3300	3300
7.	Cooperative Deptt.	164.0	221.0	221	221
8.	Rural Development Deptt. (I.R.D.P.)	4346.0	4345.0	4346	4345
9.	Employment Programme (Jawahar Rozgar Programme)	6851.0	6927.0	6927	6927
10.	Land Development Programme	10.0	25.0	25	25
11.	Panchayat Deptt.	287.0	1402.0	1402	1402
12.	Rural Develop. (Building)	248.0	3200.0	3200	3200
13.	Private Minor Irrigation)	70.0	90.0	90	90

Contd..

14. Financial Help to small & marginal farmers	2130.0	1575.0	1575	1575
15. Govt. Minor Irrigation)	2970.0	1585.0	1585	1585
16. Electricity Deptt.	-	200.0	200	200
17. Small scale Industries	737.0	890.0	890	890
18. Silk Industry	100.0	20.0	18	18
19. Village Khadi Industry	-	-	-	-
20. Road & Bridge (P.W.D.)	7500.0	5650.0	4552	4552
21. Transportation (Road)	-	25	25	25
22. Tourism	-	-	-	-
23. General Education	4297.0	4210.0	2336	2336
24. Middle Education	450.0	485.0	470	470
25. State Development cell	235.0	245.0	245	245
26. Sports	30.0	165.0	165	165
27. Apathic Treatment	7640.0	6180.0	6120	5454
28. Ayurvedic Treatment	790.0	1050.0	747	746
29. Homeopathic Treatment	92.0	210.0	171	171
30. Drinking Water Supply (Jal Nigam)	2050.0	2006.0	2006	2006
31. Rural Development Deptt. (Rural Drinking water)	600.0	600.0	600	600
32. Rural Housing (Rural Dev.)	1305.0	1305.0	1250	1250
33. Information Deptt.	30.0	30.0	30.0	30
34. Welfare of SC/ST/BC	727.0	833.0	748	748
35. Labour Welfare (Oldage Pension)	-	1049.0	1049	1049
36. Artisans Training	1740.0	1275.0	-	-
37. Social Welfare	9.0	512.0	512	512
38. Nutrition Deptt.	-	100.0	100	100
Total	49843.00	51371.0	46565	45663

Source : District Statistics Report (1993-94)

II) Poverty Alleviation Programme

In Haridwar district, various poverty alleviation programmes viz. Integrated Rural Development Programme (IRDP), TRYSEM, special component programme etc. are functioning for economic development and social justice.

i) **Training for Rural Youth for Self-Employment (TRYSEM) Plan:** This plan has been functioning since 1980 in the state. Unemployed youths will be made self-reliant through various entrepreneur training programmes under this plan. Table 7.9.2 shows the details.

Table 7.9.2 : Beneficiaries from TRYSEM in Haridwar District

Sr. No.	Type	Year		
		1991-92	1992-93	1993-94
1.	Total No. of Beneficiaries	484	328	396
1.1	S.C. Beneficiary	127	136	167
1.2	S.T. beneficiary	16	17	-
1.3	Other castes beneficiary	341	175	229
1.4	Women Beneficiary	101	54	58
1.5	Provision of Employment	159	77	24
1.6	Provision of salaries	105	86	375
2.	Expenditure (Rs. in Lakhs)	11.57	10.94	7.28
2.1	Expenditure on Scholarship	8.31	5.39	3.07
2.2	Other Expenditure	3.24	5.54	4.21

Source: District Statistics Report (1993-94)

ii) Integrated Rural Development Programme (IRDP)

This programme is functioning in Haridwar district to generate self-employment opportunities for rural families. Table 7.9.3 shows the details of the progress of Integrated Rural Development Programme (IRDP) in Haridwar District.

Table 7.9.3 : Progress of Integrated Rural Development Programme in Haridwar District

Sr.No.	1	Year							
		1990-91		1991-92		1992-93		1993-94	
		T	A	T	A	T	A	T	A
		2	3	4	5	6	7	8	9
1.	Total Beneficiaries	3115	3301	2950	3009	2950	3809	2770	2924
2.	SC Beneficiaries	1869	1990	1770	1775	1448	1556	1426	1545
3.	ST Beneficiaries	-	-	17	17	17	27	14	18
4.	Other Beneficiaries	-	1195	1163	1217	1485	1426	1330	1361
5.	Women Beneficiaries	1246	1276	1183	1205	983	1078	1108	1123
6.	Expenditure (Rs. lakhs)	-	122.77	-	107.62	-	105.94	-	40.46

where, T = Target and A = Achieved

Source : District Statistics Report (1993-94)

iii) Special Component Self-Employment Programme

The details of progress under this plan during 1990-91 to 1993-94 are given in the Table below.

Table 7.9.4 : Progress of Special Component Self Employment Programme in Haridwar District

Sr.No.	Year	Target		Achievement	
		Beneficiary	Loan Distribution (Rs. lakhs)	No. of Beneficiaries	Loan/Subsidy Rs. in Lakhs
1.	1990-91	1000	47.44	950	47.42
2.	1991-92	1081	50.81	1100	52.29
3.	1992-93	1235	54.34	1077	52.54
4.	1993-94	1200	59.40	1222	59.30

Source : District Statistics Report (1993-94)

7.10 EMERGING OVERALL ISSUES, POTENTIALS, THRUST AREAS, NEEDS AND PRIORITIES

The analysis of various physical, social and economic factors has resulted in identification of potential areas and sectors of economy of Haridwar district. Identification of issues, problems and potentials as a concluding part of the comprehensive profile of the district, thus, becomes imperative for devising planning inputs for formulation of Integrated District Development Plan. The major issues identified are:

- i) There is a high level of inter-block disparities in terms of demographic and economic parameters that has been minimised to bring about a balance in population distribution etc.
- ii) A systematic programme for diversification of economy is an important issue that need to be tackled on a planned basis.
- iii) An optimum utilization of the resource endowments in backward and problem areas by introducing cash crop farming and processing activities on an organised scale is a desirable step to achieve a level of economic sustainability. Resource based industries also have been proposed as well.
- iv) Provision of adequate transportation linkages and other infrastructure facilities become imperative for the development process to gain adequate momentum. So efforts have been made to provide required infrastructure facilities in all the villages of the district as per norms suggested by planning commission and C.B.R.I.
- v) The concept of hierarchy of settlements is based on linking each settlement, physically, socially and economically to its next higher and lower wings to achieve overall economic development and social justice.
- vi) It becomes imperative to find out the existing potential of each settlement which will be instrumental in spreading of developmental impulses. Development of Nodal settlements (central villages) service centres, Mandi Towns assumes significance to prioritise the settlement

development programmes for using the potentials to the fullest extent which have been proposed.

- vii) Tourism as an industry has a great potential in the district and needs to be promoted through optimum exploitation of untapped tourist resources and forging inter-district and intra-district linkages in tourism activities only Piran-Kaliyar layout plan has been prepared.
- viii) An integrated solution to traffic problems both regional and intra town due to the penetration of Delhi-Haridwar state Highway is of urgent need.
- ix) Ganga canal although an asset to many settlements but its potentials of water front and recreational development have remained untapped.
- x) Strategies and policy guidelines for Environmental Protection and Management in the wake of development are also required to be formulated.

Thus, all these endeavours will help in making the proposals of Integrated District Development plan priority wise.

SECTION - II

(PLANNING FOR DEVELOPMENT)

7.11 DEMOGRAPHIC PROJECTIONS

The demographic projections occupy a major task in the exercise of any Integrated District Development Plan and Spatio-Economic Plan (SEP). So, keeping in view the Development Scenario for next 20 years, the projection exercise has been done.

7.11.1 Population Projections - 2017

Various kinds of population projection methods viz, arithmetic, exponential, logistic curve, incremental increase method, geometrical increase method etc. were tried and the method adopted was geometrical progression method for Haridwar district.

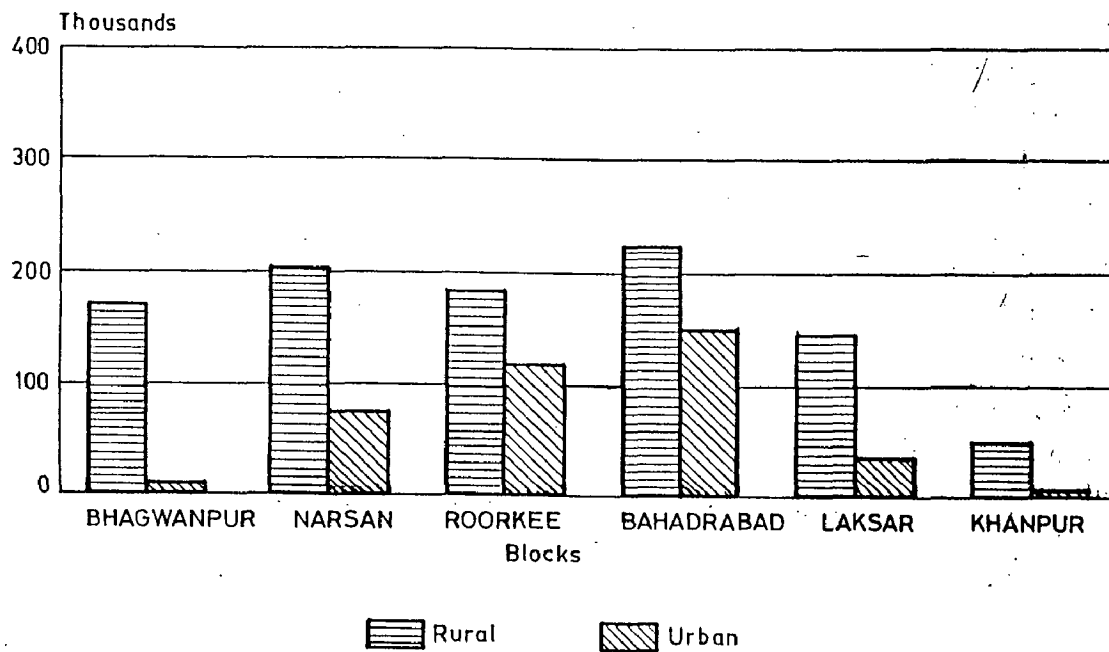
The projected population of Haridwar district for 1997 is 1310329; for 2001 it would be 14,53,624; for 2011, it would be 18,515,90 and while that for 2017, it would be 21,458,96. The increase from 1991 to 2001 would be 3,22,136 while that from 1991 to 2017 would be 10,21,408. The growth rate from 1991 to 2007, would be 90.83%.

Table 7.11.1: Projected Rural Population by Blocks in Haridwar District (1991-2017)

Block	Existing population		Projected population		
	1991	1997	2001	2011	2017
Bhagwanpur	141581	162676	178392	224831	258385
Narsan	159082	182785	200443	252558	290324
Roorkee	147040	168949	185270	233499	268348
Bahadrabad	179684	206457	226402	285338	327923
Laksar	117091	134538	147535	185941	213691
Khanpur	31868	36616	46136	50606	58159
Total District	776346	892021	984178	1232773	141683

Source : Projected

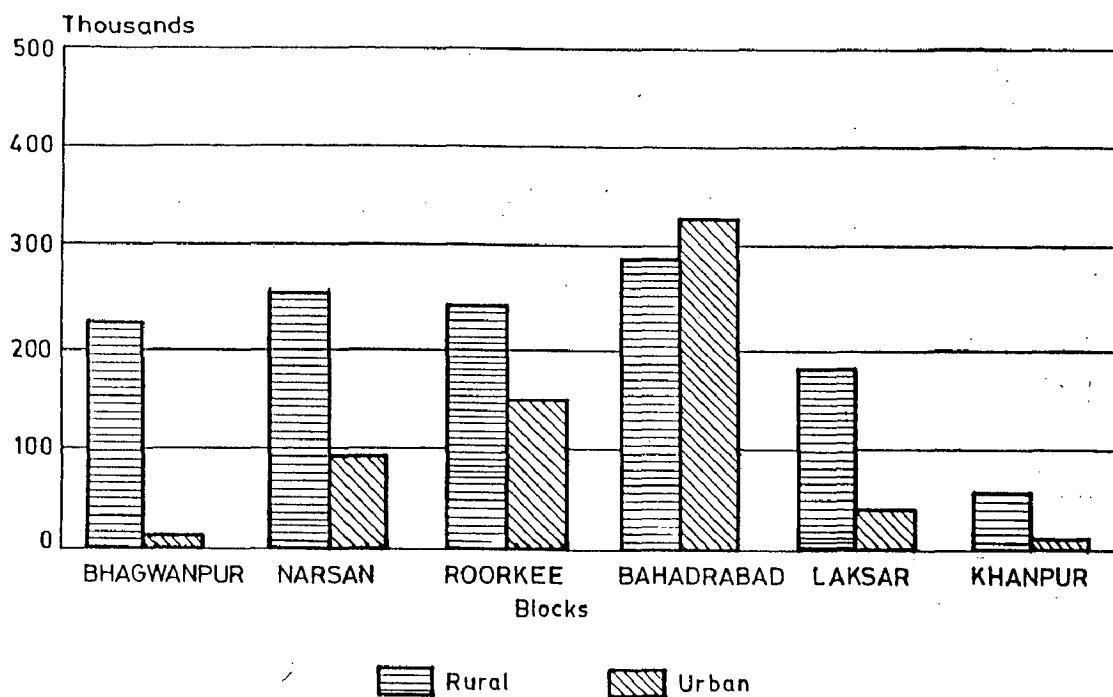
FIG-7.11.1: PROJECTED RURAL AND URBAN POPULATION (2001)



TOTAL RURAL POPULATION (2001) = 9,84,178

TOTAL URBAN POPULATION (2001) = 4,69,446

FIG-7.11.2 PROJECTED RURAL AND URBAN POPULATION (2011)



TOTAL RURAL POPULATION (2011) = 12,32,773

TOTAL URBAN POPULATION (2011) = 6,18,817

The percentage of urban population was 29.6% while that of rural population was 70.40% in 1981. The percentage of urban population in 1991, was 30.96% while that of rural population was 69.04%. The same figures for 2001 will be 32.29% and 67.71%, while for 2017 the urban population would be 33.97% and rural population would be 66.03%.

The gradual rise in urban and decline in rural population follows the past trend indicating increasing urban growth and a declining rural growth.

7.11.2 Projection of Urban Population (1991-2017)

The growth rate in all the 8 urban areas has been quite high during the past few decades. Since Narsan block has three urban centres as Manglaur, Landhora and Jhabrera, and can be called as the most urbanised block but its urban population is less as compared to Bahadrabad and Roorkee Blocks. Bahadrabad has two urban centres as Haridwar Municipality with an area of 15.07 sq.km and Ranipur BHEL with an area of 26.44 sq.km and population of 1,49,011 and 38,381 which occupies the largest share in the district followed by Roorkee. The projected urban population of the district is given in the Table.

Table 7.11.2 : Projected Urban Population by Blocks in Haridwar District (1991 - 2017)

Block	Projected Urban Population				
	1991	1997	2001	2011	2017
Bhagwanpur	-	5000	6600	8700	10250
Narsan	53989	63707	71265	93941	110677
Roorkee	91139	107544	120303	158582	186835
Bahadrabad	187392	221123	247357	326062	384154
Laksar	15622	18434	20621	27182	32025
Khanpur	-	2500	3300	4350	5125
Total District	348142	418308	469446	618817	729066

Source : Projected

Urban population was highest in Bahadrabad Block among all the blocks in 1991, followed by Roorkee, Narsan and Laksar etc. It is estimated that the Bhagwanpur and Khanpur Blocks would also have urban population. The projected population shows that Bahadrabad Block would have the highest growth rates followed by Roorkee and Narsan.

Table 7.11.3: Total (Rural-Urban) Population of Haridwar District (1991-2017)

Year	Rural	Urban	Total
1991	776346	348142	1124488
1997	892021	418308	1310329
2001	984178	469446	1453624
2011	1232773	618817	1851590
2017	1416830	729066	2145896

Source : Projected

7.11.3 Occupational Structure Projections

The occupational structure projection is another important aspect of demographic projections. Since, primary sector activities form the main stay of the employment in most of the blocks and secondary sector activities form the basis of the total work force engaged in various activities, the share of main workers to the total population has been calculated for 1997, 2001, 2011 and 2017.

The workforce has shown increase from 1981 to 1991 decade. Keeping this increase in view and the proposed development in various sectors of economy, the workforce rate is expected to increase. The percent share of marginal workers in 1991 is 1.43%, thus all the workers have been proposed to be accommodated in main workers by 2017.

FIG.7.11.3: PROJECTED TOTAL WORKERS POPULATION:
1991-2017

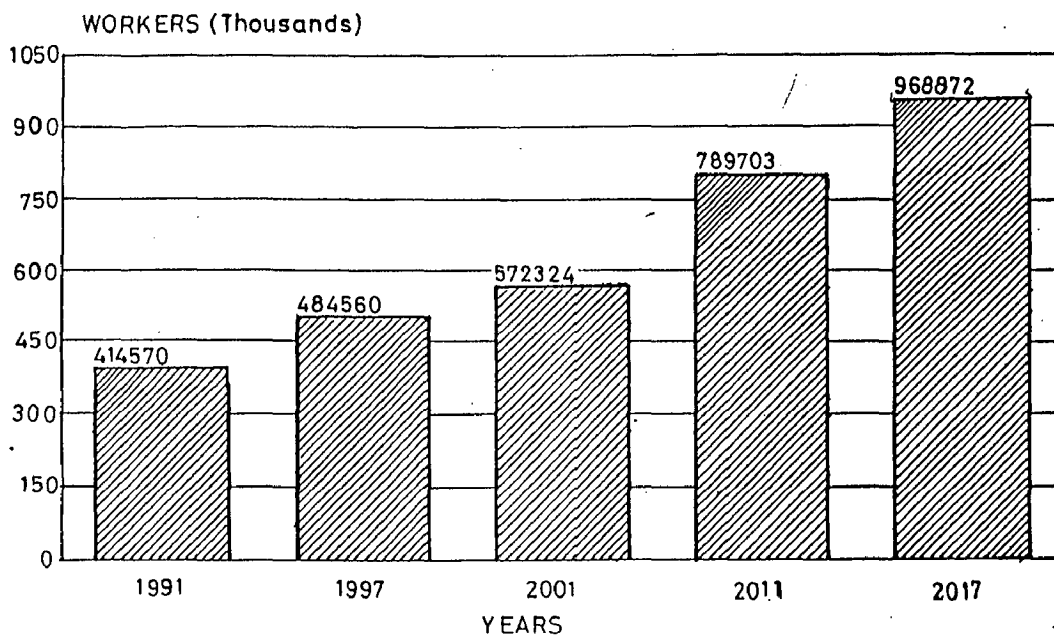
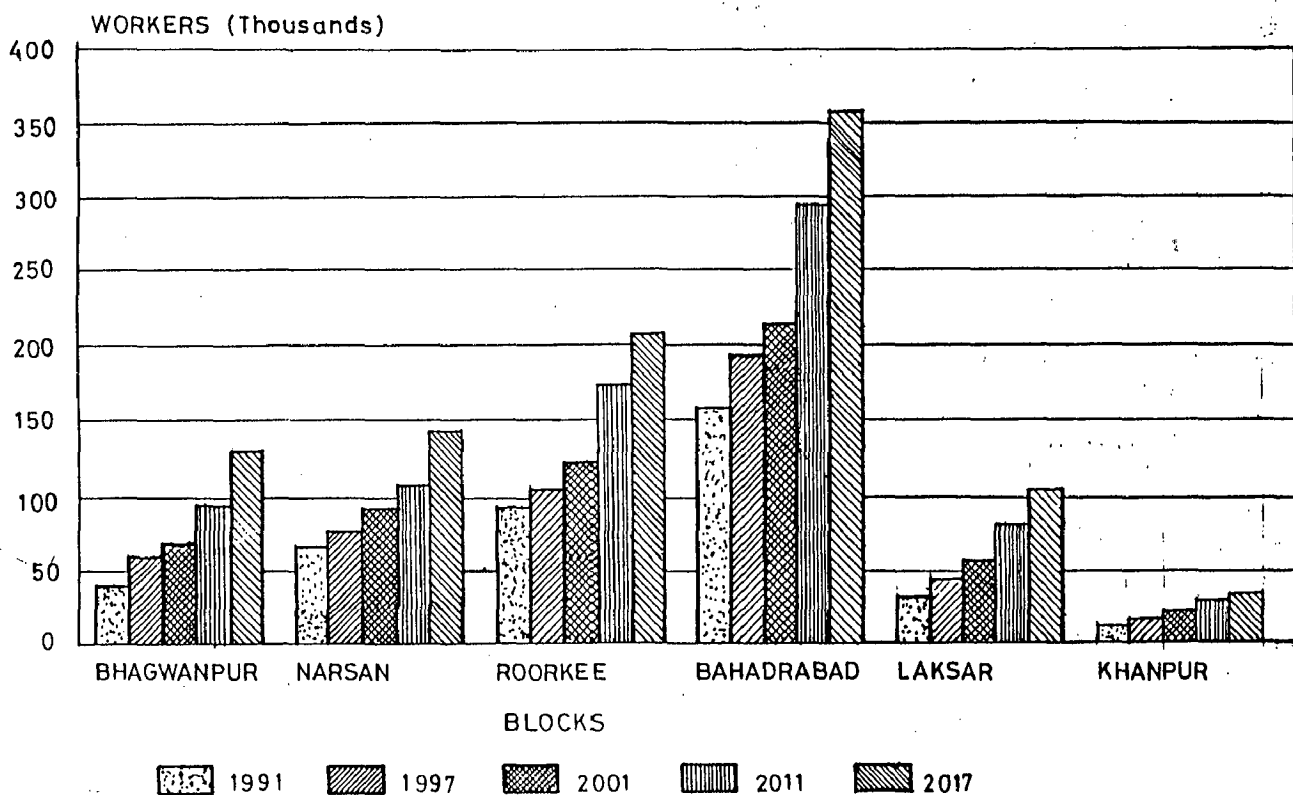


FIG.7.11.4: PROJECTED WORKERS POPULATION BY BLOCKS (1991-2017)



**Table 7.11.4: Workers share to total population in Haridwar District
(1991-2017)**

Year	No. of workers	Percentage
1991	415573	36.92
1997	484560	36.98
2001	572437	39.38
2011	789703	42.65
2017	968872	45.15

Source : Projected

Table 7.11.5 : Projected workers blockwise in Haridwar District.

Block	1991	1997	2001	2011	2017
Bhagwanpur	41758	55985	60349	94388	128909
Narsan	62630	78802	91703	118726	148178
Roorkee	90674	106993	125812	179766	204292
Bahadrabad	155658	183928	218427	295544	351503
Laksar	38525	45963	56699	75698	104318
Khanpur	10278	12889	19447	25581	31672
Total District	415573	484560	572437	789703	968872

Source : Projected

Thus, it can be concluded that, the demographic projections for Haridwar district show increase in economy by providing employment to all by 2017.

7.12 DESIGN OF MODULES FOR RESOURCE CONSERVATION OF HARIDWAR DISTRICT

Considering various parameters of growth, and a fast changing settlement pattern of the district, various modules have been evolved to conserve human resource, environmental resource and other natural resources (Prof. N.S. Saini).

* **The Land Module** has been designed with an objective to provide land compatibility leading to an overall conservation of land resources. It has been observed that the land used under various crops, and other existing uses is not proper. In other words, there is no proper utilization of land. With the improved available technology and seeds, the productivity of land can be enhanced. Thus, with the application of land development measures and proper input management, the land is expected to experience a considerable change and a faster rate of growth of productivity can be achieved, thus conserving the overall land resources.

* **The Education Module** has been evolved with a view;

- i) To provide facility for nursery school for whole of the population of the district.
- ii) To impart primary level education to all members of the community/ distt. above the age of five years.
- iii) To impart vocational training to young boys and girls to enable them to get employment in the villages and nearby work centres or to start independent small units to provide services and goods in the district in the proposed hierarchy of settlements.
- iv) To impart vocational training w.r.t. specific professions to young adults enabling them to start their own productive units or to find suitable employment in the work centres. The flow diagram shows the inter-linkages between different types of health care facilities.

These tasks involve conventional education for children and adults and work oriented education for adolescents and young adults and have been

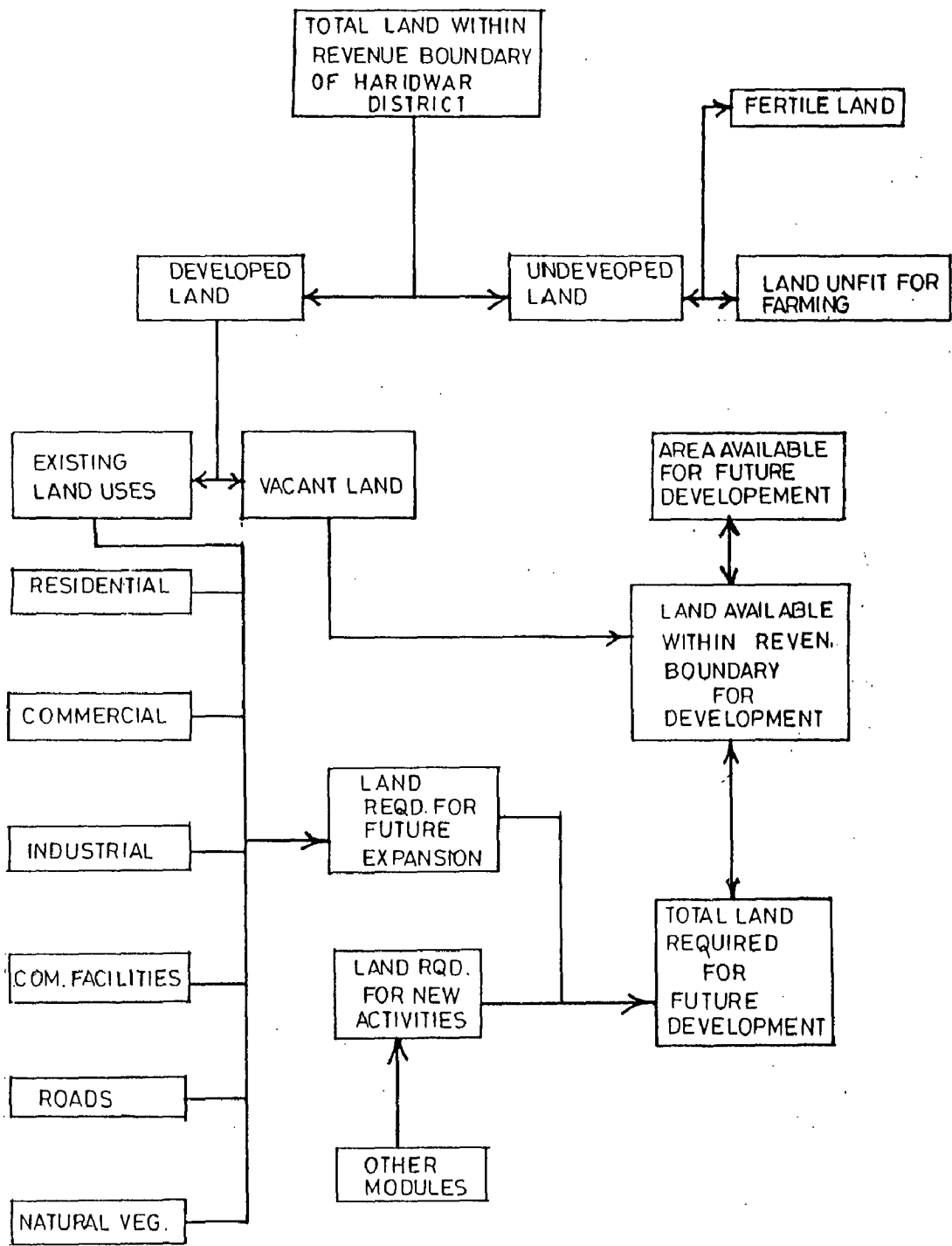


Fig-7.12-1: Land Module for Haridwar District

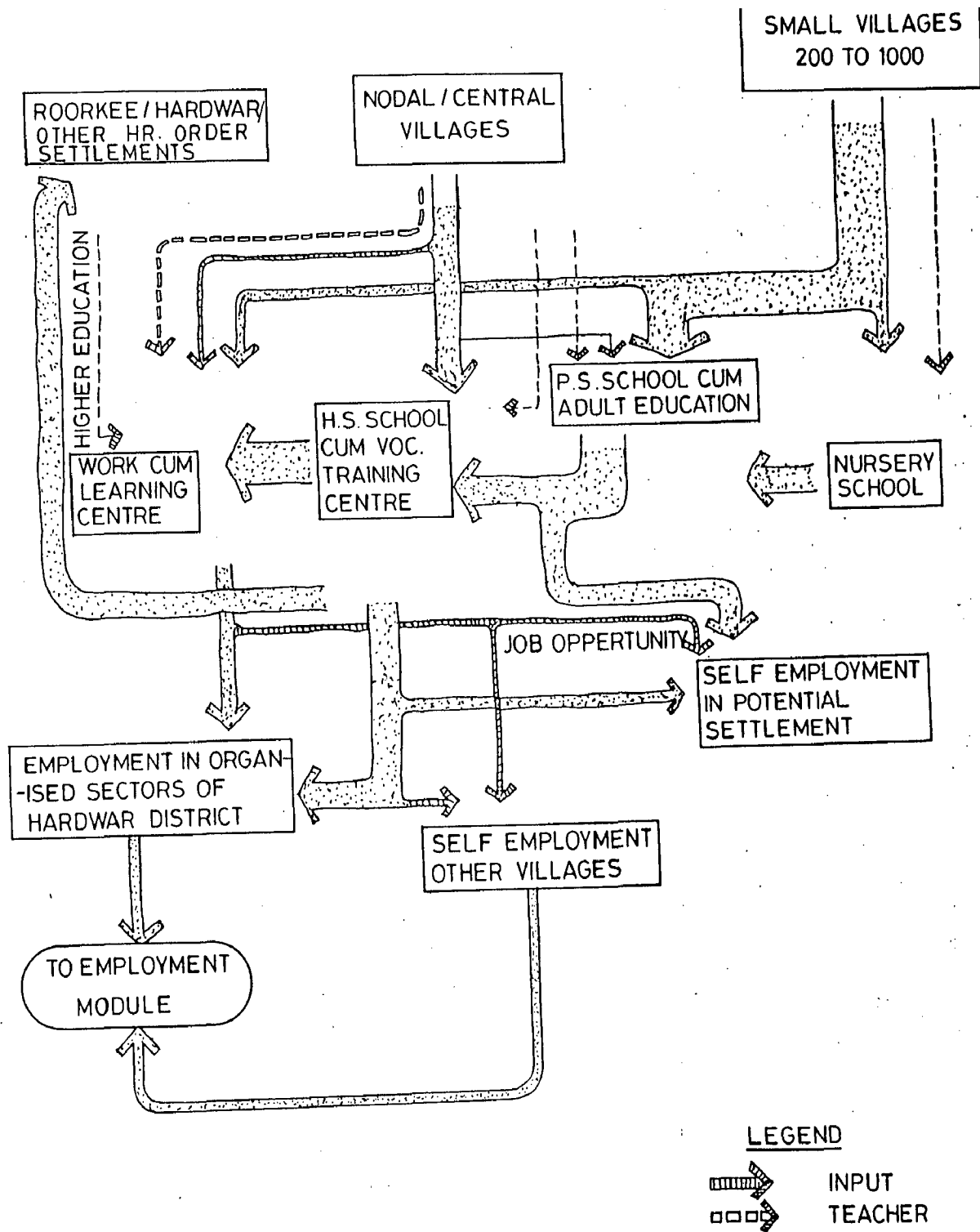


Fig-7-12-2: Education Module For Haridwar District

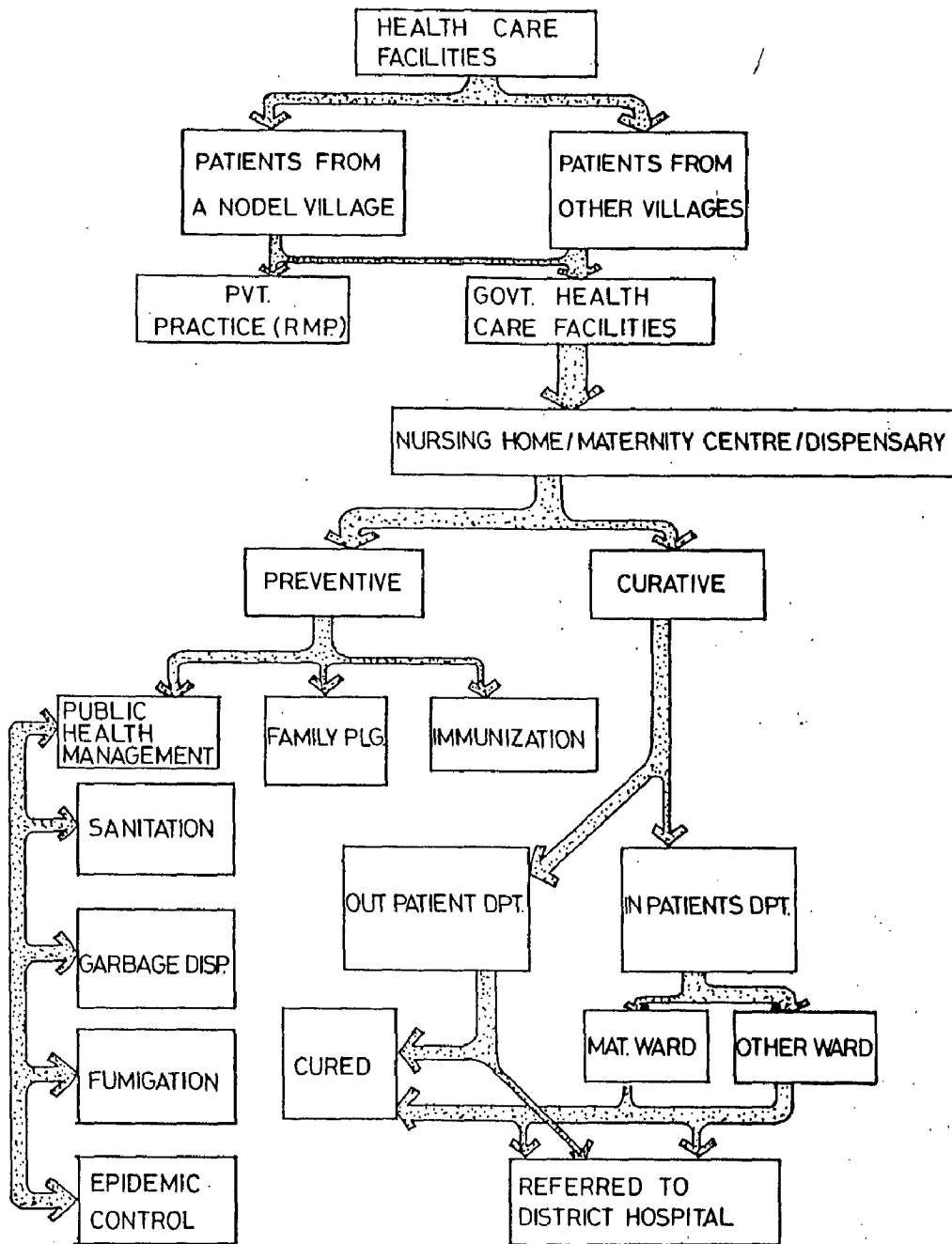


Fig.7.12.3: Health Module For Haridwar District

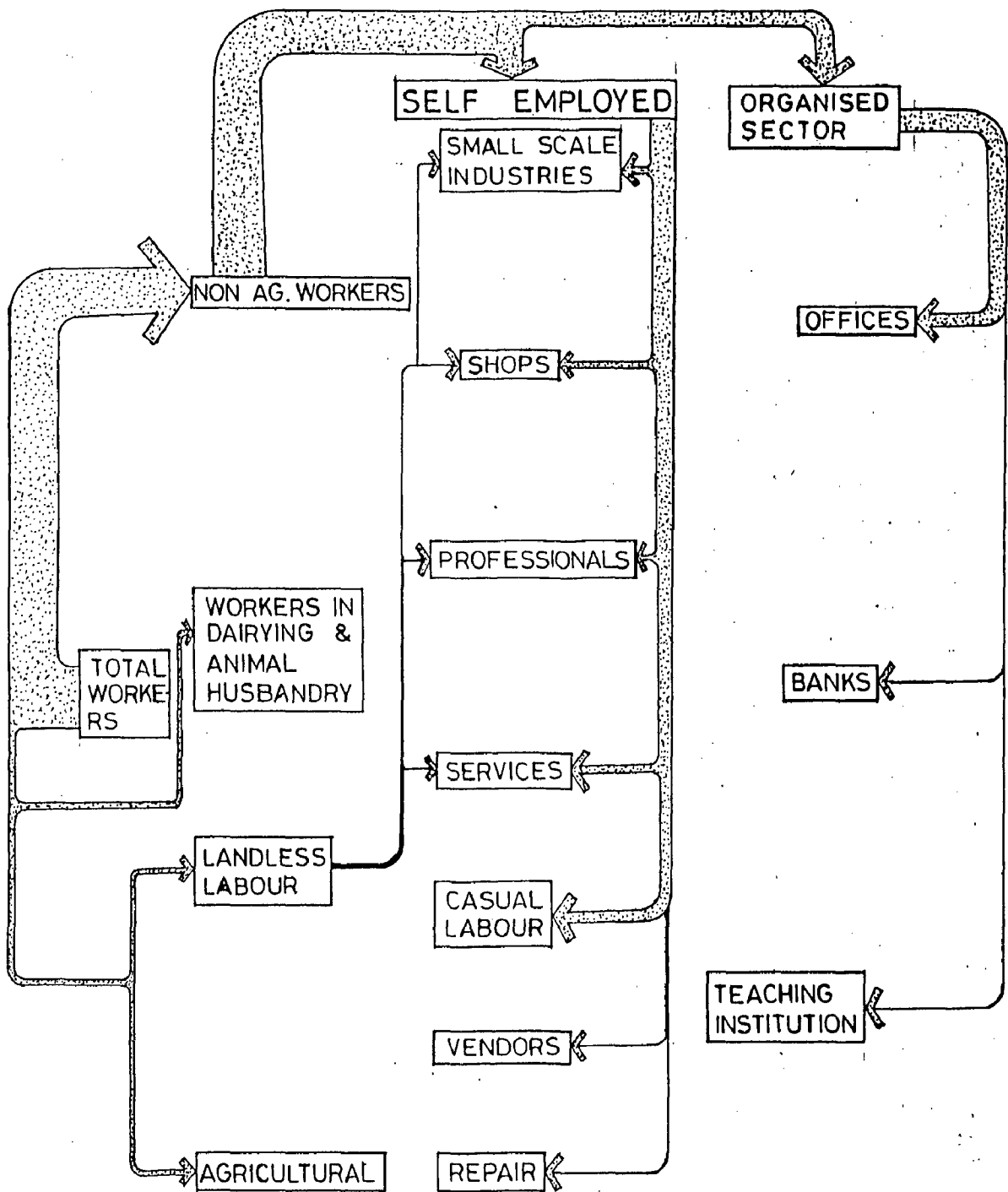


Fig. 7.12.4: - Employment Module For Haridwar District

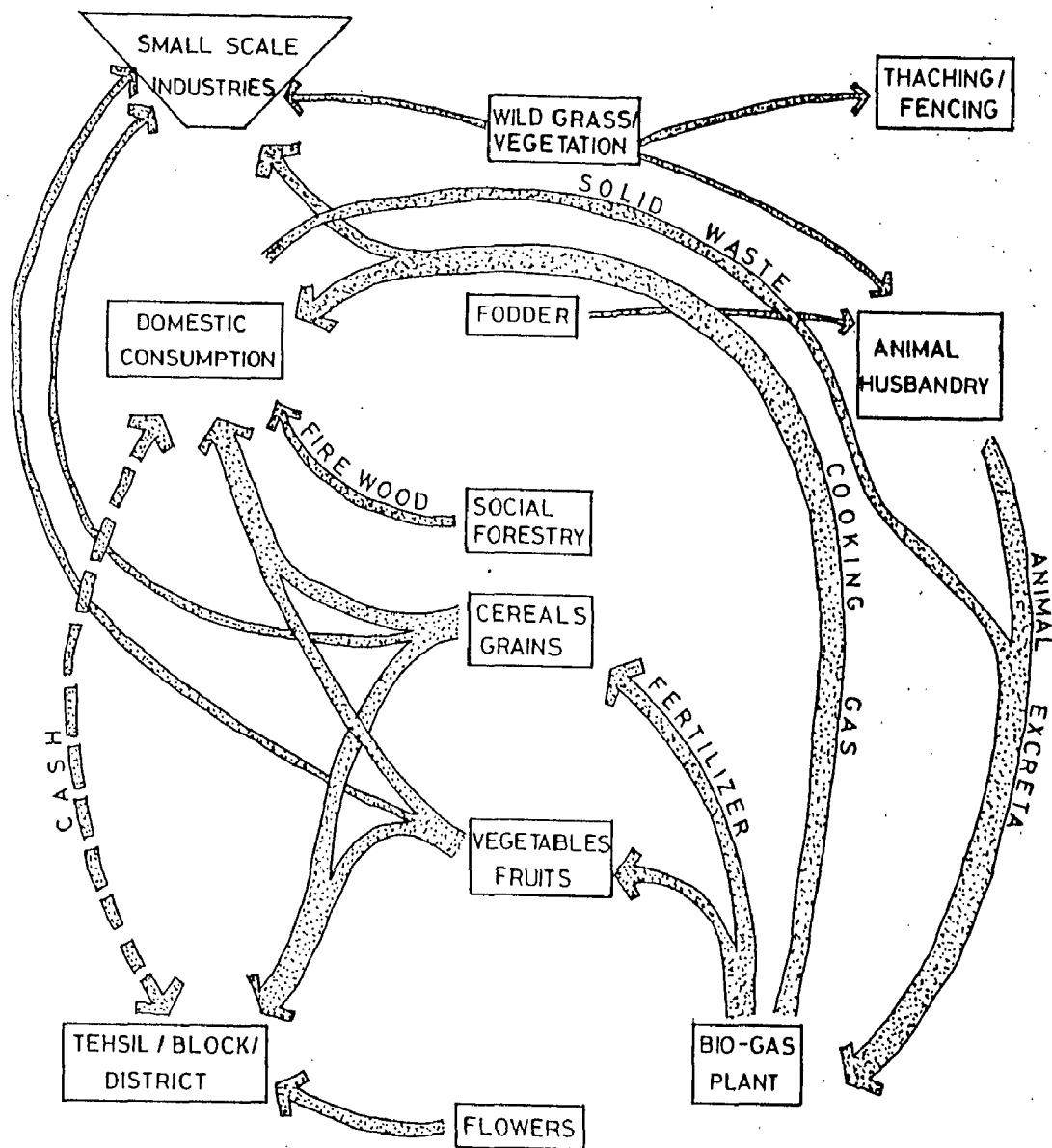


Fig.7-12-5: Vegetation Module For Haridwar District

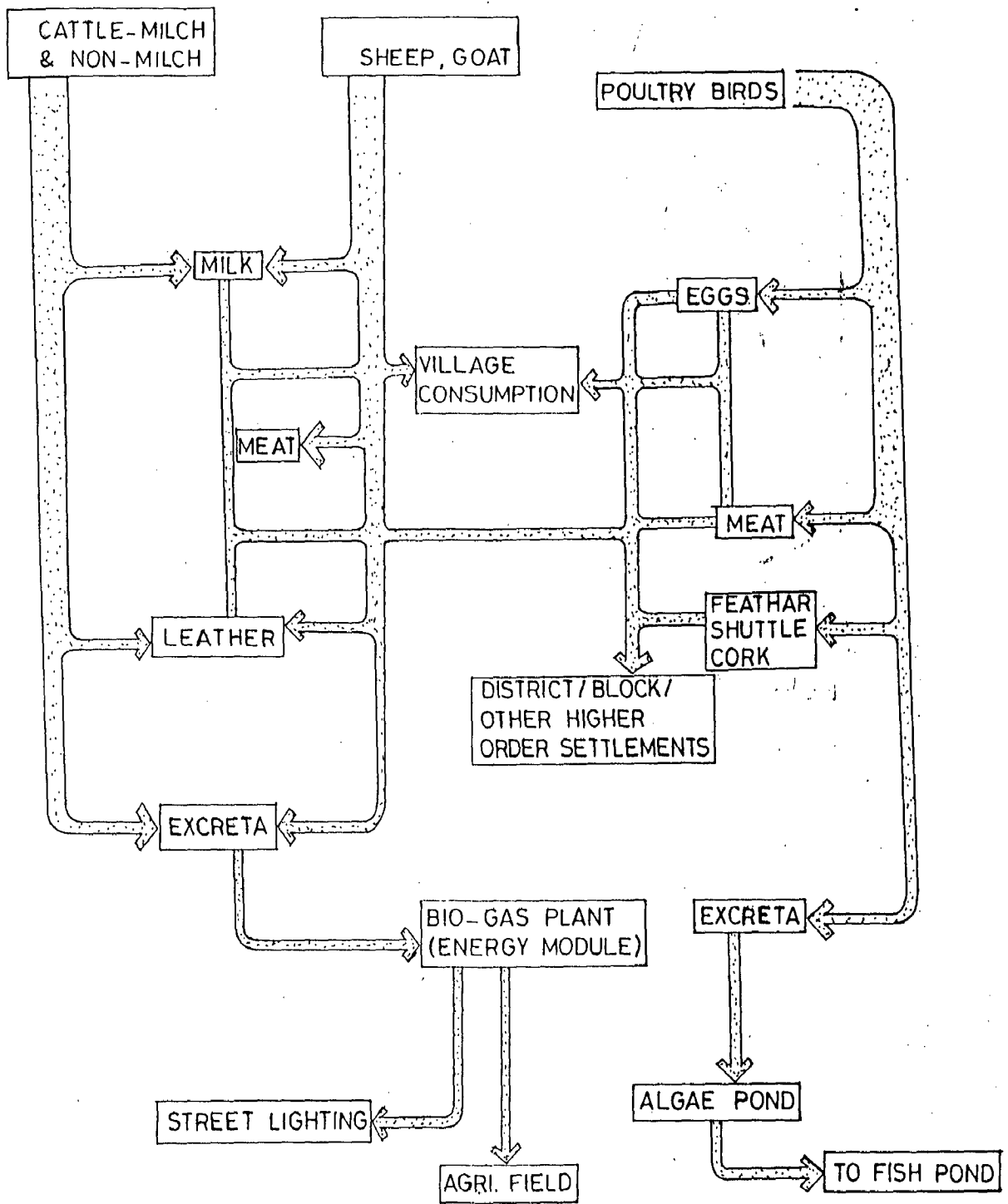


Fig.7.12-6: Livestock Resource Module For Haridwar

proposed in the planing for social facilities.

* **The Goal of the Health Module** is to improve the overall health of the population in Haridwar district so as to improve the quality of humans and make it more productive. The module covers the needed new types of health facilities for the projected population of the district. The flow diagram shows the inter-linkages between different types of health care facilities. The proposed health facilities have been given in the planning for social facilities.

* **Employment Module** has been evolved with a focus to strengthen the existing employment opportunities and create new ones to provide jobs to nearly all working age population within a distance of about 6 to 12 km (service centre). The employment module attempts to indicate gainful occupation of the work force in different sectors of economy at a point of time particularly agro based.

* **Vegetation Module** has been evolved with a view point that most of the area will always remain under agriculture, thus, to convert agricultural and allied activity into an industry. It is suggested through the vegetation module that cash crops like mango, guava, water melon, litchi, vegetables etc. should be promoted to fetch good profits. Agro based, forest based industries have been proposed in service centres to utilize Agricultural resource potentials. The details have been given in planning for Agriculture and Allied Activities.

* **Livestock Module** has been designed with a view that agricultural activity and rural character is likely to persist even by the year 2017 in Haridwar and the development of livestock resource will be an important economic activity. An excellent potential exists in Haridwar district for developing livestock activities not only to meet the localised demand for good quality milk, poultry farming, dairy farming, sheep and goat farming but also to meet the outside demand. Thus, livestock based industries have been proposed in the service centres and other higher order hierarchies, contributing to

the prosperity and quality of life through employment generation. The excreta have been proposed to be used in Biogas plants and manure for agricultural fields. The details have been given in the planning proposals.

* **Non-Conventional Energy Module** has been designed with a view to conserve non-conventional energy resources available within the district/ settlements to the extent that part of the demand is met locally. Since, the supply of electric power from the nearest grid is going to be limited in view of the future demand of the district, so the Non conventional forms of Energy like biogas, solar power and wind energy shall become viable for commercial application including cooking, light industrial, street lighting, running of Tubewells etc.

7.13 DEVELOPMENT SCENARIO-2017

7.13.1 Introduction

An appreciation of various sectors of economy discussed here clearly indicates that Haridwar is the fastest growing district in Uttar Pradesh. Owing to its advantageous location and proximity to other hill districts of Uttar Pradesh, district is experiencing a higher growth. Development scenario here, addresses some important issues like unbalanced distribution of settlements, optimum exploitation of resource potentials in all the blocks, economic development concentrating along a few transport corridors to exploit, unbalanced distribution of infrastructure development and so on so forth. An attempt has been made to 'prepare a long term 20 years Spatio-Economic Plan (SEP)/Perspective plan indicating the strategies and policies at the village and block level as well as district as a whole to achieve balanced development and to plan for "Economic development and Social Justice" in the district, thus fulfilling the goals of constitutional amendments.

7.13.2 Directions of Growth

An intra-district level appreciation of resource availability, infrastructure facilities, economic functions, settlement distribution and so on indicates definite growth directions. From the data analysis, it has been observed that Haridwar district has established a faster growth in all the urban settlements particularly along Delhi - Muzzafarnagar - Roorkee- Haridwar state Highway corridor due to the developed road network. Another important corridor in the district is Roorkee - Bhagwanpur - Dehradun/Mussurie corridor owing to its developed road network. Another corridor is Haridwar - Dehradun.

7.13.3 Emerging Directions of Growth

In addition to the above mentioned growth corridors, the emerging potential directions of growth in the district have been observed along the following:

- i) Roorkee - Dhandera - Haridwar
- ii) Roorkee - Manglaur - Zhabrera

- iii) Roorkee - Pirankalyar - Bahadrabad
- iv) Bhagwanpur - Zhabrera
- v) Bahadrabad - Roshnabad
- vi) Haridwar - Laksar - Khanpur
- vii) Haridwar - Ranipur - Roshnabad
- viii) Haridwar - Najibabad

The settlements along the above mentioned corridors hence would also function as Nodal centres of varying hierarchy levels in the future.

7.14 SPATIO-ECONOMIC PLAN-2017

Since, to achieve a balanced economic development as a whole, a long term perspective plan for 20 years becomes important. Hence, Spatio-Economic has been prepared addressing 20 years (perspective) strategies and policies at the village, block and district, taking into consideration the critical sectoral and areal issues, potentials, needs, and thrust areas.

These strategies would help in identifying the programmes for next five years (1997-2002) for Haridwar district and will lead to "Formulation of Integrated District Development Plan (IDDP)".

7.14.1 Planning for Agriculture and Allied Activities

Planning for Agriculture development in Haridwar District is aimed at greater food production through improved inputs in cropping pattern and generation of sizeable volume of employment to create greater work opportunity for rural labour force.

The proposed development of Agriculture and allied activities is given below.

1) Agriculture and Related Sectors

- i) Agriculture development should be promoted in all the blocks, as these blocks have already established a high degree of agricultural production in Haridwar district. The availability of irrigation potentials favour the agricultural as well as horticultural development in all the blocks.

- ii) Horticulture crops should be promoted in all the blocks. In view of the favourable topography, these blocks have an immense potential for raising fruits (Mango, Guava etc). ***The suggested agricultural as well as horticultural crops blockwise are given below :***

Table 7.14.1.4 : Suggested Agricultural and Horticultural Crops in Haridwar District (blockwise) - 2017

Block	Suggested Crops
1. Bhagwanpur	Cereals and Vegetables (cabbage, Beans, Sag, Groundnut (Kharif) Sunflower (Spring) Ginger and Pulses (Rabi) Sugarcane Potato (Sept. to Nov. & Nov. to Feb.) Mango, Guava etc. Tomato, Onion
2. Roorkee	Cereals and Vegetables (cabbage, Beans, Sag, Groundnut (Kharif) Sunflower (Spring) Ginger and Pulses (Rabi) Sugarcane Potato (Sept. to Nov. & Nov. to Feb.) Mango, Guava etc. Tomato, Onion
3. Narsan	Cereals and Vegetables (cabbage, Beans, Sag, Groundnut (Kharif) Sunflower (Spring) Ginger and Pulses (Rabi) Sugarcane Potato (Sept. to Nov. & Nov. to Feb.) Mango, Guava, Tomato, Onion etc.

TABLE 7.14.1.1.: PROPOSED CROPPING PATTERN FOR HARIDWAR DISTRICT (1997-2017)

S.NO.	CROPS	*EXISTING 1993-94				**PROPOSED FOR 1997-2002				**PROPOSED FOR 2017					
		IRRIGATED		UNIRRIGATED		TOTAL	IRRIGATED		UNIRRIGATED		IRRIGATED	TOTAL	UNIRRIGATED		
		TOTAL AREA (Ha.)	% TO TOTAL AREA	TOTAL AREA (Ha.)	% TO TOTAL AREA	AREA (Ha.)	TOTAL AREA (Ha.)	% OF TOTAL AREA	TOTAL AREA (Ha.)	% OF TOTAL AREA	TOTAL AREA (Ha.)	% TO TOTAL AREA	TOTAL AREA (Ha.)	% TO TOTAL AREA	
1	PADDY	17976	79.38	4930	21.62	26150	22227	84.99	3923	15.01	44699	97.99	45612	2.01	913
2	WHEAT	39807	78.56	10832	21.44	63325	53827	85.0	9498	15.00	104804	98.52	106383	1.48	1577
3	JOWAR	30	35.71	54	64.29	109	82	75.23	27	24.77	207	95.0	219	5.00	11
4	JAWAR	-	-	1	100.00	4	3	75.0	1	25.00	5	71.43	7	28.57	2
5	BAJRA	1	2.38	41	97.62	59	47	79.66	12	20.34	80	90.96	88	9.91	8
6	MAIZE	248	6.35	3753	93.65	5204	4267	81.99	937	18.01	7619	98.00	8020	5.00	401
7	OTHERS	-	-	4	100.00	8	6	75.0	2	25.00	11	91.67	12	8.33	1
TOTAL CEREALS (1 TO 7)		57962	74.79	19537	25.21	139748	118786	85.00	20962	15.00	78439	98.00	80040	2.00	1601
8	URAD	1942	98.74	246	11.24	3063	2512	82.01	551	17.99	4270	97.01	4402	2.99	132
9	MOONG	174	87.00	26	13.00	200	247	88.21	33	11.79	291	96.07	407	3.93	14
10	MASOOR	170	4.91	3289	95.09	4845	3876	80.00	969	20.00	6600	95.50	6911	4.50	311
11	CHANA (HORSEGRAM)	45	21.83	166	78.17	211	167	79.15	44	20.85	404	97.35	415	2.65	11
12	BEANS	123	70.29	52	29.71	219	185	84.47	34	15.53	380	95.0	400	5.0	20
13	ARHAR	3	7.69	36	92.31	58	47	81.03	11	18.97	74	91.37	76	2.63	2
14	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PULSES (8 TO 14)		2457	39.17	3815	60.83	6153	6850	84.02	1303	15.98	12390	98.49	12590	1.51	190
TOTAL FOODGRAIN (1 TO 14)		60419	72.12	23352	27.88	108902	92566	85.0	16336	15.00	162280	96.85	167560	3.15	5280
15	MUSTARD	773	80.19	191	19.81	1253	978	78.05	275	21.95	1081	97.21	1935	2.79	54
16	ALSEE	1	33.33	2	66.67	5	4	80.0	1	20.00	6	85.71	7	14.29	1
17	TIL	17	93	1840	99.07	2414	1907	79.0	507	21.00	3665	98.50	3721	1.50	56
18	REDI	-	-	4	100.00	5	4	80.0	1	20.00	7	87.50	8	12.50	1
19	GROUNDNUT	6	7.623	2596	99.77	2602	2108	81.01	494	18.99	5054	97.01	5210	2.99	156
20	TOBACCO	110	100.00	-	-	143	108	75.52	35	24.48	218	96.89	225	3.11	7
21	JUTE	1	100.00	-	-	4	4	75.0	1	25.0	7	87.50	9	12.50	1
22	COTTON	72	27.38	191	72.62	263	212	80.61	51	19.39	510	86.23	530	3.77	20
23	SUNFLOWER (SURAJMUKH)	7	53.64	4	36.36	15	12	80.0	3	20.00	22	95.63	23	4.35	1
24	SOYABEAN	1	100.00	-	-	3	2	66.67	1	33.33	4	80.00	5	20.00	1
25	OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OIL CROPS (15 TO 25)		805	14.79	4637	85.21	7075	5882	82.01	1213	17.99	10566	97.30	10880	2.70	294
26	SUGARCANE	48048	86.03	7804	13.97	55852	47195	84.50	8657	15.50	167240	94.00	111709	4.00	4469
27	POTATO	672	96.41	25	3.59	906	745	82.23	161	17.77	1293	92.49	1398	7.51	108
28	SANAYEE	1	100.00	-	-	3	2	66.67	1	33.33	4	80.00	5	20.00	1
29	TERMERIC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	RABI FODDER	4308	88.22	575	11.78	6348	4920	77.50	1428	22.50	8942	91.53	9770	8.47	828
31	KHARIF FODDER	1835	16.88	15024	89.12	21914	18562	84.70	3354	15.30	31702	94.00	33725	6.00	2623
32	JAYAD FODDER	4331	91.88	383	8.12	6128	5208	84.99	940	15.01	9293	98.47	9435	151	142

* SOURCE : Compiled by Author from District Statistics Report of Haridwar Year 1993-94
 SOURCE ** : Estimated by Author.

horticultural market centres in the district. Khanpur should be developed as agricultural market centre.

- ix) Farmers with small holdings with irrigation facilities should be encouraged in horticulture crops.
- x) In order to increase the production of various crops, the requirements of fertilizers, and seeds and pesticides are presented here in Table. Thus, with the application of land development measures and proper input management, the agriculture and allied activities in the district are expected to experience considerable change in all aspects and a faster rate of growth in productivity can be achieved and sustained if proper infrastructure like transfer of new technology, servicing and repair of farm implements, marketing, storage, processing of food grains and credit from financial institutions etc. is provided to the farmers at the various hierarchy of settlements.

Table 7.14.1.5 : Seed and Fertilizer Requirement for Various crops

Sr. No.	Name of the Crops	Seed Rate (Kgs./Ha.)	Fertilizer Rate (Kg/Hectare)		
			N	P	K
1.	Paddy	50.0	100	60	40
2.	Wheat	90.0	80	40	-
3.	Maize	25.0	60	30	-
4.	Jowar	10.0	50	30	-
5.	Bajra	5.0	50	30	-
6.	Pulses				
	a) Red gram/				
	Green gram	25.0	-	25	50
	b) Horse gram	15.0			
7.	Ground nut	80.0	25	30	-
8.	Chillies	4.5	80	30	-
9.	Vegetables	-	80	30	-
10.	Sugarcane	1200.0	150	30	-

Where N = Nitrogen, P = Phosphorous
K = Kpotash

Source : Department of Agriculture, U.P.

TABLE 7.14.1.3 : EXPECTED YIELD (Average) OF MAIN CROPS IN HARIDWAR DISTRICT (Quintal Per Hactare)

S.No.	CROPS	1991-92	1992-93	2001	2017
1.	2.	3	4	5	6
1.	PADDY				
(i)	KHARIF	22.91	21.76	30.94	40.15
(ii)	JAYAD / Zaid	22.91		46.72	70.59
2.	MAIZE				
(i)	KHARIF	9.89	16.22	53.55	85.90
(ii)	JAYAD / Zaid	10.84	15.33	46.76	78.50
3.	JAWAR	4.33	6.41	20.25	30.79
4.	BAJRA	12.48	12.63	13.73	23.96
5.	SOYA				
(i)	KHARIF	3.64	3.76	4.55	5.64
(ii)	JAYAD / Zaid				
6.	WHEAT	25.87	20.58	29.84	38.07
7.	JOU	32.20	34.54	38.32	44.11
8.	URD				
(i)	KHARIF	4.00	4.70	5.60	15.20
(ii)	JAYAD / Zaid	6.31	2.74	12.50	25.00
9.	MASSOR	6.96	3.57	18.24	32.50
10.	HORSE GRAIN (CHANA)	11.88	13.98	26.14	40.39
11.	PEAS	15.89	15.92	31.78	66.74
12.	ARHAR	10.25	8.32	12.48	17.47
13.	MUSTARD	8.55	9.91	13.82	18.42
14.	ALSI	4.19	3.65	5.19	6.05
15.	TIL	0.54	2.56	6.72	9.16
16.	SUGAR CANE	610.96	539.72	1079.44	1889.02
17.	MOONG				
(i)	KHARIF	3.16		7.72	20.02
(ii)	JAYAD / Zaid	6.74	7.13	9.84	13.16
18.	ARANDI	10.21	8.57	19.25	40.11
19.	SUNFLOWER	12.86	12.48	16.17	30.02
20.	SOYABEEN	1.79	1.95	3.63	5.79
21.	TOBBACCO	1.79	1.95	3.12	5.70
22.	COTTON	8.11	-	30.14	50.47
23.	JUTE	5.13	5.05	8.09	15.48
24.	POTATO	230.28	233.71	508.02	1100.29
25.	GROUNDNUT	13.95	10.71	22.04	45.16

Table 7.14.1.6 : Major Pesticides Required for Various Crops

Sr. No.	Name of the Crop	Pesticides required per hectare (Kgs./lits.)			
		DDT(kgs.)	BHC(kgs.)	Parthenon (lits.)	Endrin (lits.)
1	2	3	4	5	6
1.	Paddy	1.25	1.25	0663	0.663
2.	Jowar	1.25	1.25	-	-
3.	Bajra	1.25	1.25	-	-
4.	Wheat	1.25	1.25	-	0.663
5.	Maize	1.25	1.25	-	-
6.	Pulses	1.25	1.25	-	-
7.	Groundnut	1.25	1.25	-	0.663
8.	Vegetables	1.25	1.25	-	-

Source : Department of Agriculture, U.P.

2) Forestry

Haridwar district has got 22.7% of the total area under forests with 32078 Ha area as Reserved forest (RF). Reserved forests are entirely in the hands of the state government and the district forest departments are responsible for their maintenance, conservation, and economic utilization. Based on the forest development policy, the forest development programmes have been suggested.

- i) The area under forests in Haridwar district is showing decline; 1990-91 (43535 Ha), 1991-92 (43388Ha) and 1992-93 (37, 388 Ha). Roorkee and Narsan Blocks do not have any area under forests. Hence, trees should be planted in future in Barren and waste land in all potential settlements.
- ii) As Bahadrabad block has comparatively large area (20.52%) under forests among other blocks in Haridwar district, forest based economic activities are to be strengthened in Bahadrabad block. Ayurvedic

medicinal industries need to be promoted.

- iii) Legal measures should be taken up to restrict the unauthorized grazing, cutting and lopping of trees, thus reducing deforestation.
- iv) Forest Based Industries like paper mills, plywood, pulp, saw mills, joinery, general wood works, carpentry, furniture, resin and turpentine etc.) should be established in all blocks except Roorkee and Narsan.

7.14.2 Planning for Industrial Development

Industrialisation of rural areas is an important policy instrument to tackle the problem of rural poverty and unemployment. Therefore, efforts should be intensified now to develop rural industries as one of the important components of Integrated Rural Development Programme. The main objectives of the industrial development in the district development plan would be (i) to promote small scale industries to optimise the use of resources locally available (ii) to maximise output and employment potential of the tiny industrial units (iii) to enhance productive efficiency and income potentiality of rural artisans by developing artisan and other household industrial activities so that each family could become economically a viable unit.

Since Haridwar district has much potential for development of resource based industries in Uttar Pradesh, Hence. Keeping these objectives in view, the industrial development programme in the district will have the following components:

- * Development of agro-based industries.
- * Development of other local resource based, skill based and demand based small industries.
- * Development of house hold and other artisan based industries.
- * Development of skill and entrepreneurship in rural workers, particularly those in self-employment.

As the existing industrial development activities are concentrated only in

Ranipur, BHEL Haridwar and Roorkee proper distribution of industries at selected centres throughout the district is essential in order to ensure the effective utilisation of resources as well as for generating balanced employment distribution throughout the district. It is suggested that in addition to the existing centres, the following settlements should also be promoted as industrial sub-growth centres in the district, and appropriate infrastructure development taken up.

- a) Bhagwanpur
- b) Panyala Chandapur
- c) Zhabrera
- d) Manglaur
- e) Narsan Kalan
- f) Bahadrabad
- g) Sultanpur Aadampur
- h) Bhikanpur Jeetpur
- i) Khanpur

The suggested type of small - scale industries in Haridwar district are as under:-

- a) **Agro-Based industrial units** - food based, cotton based, Rice and Flour Mills, Sugar Mills,
- b) **Fruit processing units** (Mango, Lemon etc.)
- c) **Oil extracting units** (Groundnut, Mustard, Cotton)
- d) **Forest based industries**
 - Hand made paper
 - Paper and cardboards
 - Laminated boards
 - Ply wood,
 - saw mills
 - joinery and wood works
 - resin and turpentine
 - Neem oil manufacturing units

- Medicinal Plants.
- e) **Livestock Based Industries** - Dairy, Milk Chilling plants, woollen carpet and Blankets, Sheep Rearing, Leather tanning, Poultry Feather Cork etc.
- f) **Demand Based Industries**
 - General Engineering
 - Industries related to Agri. inputs
 - Wire Netting and Wire Mesh
 - Rolling shutters
 - Textile (Ready-Made Garments)
 - Screen printing
 - Bicycle and Cycle Rickshaw parts
 - Washing soap.
 - Stone crushers and stone polishing units.
 - Brick Kilns
- g) **Drawing and survey instruments**
- h) **Electronic Based Industries**
- i) **Development of Rural Artisans and Household Industries**
(Weavers, Blacksmiths Potters, Cobblers, Goldsmiths, Masons, Carpenters, Tin smiths, Basket makers, Tailors, Barbers etc.)

Under Integrated Rural Development Programme (IRDP), there is a provision to assist artisan families with a provision of subsidy. Besides, loan facility should be made available from banks for purchase of tools, construction of sheds for workshop and many other items which would enhance the level of their efficiency, increase production and servicing capacity resulting in sustained employment and regular income.

- * The small scale units of the type of industries suggested above should be promoted primarily in all the growth centres sub-growth centres so that these settlements would act as major nerve centres in the district. Besides, the servicing units and cottage units would be promoted in service centres and central villages where Khadi Village Industries

- Board (KVIB) would play a major role in development of such industries.
- * In order to facilitate industrial development encouragement of entrepreneurship and skill enhancement are essential. It is suggested that training institutions should be set in every Sub-Growth centre to facilitate above.

Table 7.14.2.1 shows the various types of skills needed to be developed in the district. Thus, with the development of productive activities in Agriculture and its allied sectors, there will be demand generated for different categories of workers, which will create jobs in urban as well as Rural areas of the district.

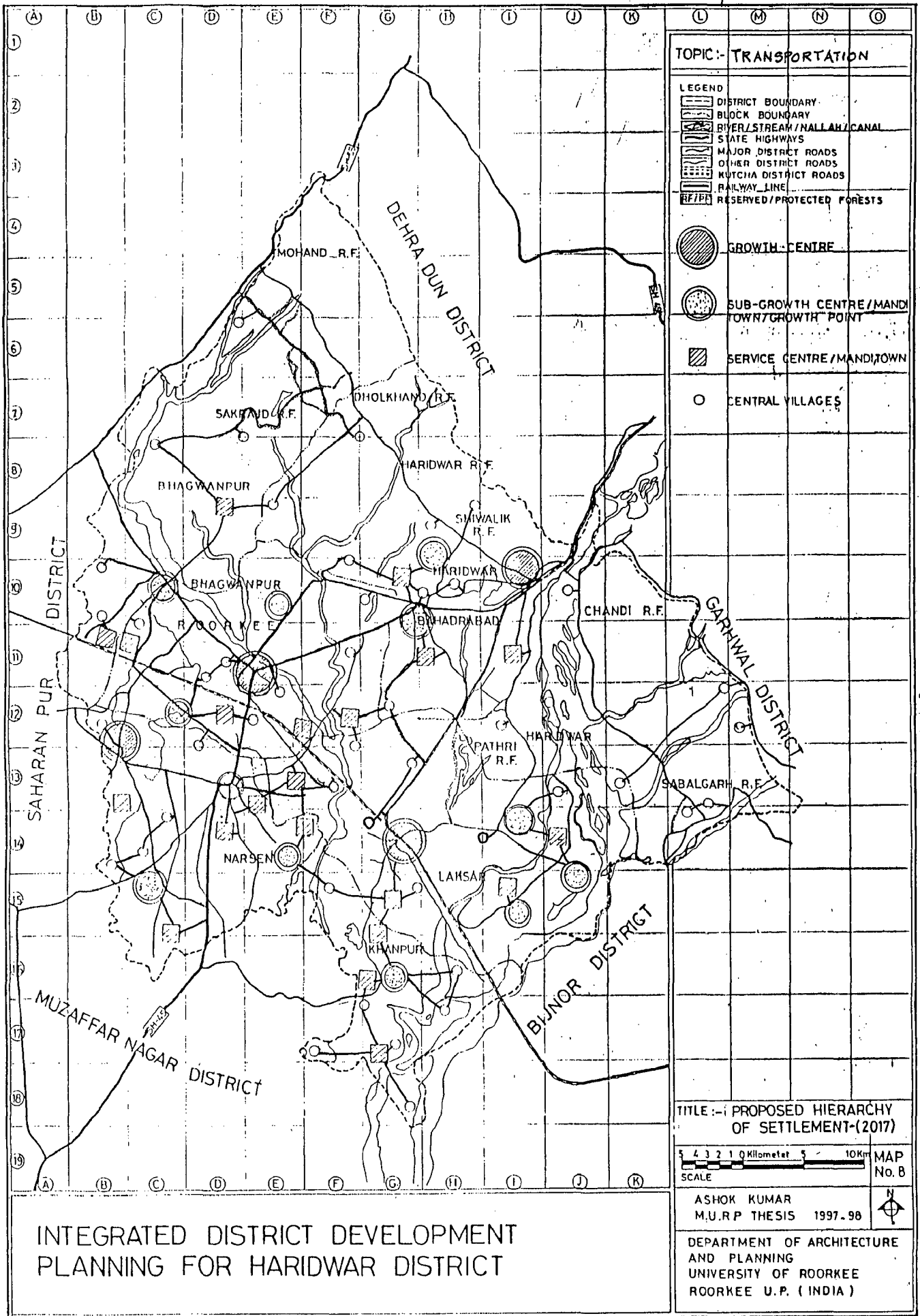
Table 7.14.2.1 : Various Types of Skills Needed and Category of Workers

Activities	Type of Skill	Category of Workers
(1)	(2)	(3)
1. Agriculture		
a) Construction of well and other irrigation facilities	Masonry work	Mason
b) Repairing and servicing of pump sets	Mechanical (Electric as well all automobile)	Educated Unemployed
c) Processing of paddy, wheat, jowar, bajra, groundnut, sugarcane, etc.	Entrepreneurial, managerial mechanical and skilled labour	Educated, technical, semi-skilled and unskilled workers
d) Repairing and servicing of simple farm implements, bullock carts and other carts, etc.,	Blacksmithy and Carpentry	Blacksmiths and Carpenters
e) Ploughing of Fields	Tractor Drivers & Repairs	
2. Horticulture		
a) Preservation and canning	Entrepreneurial, managerial	Educated, technical, semi-

of fruits	and skilled labour	skilled and unskilled labour and carpenters
b) Packing material	Carpentry and labour	Carpenters and unskilled labour
3. Sericulture		
a) Silk reeling	Simple knowledge of reeling	All categories of workers
b) Weaving	Weaving	Weavers and other workers to be skilled by training.
c) Manufacturing of rearing trays	Cane and bamboo works	Basket makers, other artisans and labourers
d) Manufacturing, repair and servicing of looms	Blacksmithy and Carpentry	Blacksmiths and Carpenters
4. Animal Husbandry		
a) Dairying	No specific skill	Cultivators, landless labour
b) Sheep, poultry and piggery	No specific skill	Landless labourers
c) Manufacture, servicing and repairs of milk cans	Tinsmithy, Blacksmithy	Tinsmiths and Blacksmiths
d) Leather tanning	Leather tanning & leather workers	Cobblers
e) Wool and weaving	Weaving	Weavers and landless labourers
5. Fisheries		
a) Fishing	Fish catching	Fishermen
6. Engg. & allied activities (Demand Based)		
a) Agriculture Implements	Entrepreneurial, Managerial Technical, and skilled workers	Engg. Educational, Semi-skilled and Un-skilled workers.
b) Cement Products		
c) Gen. Engg. Workshop		
d) Building Material & Ceramics etc.		

7.14.3 Planning for Infrastructure Development

Availability of adequate infrastructure in an area is an essential tool for



accelerating the pace of development and to ensure the spread effect of such development. The Minimum Needs Programme as envisaged by the Planning Commission is an attempt in the direction of providing basic infrastructure for development for all. The infrastructure includes Transportation, Electricity, Water Supply & Sanitation, Education, Health, Banking, Cooperatives etc., which have been discussed below :

1) Transportation

Transportation network plays an important and multipurpose role in assisting and sustaining the process of development by connecting different distant places in securing economic, cultural and national integration by enabling the movement of people and material. Adequate provision of transport facilities is of basic importance to the successful implementation of the programme of all round economic development of any part of the country, be a village, block, town, a district or a state.

It is necessary to increase the existing transport facilities to meet the future requirements of the area. According to the norms suggested by the Indian Roads Congress (I.R.C.), the road length should be 0.52 km per sq. km w.r.t. total geographical area. After many years of these recommendations of Indian Roads Congress, the conditions of the road network still remain very poor in the district.

Based on the analysis, it can be suggested that the roads, not motorable at present, can be improved for vehicular traffic. The semi-mettled roads should be converted into metalled roads and the motorable unmetalled roads should be converted into semi-metalled or water bound macadam roads during the plan period upto 2002.

Planning for transportation under road and rail development programme in the district will basically follow certain objectives.

Roads :

- i) Increasing accessibility

- a) Linking all settlements (Inhabited and Uninhabited) with their central villages as per norms suggested by Planning Commission.
 - b) Inter linking central villages, service centres, sub-growth centres, growth centres, block headquarters, and important tourism centres.
- ii) Strengthening the existing transportation facilities such as:
- a) Increasing the road capacity by increasing widths as per norms.
 - b) Minimising traffic obstructions to reduce time and cost of movement.
 - c) By passing the unwanted traffic to avoid congestion and accidents between Manglaur and Roorkee.
 - d) To follow norms for Road side Developments particularly along State-Highway (45) to avoid Road Encroachments.

Railways :

- i) To link Haridwar-Roorkee-Muzaffarnagar through Broadgauge line to have better connectivity between Delhi, Haridwar & Dehradun.
- ii) To broaden the existing Roorkee railway station and introducing new Trains.
- iii) To strengthen the extra regional linkages.

2) Electricity

Electricity plays an important role for the economic development, removing some of the primary problems of the area and for utilising the potentiality of various sectors of economy in the district.

Planning for Electricity under "Rural Electrification Programme" in the district will follow certain objectives, viz;

- i) All the remaining 19.9% villages will be electrified.
- ii) All such settlements where industries have been recommended, should have Electric-Sub-Station and should be electrified, regardless of their population size or status.
- iii) Centres of Social facilities like Hospitals and other Health/Medical

Various proposals have been made to recycle liquid and solid wastes to harness non-conventional sources of energy. These are : Biogas Plants, Faculative ponds, Fish ponds, Algal ponds, Poultry farm, Solar Radiators etc.

Provision of adequate **Social Infrastructure Facilities** has been accepted a need under Minimum Needs Programme of Government of India.

5) **Education**

Provision of education facilities is a prerequisite for social upliftment and human resource development. As per the analysis of the existing education facilities, it is clear that there is no proper distributions of different level of educational facilities. Hence the education facilities have been proposed in all the Settlements as per order of hierarchies based on Government of India Norms, which have been given in the table.

6) **Health**

Planning for Health facilities is an essential input of development. Under Minimum Needs Programme, certain norms have been suggested by the Planning commission and same have been followed for Haridwar district of Uttar Pradesh. The various medical facilities have been proposed to be provided as per the order of hierarchy of settlements given in table.

7.14.4 **Settlement Development Strategies**

Settlement development strategies form an important component of the Spatio-Economic Plan (SEP) and resultant settlement development programmes would become part of the Integrated District Development Plan (IDDP). The settlement development strategies proposed for Haridwar district are of four tier hierarchy.

The proposed settlement development (2017) for Haridwar district has been conceived after analysing the following factors :-

- a) Existing distribution and functional role of settlements.

- b) Infrastructural availability and potentiality at block/settlement level.
- c) Directions of growth and Emerging potential/corridors.
- d) Sectoral issues and potentials.
- e) Demographic and socio-economic scenario.
- f) Location of nodal settlements as per proposed hierarchy.
- g) Ongoing programmes and committed programmes at the village/block level by various departments.

The proposed settlement pattern for Haridwar district suggests the following four levels of hierarchy of nodal settlements.

- a) Growth Centres
- b) Sub-growth centres/Mandi Towns/Growth Point.
- c) Service Centres/Sub-Mandi Towns.
- d) Central Villages

The service population and the distance from the lowest order settlement (Basic village) for each of the proposed level of hierarchy is suggested as under :

Level of Settlement	Service Population	Distance (Km.)
Central Village	3,000- 4,999	3- 6
Service Centre	5,000-19,999	6-12
Sub-Growth Centre	20,000-49,999	12-18
Growth Centre	50,000-99,999	18-24

Source : Proposed

The population and distances have been arrived at based on the analysis of settlement pattern of Haridwar district and Uttar Pradesh census 1991. It may be noted that in view of the topography in most of the blocks where the settlements are sparsely located and the population is sparse; accessibility (distance) and other infrastructure development criteria have also been used before arriving at the location as well as number of the

above level of hierarchy of settlements in each block.

1) Central Villages

Ranking lowest in the settlement hierarchy, these settlements would act as nodal centres in meeting the requirements of social infrastructure facilities of a group of 8-10 basic villages and performing the functions of a "Collecting Centre", serving a population of 4,999 within a radius of 3-6 Km.

2) Service Centres/Sub-Mandi Towns

These centres are the second order settlements in hierarchy for Haridwar district. Three to four central villages are proposed to form a service centre having a population of 5,000-19,999 or within a radius of 6-12 km. to be named as "Service Centres/ Sub-Mandi Towns performing short term storage facilities, major collection and distribution centres of agricultural and horticultural commodities. Besides, these centres would also act as centres of Agro-Based, Fruit Based, Forest Based, Livestock Based service industries.

3) Sub-Growth Centres/Mandi Towns/Growth Points

These are the third higher order settlements. Here, three to four service centres/ sub-mandi towns are proposed to form a "Sub-Growth Centre/ Mandi Town/Growth Point" having a population of 20,000-49,999 within a radius of 12-18 km. These centres would act as multi-functional nodes with administrative, market, storage and industrial related functions of higher order than service centres. It is suggested that each block would have 2 to 3 sub-growth centres, depending upon the population.

4) Growth Centres

This is the highest order settlement in the proposed settlement hierarchy with a service population of 50,000-99,999. It is suggested that two to three sub-growth centres are proposed to form a growth centre and would play a dominant role with primarily multi-functional nodes with administrative,

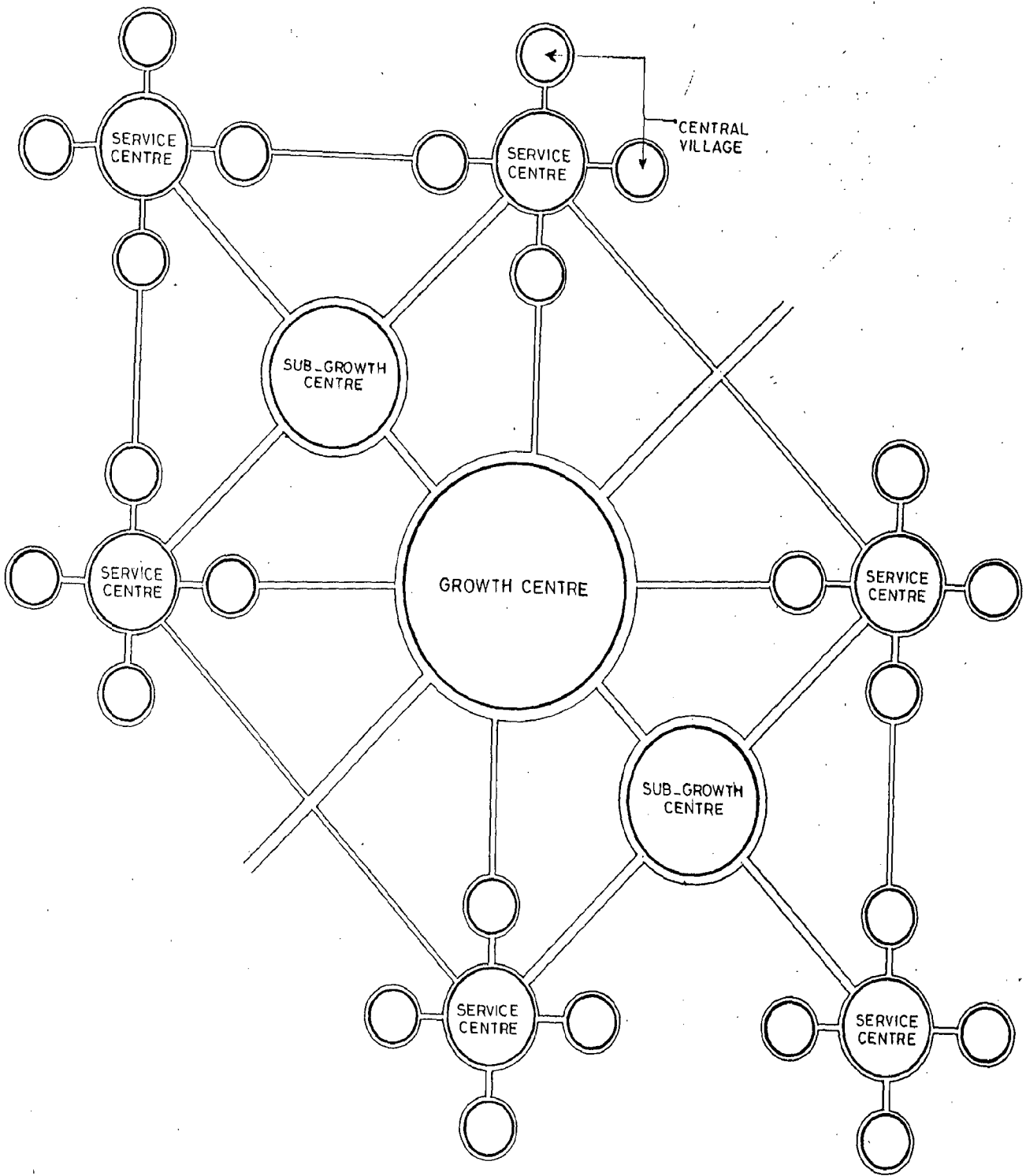


FIG.7.14.4: PROPOSED CONCEPT OF HIERARCHY OF SETTLEMENTS IN A DISTRICT

Economic, Infrastructure, marketing, Banking and industrial functions. Besides, these centres would also cater for all the higher order social infrastructure facilities required for the block. Roorkee and Haridwar would not only play a role as growth centre but also as a regional centre, in view of having comparatively highly developed infrastructure facilities in the district, but also being one of the more important urban centres of the district and state, and located in the important corridor of the state, has good connectivity with other regions/centres outside the district. ***The proposed higher order (growth centre) facilities are given in the table below.***

Table 7.14.4.1 : List of Proposed Hierarchy of Settlements in Haridwar District

Block	Growth Centre	Sub-Growth Centre/ Mandi-Town/Growth Point	Service Centre/ Sub-Mandi Town	Central Villages
Bhagwanpur		Bhagwanpur	Sikrauda, Chudiala Mahanpur, Sirchandi	Sikanderpur Bhainswala, Kheri Shikohpur, Banjarewala Grant, Jalapur Dada, Chauli Shahbudinpur, Habibpur Newada,
Roorkee	Roorkee	Piran Kaliyar, Badhedy Rajputan, Panyala Chandpur	Imlikheda Dharampur, Toda Kalyanpur, Saleempur Rajputan, Anantpur, Bhauri, Khatakheri, Tashipur	Daulatpur, Dhanauri Salyer Salapur, Bagtowali Mazra Dehat, Sumetra, Belra, Nanheda, Sunehra, Khanjarpur
Narsan	Zhabreda	Narsan Kalan, Manglaur	Liberhedi, Kheda Jat, Mundlana, Bunheda Tanda, Kotwal Alampur, Dhandera, Bhagwanpur Chandanpur	Gadar Judda, Jhabiran, Padele Guzar, Bejholi, Zaurasi Pert, Makhdoompur, Tekula Kalan, Mohammadpur Jat, Rajpur

Bahadrabad	Haridwar	Bahadrabad, Ranipur and Roshnabad	Saleempur Mahdood, Bhagtampur Abidpur, Dhanpur Garh.	Mustafabad, Sherpur Khelman, Horjoli Jat Kota Murad Nagar, Shivdaspur, Rawli Mahdood, Asampur Begum, Jamalapur Kalan, Jageetpur, Rasoolpur, Mithi Beri, Laldhang, Aurangabad, Ransura, Theru Ramkhera, Badshahpur
Laksar	Laksar	Bhikampur Jeetpur, Sultanpur Aadampur	Kharanja Kutubpur, Bhogpur, Habibpur Kuri, Niranjapur	Mohammadpur, Bhuzurg, Mubaritempur Alipur, Bahadurpur Khedey, Akotha Aurang Zebpur Mundakhera Kalan, Semli, Maharajpur, Kalan, Mahtauli
Khanpur	-	Khanpur	Gordhanpur, Prehladpur, Tughalpur	Lalchandwala, Karanpur, Mirajapur Sadat, Rajhumathpur, Podowali, Chandipur Banger

Table 7.14.4.2 : Proposed facilities in Haridwar District (Growth Centre of Higher Order)

A. Economic Infrastructure Facilities

Market and storage : Industrial estate (small and medium scale units)
Wholesale market with cold storage facilities and godown.
General workshop with specialised services
Fertilizer & Seed godown
Special agriculture implements store

Livestock products centre

Banking : Financing agencies

Lead Bank Office

Bank office

Transportation : Railway station

Truck terminus with repair and spare parts. Bus Depot

State highway and major district roads.

Forest : Forest produce godown

B. Social Infrastructure Facilities

Education : Polytechnic, professional college, Degree colleges.

Health : Hospital with 50 beds, X-ray, ECG and other specialised veterinary facilities.

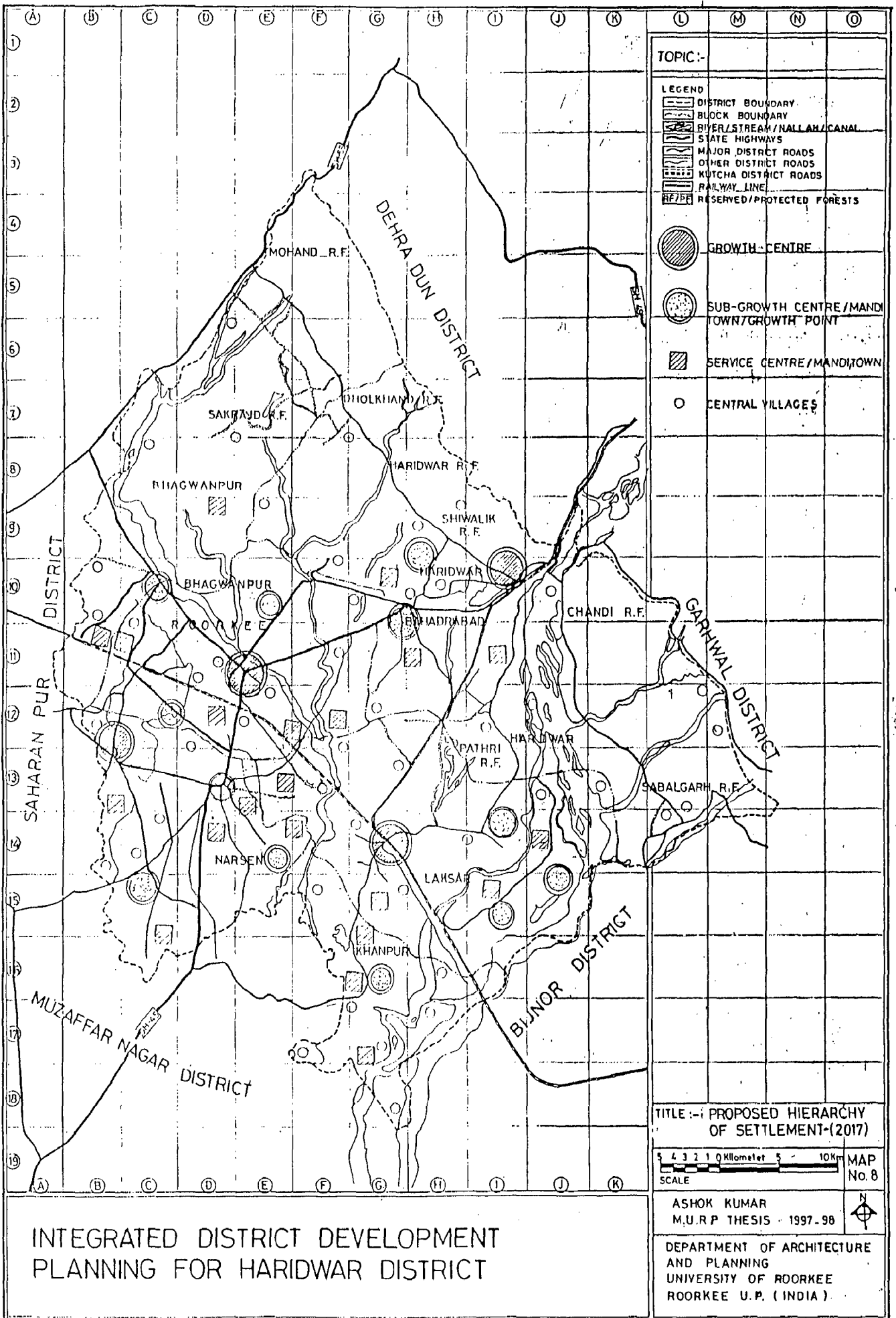
Post & Telegraph : Head post office and telegraph office

Recreational and Cultural centre, regional library, cinema hall with modern

Community facilities : fittings, hotels, parks, playgrounds etc.

The list of centres and the type and level of economic and social infrastructural facilities proposed to be located in each of the hierarchy explained earlier are listed below. The planning for Transportation have been discussed earlier and it is further suggested that all the road network is to be strengthened as an integral part of the transport development strategy :

Link	Recommended types
a) Between Growth centres	Two lane carriageway
b) Between Growth centres & Sub Growth centres.	One and half carriageway
c) Between Sub-Growth centre & Central Village	Single lane carriageway
d) Between Service centre and Central Village	Motorable road
e) Between Centre Villages and	Jeepable road



INTEGRATED DISTRICT DEVELOPMENT
PLANNING FOR HARIDWAR DISTRICT

Basic Villages

It is suggested that all the central villages should be connected by motorable roads by the end of 9th five years plan (2002).

Table 7.14.4.3 : Proposed Services According to Hierarchy of Settlements

Sectors	Growth Centre	Sub-Growth Centre Mandi Town/ Growth Point	Service Centre
A. Economic Infrastructure			
Industries	SSI estate and medium scale industries	KVI & Small Processing units	Village industries
Market & Storage	Wholesale market and godown General Shop Fertilizer godown/depot Seed godown Grain & Vegetable Mandi & godown Agri. implements store Milk/dairy product poultry centre	Retail market Gen. Workshop Fertilizer depot Seed sub-depot Grain mandi Agri. implements district Milk chilling and poultry collection	Consumer Coop. Store/shops Repair workshop Fertilizer Centres Seed distribution centre Grain sub - mandi Agri. implements on hire centre Milk collection centre
Banking	Land dev. bank/ Agri. finance corporation Lead Bank/ Commercial bank	Rural credit society Commercial bank branch	Agri. cooperative Cooperative bank branch
Transport	Truck terminus Bus station State highway	— Bus stand Major District Roads	— Regular bus stop Other District Roads

Table 7.14.3.1 : Norms for Infrastructure Facilities at District Level

Facilities	Distance (in Kms.)	Population
Regulated Market	16-20	-
Godown	16-20	-
Cold Storage	16-20	-
Technical College	16-20	-
Hospital	16-20	For Each Tehsil
Primary Health Centre	-	One Per 30,000 population (20,000 in Hill/Tribal Area)
Veterinary Hospital	-	One Per 30,000 population (20,000 in Hill/Tribal Area)
Bank	-	One Per 17,000 population
College	-	One Per 30,000 population (20,000 in Hill/Tribal Area)
High School	08-12	One per 20,000 population
Vocational Training	12-16	-
Dispensary	08-12	One Per 20,000-25,000 population
Health Sub-Centre	04-05	One Per 5,000 population (3,000 population in Hill/Tribal Area)
Sub-Post Office with Telegraph Facility	08-12	-
Veterinary Key centre	04-05	-
Middle School	04-05	-
Branch Post Office	04-05	-
Bus Stop	04-05	-
Fair Price Shop	02-04	-
Link Road	02-04	All Villages with More Than 1,000 population
Community Health	02-04	All Villages with More Than 1,000 population
Primary School	02-04	

Source-VIth Five Year Plan

Special Requirements for Community Facilities/Activities in the Villages of North India:

Considering the large variation in geo-climatic conditions, socio-cultural and economic conditions in rural India, C.B.R.I. has done a research study on formation of Norms for Community Facilities for better quality of life of villages to be provided in relation to the village size for North India.

Table 7.14.3.2 : Norms for Location of Community Facilities for Different Sizes of Villages

Village Population	Educational Facilities			Health Facilities			Open Space	Other Facilities			
	P.S.	Jr.H.S.	H.S.S.	Dispansry	Family Welfare	Health Sub. Cent.		Comm Centre	Coop. Office	Coop. Bank	P&T
Up to 2000	✓			✓			✓	✓			
2001 to 4000	✓	✓		✓			✓	✓	✓		✓
4001 to 6000	✓	✓		✓	✓		✓	✓	✓	✓	✓
6001 and above	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

P.S. : Primary School, Jr. H.S. Junior High School, H.S.S. Higher Secondary School.

Source : Annual Report - 1995, Central Building Research Institute Roorkee, India.

TABLE No. 7.14:4.4: (1)
 PROPOSED FACILITIES BLOCKWISE IN VILLAGES AS PER DISTANCE FOR 1997-2002

S.No.	BLOCK	RATION SHOP (1)					DRINKING WATER (2)					AGRICULTURAL FACILITIES - CENTRE (3)					CONVENIENT SHOPPING - (4)								
		< 1 KM.	1-5 KM.	5-10 KM.	> 10 KM.	TOTAL	< 1 KM.	1-3 KM.	3-5 KM.	5-10 KM.	TOTAL	IN VILL.	< 1 KM.	1-3 KM.	3-5 KM.	5-10 KM.	7-5 KM.	TOTAL	IN VILL.	< 1 KM.	1-3 KM.	3-5 KM.	5-10 KM.	7-5 KM.	TOTAL
1	BHAGWANPUR	70 (57)	12 (21)	-	-	82	(82)	-	-	-	-	(82)	38 (24)	12 (7)	16 (10)	12 (20)	4 (41)	82 (82)	(82)	2 (-)	30 (24)	32 (16)	18 (43)	18 (82)	(82)
2	NARSAN	76 (58)	10 (15)	5 (9)	- (4)	91	(91)	-	-	-	-	(91)	33 (15)	11 (4)	26 (15)	14 (20)	7 (25)	91 (91)	(91)	6 (6)	28 (20)	47 (39)	8 (18)	(91)	
3	ROORKEE	72 (65)	10 (8)	5 (17)	- (-)	91	(91)	-	-	-	-	(91)	31 (15)	16 (5)	22 (14)	16 (23)	6 (59)	91 (91)	(91)	4 (4)	24 (17)	48 (27)	11 (9)	(91)	
4	BAHADRABAD	77 (62)	10 (15)	8 (15)	- (3)	103	(103)	-	-	-	-	(103)	42 (20)	15 (8)	31 (20)	12 (7)	3 (248)	103 (103)	(103)	4 (4)	42 (35)	28 (17)	15 (15)	(103)	
5	LAKSAR	65 (57)	10 (7)	9 (15)	- (5)	84	(84)	-	-	-	-	(84)	24 (13)	21 (14)	25 (17)	11 (20)	3 (20)	84 (84)	(84)	7 (7)	37 (31)	22 (19)	8 (6)	(84)	
6	KHANPUR	30 (23)	8 (5)	9 (16)	- (5)	47	(47)	-	-	-	-	(47)	5 (-)	6 (1)	19 (10)	9 (17)	8 (23)	47 (47)	(47)	3 (3)	19 (19)	18 (14)	5 (15)	(47)	
	TOTAL DISTRICT	590 (536)	68 (63)	40 (74)	- (4)	(498)	(498)	-	-	-	-	(498)	173 (87)	81 (43)	140 (86)	74 (104)	(132)	498 (498)	(498)	37 (37)	26 (24)	180 (140)	57 (101)	498 (498)	
S.No.	BLOCK	WHOLE SALE MANDI (5)					COLD STORE (6)					SEED GODOWN/FERTI. GODOWN/ PESTICIDE STA.(7)					ANIMAL WELF. CENTRE/ VETERINARY HOSPITAL (8)								
1	BHAGWANPUR	3 (1)	2 (1)	10 (7)	15 (6)	52 (47)	82	1 (-)	1 (-)	2 (-)	4 (-)	7 (4)	7 (4)	7 (2)	8 (1)	35 (20)	19 (17)	13 (20)	(82)	6 (6)	12 (12)	16 (16)	37 (24)	11 (24)	(82)
2	NARSAN	3 (1)	3 (2)	9 (6)	40 (15)	55 (53)	51	2 (1)	3 (1)	4 (1)	6 (4)	76 (44)	10 (5)	15 (8)	27 (16)	26 (32)	13 (20)	(51)	(51)	5 (1)	5 (5)	18 (15)	41 (34)	21 (21)	(51)
3	ROORKEE	2 (-)	9 (7)	6 (4)	20 (7)	54 (53)	91	2 (1)	5 (3)	12 (8)	18 (10)	54 (33)	9 (1)	22 (13)	39 (27)	14 (10)	7 (30)	(91)	(91)	7 (4)	5 (3)	12 (9)	39 (27)	28 (42)	(91)
4	BAHADRABAD	2 (-)	3 (3)	6 (4)	24 (10)	65 (57)	103	1 (-)	1 (-)	2 (-)	6 (-)	93 (105)	15 (5)	17 (4)	26 (16)	29 (36)	16 (41)	(103)	(103)	6 (6)	4 (2)	16 (16)	26 (16)	51 (52)	(103)
5	LAKSAR	3 (-)	1 (-)	5 (-)	12 (-)	65 (45)	84	1 (-)	1 (-)	2 (-)	3 (-)	77 (64)	15 (5)	17 (7)	24 (20)	23 (24)	10 (27)	(84)	(84)	4 (4)	4 (4)	21 (21)	22 (22)	33 (33)	(84)
6	KHANPUR	1 (-)	1 (-)	2 (-)	5 (-)	35 (27)	47	1 (-)	1 (-)	2 (-)	3 (-)	40 (27)	6 (-)	6 (-)	17 (10)	12 (17)	6 (16)	(47)	(47)	3 (3)	4 (4)	18 (16)	15 (15)	7 (7)	(47)
	TOTAL DISTRICT	14 (12)	19 (17)	38 (21)	116 (41)	511 (421)	458	8 (2)	12 (4)	24 (20)	40 (14)	444 (469)	434	55 (8)	85 (34)	166 (103)	125 (140)	57 (100)	(458)	32 (32)	34 (34)	101 (64)	182 (154)	151 (224)	(458)
S.No.	BLOCK	AGRI. LOAN CO-OP. SOCIETIES (9)					SALE/PURCHASE CO-OP. SOCIETIES (10)					COMBINED JR. BASIC SCHOOL (11)					BOYS SR. BASIC SCHOOL (12)								
1	BHAGWANPUR	(2)	(25)	(16)	(14)	(62)	(62)	(-)	(-)	1 (-)	1 (-)	(30)	(6)	(4)	(4)	(-)	(-)	(-)	(62)	(4)	(4)	(30)	10 (6)	21 (23)	(62)
2	NARSAN	(7)	(6)	(20)	(20)	(53)	(51)	(-)	(-)	5 (5)	14 (10)	(27)	(74)	(11)	(6)	(-)	(-)	(-)	(51)	(10)	(5)	(30)	38 (30)	2 (2)	(51)
3	ROORKEE	(6)	9 (5)	(20)	(16)	33 (42)	(51)	(-)	(-)	5 (5)	7 (5)	(29)	(56)	(16)	(18)	(1)	(-)	(-)	(51)	(15)	(17)	(13)	22 (17)	24 (26)	(51)
4	BAHADRABAD	(9)	8 (1)	(19)	(20)	36 (42)	(113)	(-)	(-)	2 (-)	6 (-)	(113)	(19)	(11)	(11)	(-)	(-)	(-)	(113)	(11)	(10)	(30)	16 (13)	25 (24)	(113)
5	LAKSAR	(8)	(5)	(24)	(15)	(25)	(44)	(-)	(-)	1 (-)	1 (-)	(44)	(55)	(10)	18 (15)	1 (4)	(-)	(-)	(44)	(17)	(7)	(30)	29 (23)	5 (1)	(44)
6	KHANPUR	(9)	(2)	(15)	(19)	(27)	(47)	(-)	(-)	1 (-)	1 (-)	(47)	(27)	(18)	25 (20)	2 (8)	(-)	(-)	(47)	(3)	(1)	(10)	12 (9)	15 (17)	(47)
	TOTAL DISTRICT	(44)	(49)	(114)	(116)	(477)	(428)	(-)	(2)	(10)	(24)	(462)	(494)	(39)	(64)	(74)	(15)	(-)	(428)	(66)	(44)	(162)	129 (97)	90 (120)	(428)

* SOURCE : (C) Compiled by Author from District Statistics Report for Year 1994.
 ** SOURCE : (**) Estimated by Author

TABLE No. 7-14.4.- CONTINUED (2)

S.No	BLOCK	GIRLS SENIOR BASIC SCHOOL - (13)				HR. SECONDARY SCHOOL (BOYS) - (14)				GIRLS HR. SECONDARY SCHOOL - (15)				ADULT EDUCATION CENTRE - (16)					
		IN VILL.	< 1 KM.	1-3 KM.	3-5 KM.	7.5 KM.	TOTAL	IN VILL.	< 1 KM.	1-3 KM.	3-5 KM.	7.5 KM.	TOTAL	IN VILL.	< 1 KM.	1-3 KM.	3-5 KM.	7.5 KM.	TOTAL
1	BHAGWANPUR	(3)	(8)	(21)	(45)	(82)	(7)	(7)	(29)	(18)	(27)	(85)	(-)	(-)	(-)	(-)	(-)	(82)	(82)
2	NARSAN	(2)	(2)	(12)	(33)	(49)	(5)	(5)	(29)	(24)	(27)	(91)	(-)	(1)	(2)	(26)	(26)	(91)	(91)
3	ROORKEE	(4)	(3)	(14)	(29)	(49)	(2)	(2)	(15)	(25)	(42)	(29)	(-)	(1)	(5)	(6)	(7)	(91)	(91)
4	BAHADRABAD	(6)	(4)	(11)	(20)	(32)	(3)	(1)	(10)	(9)	(18)	(108)	(-)	(-)	(2)	(5)	(5)	(96)	(108)
5	LAKSAR	(2)	(4)	(19)	(40)	(64)	(5)	(10)	(13)	(16)	(40)	(84)	(-)	(-)	(-)	(-)	(-)	(82)	(84)
6	KHANPUR	(1)	(4)	(15)	(23)	(47)	(-)	(-)	(-)	(7)	(40)	(47)	(-)	(-)	(-)	(-)	(-)	(46)	(47)
	TOTAL DISTRICT	(16)	(20)	(87)	(152)	(257)	(22)	(29)	(64)	(94)	(269)	(428)	(-)	(2)	(1)	(44)	(31)	(443)	(498)
S.No	BLOCK	ALLOPATHIC HOSPITAL, DISPENSARY, P.H.C. - (17)				AYURVEDIC HOSPITAL & DISPENSARY - (18)				FAMILY WELFARE CENTRE / SUB-CENTRE - (19)				PUCCA ROADS - (20)					
1	BHAGWANPUR	(4)	(4)	(16)	(24)	(34)	(3)	(9)	(15)	(11)	(32)	(52)	(22)	(1)	(24)	(5)	(24)	(24)	(24)
2	NARSAN	(3)	(12)	(2)	(3)	(21)	(23)	(9)	(7)	(16)	(64)	(23)	(30)	(11)	(22)	(23)	(6)	(23)	(23)
3	ROORKEE	(5)	(3)	(12)	(21)	(35)	(-)	(-)	(7)	(12)	(12)	(12)	(22)	(9)	(5)	(11)	(-)	(22)	(22)
4	BAHADRABAD	8	(6)	(10)	(14)	(29)	(4)	(1)	(12)	(11)	(68)	(45)	(50)	(6)	(24)	(24)	(12)	(45)	(45)
5	LAKSAR	(2)	(4)	(10)	(23)	(34)	(4)	(1)	(15)	(14)	(59)	(32)	(22)	(2)	(22)	(22)	(-)	(22)	(22)
6	KHANPUR	(1)	(1)	(7)	(11)	(19)	(1)	(1)	(4)	(2)	(35)	(27)	(11)	(1)	(22)	(2)	(17)	(27)	(27)
	TOTAL DISTRICT	(24)	(22)	(32)	(42)	(92)	(14)	(19)	(68)	(75)	(338)	(222)	(152)	(30)	(152)	(97)	(62)	(477)	(477)
S.No	BLOCK	POST OFFICE - (21)				TELEGRAPH OFFICE - (22)				PUBLIC TELEPHONE - ST.D. - (23)				LAND DEVELOPMENT BANK / TRADE/RURAL CO-OP. BANK - (24)					
1	BHAGWANPUR	(14)	(4)	(40)	(24)	(59)	(3)	(3)	(12)	(19)	(41)	(52)	(23)	(4)	(29)	(21)	(24)	(24)	(24)
2	NARSAN	(19)	(5)	(31)	(35)	(69)	(4)	(9)	(14)	(31)	(34)	(61)	(31)	(8)	(29)	(22)	(14)	(29)	(29)
3	ROORKEE	(19)	(10)	(44)	(22)	(85)	(-)	(1)	(5)	(6)	(74)	(42)	(17)	(1)	(26)	(15)	(21)	(20)	(20)
4	BAHADRABAD	(20)	(5)	(27)	(31)	(63)	(4)	(1)	(4)	(11)	(78)	(53)	(17)	(1)	(25)	(11)	(17)	(43)	(43)
5	LAKSAR	(19)	(7)	(35)	(29)	(69)	(-)	(-)	(12)	(12)	(60)	(34)	(11)	(1)	(35)	(24)	(19)	(11)	(11)
6	KHANPUR	(5)	(-)	(29)	(15)	(44)	(-)	(-)	(-)	(-)	(41)	(25)	(1)	(4)	(12)	(12)	(-)	(12)	(12)
	TOTAL DISTRICT	(80)	(35)	(226)	(156)	(388)	(8)	(16)	(52)	(145)	(346)	(249)	(112)	(22)	(152)	(122)	(64)	(92)	(322)

SOURCE : * () Compiled by Author from District Statistics Report for year 1994
SOURCE : ** Estimated by Author

Sectors	Growth Centre	Sub-Growth Centre Mandi Town/ Growth Point	Service Centre
Forest	Forest produce store FPC impl.	Forest produce collection centres FPC input distribution centre	Forest produce collection and FPC impl. distribution Sub-centre.
Electricity	Electricity station	Sub-station	Elec. local feeding office
Irrigation	Irrigation Office	Sub-office	Local irrigation Office
B. Social Infrastructure			
Education	Degree college	SS. School Vocational college	High School adult education centre.
Health	Community health centre Eye and Dental clinic, veterinary hospital	Primary health centre Vet. Dispensary	Dispensary/sub-health centre Vet. aid centre
Post & Telegraph	Post Office with telephone & telegraph facility	Sub-post office with telegraph facility	Branch post office

7.15 : FORMULATION OF INTEGRATED DISTRICT DEVELOPMENT PLAN (IDDP) FOR HARIDWAR DISTRICT (1997-2002)

As per the proposed development scenario for 2017, an Integrated District Development Plan (IDDP) has been formulated for next five years (9th Five year plan). The IDDP basically indicates a set of schemes and programmes at the block level under each sector to be taken up for implementation. In addition to the ongoing programmes, list of schemes and programmes has been identified which would reflect the development scenario of 2017. It may be noted that these programmes are need based and identified as per the settlement priority to be considered for next five years (9th Five Year Plan)

in Haridwar District.

7.15.1 Proposed Schemes and Programmes for Integrated District Development Plan (IDDP)- 1997-2002

Sector/Blocks	Schemes	Programmes
1. AGRICULTURE AND HORTICULTURE SECTOR		
a) Bhagwanpur in	<ul style="list-style-type: none"> * High Yielding Varieties * Commercial Crops including schemes for crop insurance * Minor irrigation scheme Tubewell Irrigation * Extension of irrigation facilities * Conversion of Fallow land Conversion of Cultivable Waste and fallow into Pasture land. * Agricultural Marketing * Soil Conservation Scheme * Improved Fruit Production Schemes 	<ul style="list-style-type: none"> 1) Intensive agriculture programmes. Change Cropping Pattern 1) Development of vegetable farms for seed potato, ginger, soyabean, pulses 2) Oilseed Development Programme 1) Intensification of Schemes 1) Wasteland Development Programmes 1) Establishment of improved storage units. 1) Soil and Water Conservation Schemes under National Water Shed Management Programme. 1) Programmes for improved fruit

production eg. Mango
guava, and other fruits.

- * Area Development Schemes
Schemes to increase area and implement method of mushroom cultivation
Organisation of garden competition for fruit/flower show to give better quality of products.
- * Schemes for promotion of sericulture, apiculture etc.
- * Horticulture Marketing
 - 1) Establishment of improved storage and Processing units for efficient use of horticulture products
- * Non-food crops-change in cropping pattern to grow vegetable as well as intensive cash crops.
 - 1) Development of Vegetable for tomato, capsicum cabbage, cauliflower, peas, potato and ginger.
- * Assistance Schemes
Schemes of assisting small and marginal farmers for increasing agricultural production.
 - 1) Under special 20-point programmes
- * Soil Conservation and National Water Shed Management
- * Conversion of Fallow Land
Scheme to Convert fallows to pastures-maintenance of pasture land for grazing
 - 1) Wasteland development programmes
 - 2) Management of Private grass land for biomass development.

b) Roorkee

- * Animal Husbandry Schemes
 - Cattle development schemes to be given priority
 - 1) Promotion of Animal Husbandry Programmes.
 - 2) Dryland farming.
 - * Agricultural Marketing
 - Establishment of Sub-Growth Centres/service centres for distribution of agricultural crops.
 - * Improved Fruit Production Scheme
 - Schemes to improve Mango fruit cultivation and production
 - 1) Maintenance of Mango fruit trees and nurseries.
 - * Plant protection and control of pests and diseases of agricultural importance.
 - 1) Programme for increase in mushroom farms.
 - * Subsidy Schemes to EWS Families
 - Special subsidy schemes for EWS families taking up fruit production
 - 1) IRDP and 20 Point programmes
 - * Schemes to increase processing and canning units along with horticulture, marketing (distributions, collecting centres)
 - 1) Regulated sub-growth centres
 - 2) Cold Storage and canning, bottling plants.
- c) Narsan**
- * Subsidy Scheme for EWS Families
 - 1) Interest subsidy for Mango plantation
 - * Special subsidy scheme for Agriculture and horticulture inputs
 - 2) Wasteland Development Programmes
 - * Scheme for land conversion of fallow and wasteland to economically viable horticulture production

- * Further promotion of apiculture activities
 - 1) Beekeeping Extension Programmes to farmers to encourage more cultivation.
 - 2) Supply of Honeybee colonies to the Private bee keepers.

- * Horticulture Marketing Storage and marketing facilities as well as collection and distribution centres for horticulture produce.
 - 1) Regulated market centres at wholesale level as well as smaller market centres.

- d) **Bahadrabad.**
 - * Improved Paddy, Wheat and Fruit Production Schemes
 - Schemes on increasing and upgrading fruit production
 - 1) Fruit processing and canning units for mangoes, litchies lemons etc.

 - * Horticulture Marketing
 - * Ware housing and Marketing facilities.
 - 1) Offseason fruits and vegetables to be given more impetus taking advantage of better soil, topography and irrigation facilities.

 - * Dryland farming
 - Drought resistant varieties and dryland cultivation schemes
 - 1) Distribution of improved drought resistant seeds
 - 2) Distribution of Chemical fertilisers

 - * Horticulture Marketing
 - Centres for efficient distribution of products
 - 1) Regulated markets
 - 2) Establishing of new

2. FORESTRY

a) Bhagwanpur

- * Fast growing species
- * Scheme for plantation of growing species to the depleting forest area.
 - 1) Programme for introductory plantation of deodar, and other trees.
- * Soil Conservation
Scheme for soil conservation which would bring additional area under forest.
 - 1) Programmes for development of pasture and grazing land, grass land , development project
- * Integrated Wasteland Development Project
 - 1) Fuelwood and project under Minimum Needs Programme
- * Social forestry and wild-life scheme
 - 1) Improvement of and protection of wild life species
 - 2) Wildlife Management and Nature Conservation
 - 3) Programme for extension for farm forestry land.

b) Roorkee

- * Soil Conservation
- * Soil and water conservation schemes to bring land under afforestation.
River valley project schemes (solani)
 - 1) Integrated Watershed Development Project
 - 2) Flood prone area Projects
- * Wasteland Development Project
Conversion of fallow land into pasture land cattle grazing
 - 1) Development Programme for pasture and grazing

		2) Grassland Development Project
	* Farm and Social project.	1) Fuel and fodder project under MNP
		2) Bio-mass Development Project
c) Narsan	* Soil Conservation	
	Soil and Water Conservation Schemes to bring some area under forests.	1) Soil Conservation Programmes
		2) Watershed Management Programmes
	* Social Forestry and Fast growing Plantation Species Scheme-Economic Plantation	1) Plantation of Deodar species.
d) Bahadrabad	* Afforestation and social forestry schemes to existing forest area which is the highest in the block	1) Farm forestry and plantation species along with rural fuel and fodder project under Minimum Needs Programme (MNP)
	* Soil Conservation	
	Soil watch and flood prone area project	1) Soil conservation under plan and non plan projects for maintenance and improvement
	* Extension and Training Facilities	
	Schemes relating to extension and training facilities to farmers involved in plantation of fast growing species	
	* Wasteland Development Project	

	Development of pasture and grazing land by converting fallow and wasteland	<ol style="list-style-type: none"> 1) Integrated Grass land converting 2) Wasteland Development Project
e) Laksar	<ul style="list-style-type: none"> * Fast growing species Introductory plantation of economic and fast growing species * Subsidy scheme for EWS families taking up social forestry for plantations * Forest conservation and development schemes * Wild life Management and Nature Conservation 	<ol style="list-style-type: none"> 1) Plantation and afforestation programme for deodar, sheesham, neem, etc. 1) Economic Plantation Scheme 2) Fuelwood and Fodder Project 1) Forest Protection Programme 1) Improvement and Development of Wild life Sanctuaries.
f) Khanpur	<ul style="list-style-type: none"> * Forest conservation and development schemes * Subsidy scheme for EWS families for taking up forestry for plantations. 	<ol style="list-style-type: none"> 1) Forest Protection Programme. 1) Economic Plantation Scheme.

3. INDUSTRY SECTOR

a) Bhagwanpur	<ul style="list-style-type: none"> * Promotion of industrial entrepreneurship in service centres. * Environmental Conservation and pollution control * Investment in UPSIDC units 	<ol style="list-style-type: none"> 1) Devt. of industrial estates for Resource based Industries. 1) Pollution control testing laboratory. 1) Paper and Pulp based units
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- * Infrastructure development for industrial extension
- * Modernisation to improve productivity of small scale units
 - 1) Resource based industries
 - 2) Agri/horti based processing units (food and fruit based).
- * Assistance to backward classes/SC/ST, handicapped
 - 1) Electrical accessories
 - 2) Garment manufacturing
 - 3) Leather products units
- * Subsidy schemes to backward families who are entrepreneurs in SSI and KVI units-handloom and textile units.
 - 1) Marginal subsidy to weavers co-op societies including Marketing, Development assistance
- * Modernisation of SSI Units

b) Roorkee

- * Existing SSI units being the only industrial potential, have to be given impetus, specially the ones important in the block (Drg./survey Instruments, Electronics etc)
- * Forest based units among the SSI's can be prioritised under schemes
 - 1) Hand made paper making units
 - 2) Paper and cardboard
 - 3) Laminated board
- * Development of skill based industrial units under KVIB
 - 1) Blacksmithy
 - 2) Carpentry, 3) Shoe making 4) Bamboo craft
 - 5) Potters.
- * Extension facilities for infrastructure development at the proposed new industrial centres in the block.
- * Entrepreneurship development programmes
 - 1) To organise training courses for graduates and diploma holders and engineers

- | | | |
|----------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| | * Schemes to assist women in need by setting up cottage industry units | 1) Knitting, 2) Tailoring
3) Grinding 4) Packing of spices 6) Papad
7) Bidi Making, 8) Pickle/ sauces, jam making etc. |
| | * Workshed cum housing scheme | 1) Overhead infrastruc ture development to setup units. |
| c) Narsan | * Motivation programmes for educated unemployed to set up SSI Units. | 1) Entrepreneurship development programmes give guidance about scope of different industries, incentives and concessions |
| | * Schemes to provide assistance under TRYSEM, IRD etc. | 1) Self employment scheme |
| | * Establishment of mini-industrial estates at block headquarters by DIC finance. | 1) Extension programme for new/mini industrial estates through land acquisition by DIC |
| | * Schemes to assist women in need by setting up cottage industry units | 1) Knitting, 2) Tailoring
3) Grinding 4) Packing of spices 6) Papad
7) Bidi Making, 8) Pickle/ sauces, jam making etc. |
| d) Bahadrabad | * Training and visit programme for small and medium entrepreneurs. | |
| | * Environmental Conservation and Pollution Control in BHEL, Ranipur. | |
| | * Development of SSI Units for resource demand based | 1) Ancillary industries
Tractor assembly, |

	and ancillary industries	Automobile fitters assembly.
	* Schemes to assist women in need by setting up cottage industry units	1) Knitting, 2) Tailoring 3) Grinding 4) Packing of spices 6) Papad 7) Bidi Making, 8) Pickle/ sauces, jam making etc.
e) Laksar	* Scheme for upgradation and improvement of the existing industrial unit at Laksar	
	* Extension facilities and development of SSI Units	1) Agro based-food based 2) Fruit processing units 3) Forest based units - Paper and pulp - Laminated Boards and cardboards.
	* Scheme to provide assistance under TRYSEM, and self employment	1) Setting up ITI and Polytechnic at Block HQ for imparting training to unemployed youths.
	* Employment generation schemes to expand SSI units for skill based, resource based and demand based industries	1) Fruit Preservation (Mango etc.) 2) Welding units, steel furniture, garments, 3) Blacksmithy, shoemaking of tailoring, carpentry etc.
	* Assistance to backward classes, SC/ST, ex-service-men, handicapped persons etc.	
	* Schemes to assist women in need by setting up cottage industry units	1) Knitting, 2) Tailoring 3) Grinding 4) Packing of spices 6) Papad

- | | | |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | 7) Bidi Making, 8) Pickle/ sauces, jam making etc. |
| f) Khanpur | <ul style="list-style-type: none"> * Development of SSI units for Resource Based, Demand based industries * Scheme to provide assistance under TRYSEM and self-employment * Assistance to Backward classes, SC/ST, women and men. * Schemes to assist women in need by setting up cottage industry units | <ul style="list-style-type: none"> 1) Agro Based Food based. 2) Forest Based units 3) Fruit processing units 1) Knitting, 2) Tailoring 3) Grinding 4) Packing of spices 6) Papad 7) Bidi Making, 8) Pickle/ sauces, jam making etc. |

4. INFRASTRUCTURE SECTOR

i) TRANSPORT NETWORK

(Rural roads under Minimum Needs Programme)

- | | |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Bhagwanpur | <ul style="list-style-type: none"> * Schemes for rural roads for special disparity areas * Strengthening of existing rural roads and related repair work * Metalling and tarring of roads damaged due to bad weather |
| b) Roorkee | <ul style="list-style-type: none"> * Upgradation of existing road network in the rural areas under MNP |

- * Road side facilities and plantation schemes.
- * Extension facilities to upgrade rural roads to make it pucca and motorable
- * Widening of narrow roads and improving connectivity
- * Bypassing the unwanted (heavy) traffic in State Highway - 145 by creating a By-pass Road between Manglaur & Roorkee meeting after Solani Bridge.

c) Narsan

- * Schemes related to construction of roads and bridges under MNP for rural roads
- * Kutcha road to be upgraded to Motorable or jeepable roads
- * Connectivity specially in the rural areas being very poor. Schemes related to improvement and maintenance of rural roads.

d) Bahadrabad

- * Extension facilities for existing road network in rural areas of the block.
- * Upgrading connectivity in special disparity areas
- * Schemes to impart road safety measures to those concerned
- * Metalling and tarring of Kutcha roads of remote villages to make them more accessible.

b) Roorkee

- * Improvement of school infrastructure at middle school level
 - 1) Maintenance of building
 - 2) Furniture and library, books to schools
- * Scholarships for students of SC/ST, backward families to attract poor students in education.
 - 1) Stipends for EWS (SC/ST) students
- * Opening women's college institution at block headquarter.
 - 1) Women's polytechnic and ITI at higher order settlements.
- * Vocationalising of certain colleges for women.
- * Upgradation of Middle School to High School and High School to Sr. Secondary School
- * Rural literacy schemes
 - 1) Adult education programmes
 - 2) Initiating evening classes for working males in various central villages.

c) Narsan

- * Schemes to provide atleast elementary education at primary level throughout the block.
 - 1) Grant in aid to government primary schools in backward areas.
- * Refresher courses for primary teachers for nursery teacher training.
 - 1) Teachers training programmes
- * Incentive scheme to improve enrolment in middle and secondary school level
 - 1) Scholarship to SC/ST girls in class IV-VIII
 - 2) Merit scholarships
- * Additional teaching staff for middle and senior secondary school levels.

- | | | |
|----------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| | * Starting of evening colleges/
class | 1) Programme under
adult literacy schemes. |
| | * To increase literacy rate,
starting of adult education
institutes. | 1) Operation Blackboard
programme. |
| | * Upgradation of High
Schools to Senior Secondary
Schools | |
| d) Bahadrabad | * Schemes for setting up primary
and middle level schools in
the rural areas as per norms. | |
| | * Grants in aid for maintenance
of institutions | |
| | * Additional teachers for high
school and SSC. | |
| | * Teachers training in the form
of refresher courses. | |
| | * Assistance to colleges for
initiating additional courses
(Gurukul Kangri University) | |
| | * Technical education to be
upgraded-state board of
technical education | 1) Opening Diploma
ITI in rural area |
| e) Laksar | * Extension facilities for
associated infrastructure
for schools | 1) Hostel facilities for
students enrolling from
far off rural areas. |
| | * Vocational training from HS
and Senior Secondary School
level | |
| | * In service training for teach-
ers for better teaching
methods | 1) Imparting training thro-
ugh audiovisual aids for
improved teaching
methods. |
| | * Adult education to increase
literacy rate. | |

f) Khanpur

- * Schemes for setting up primary and middle schools in rural areas as per suggested norms.
- * Teachers training in the form of refresher courses
- * Vocational training programmes at panchayat level for rural women.

iii) MEDICAL

a) Bhagwanpur

- * Schemes to construct dispensaries and PHC in at least every central/Basic village.
- * Strengthening of services at Dispensaries/P.H.C.
Upgrading of beds & additional staff in various levels.
- * Conversion of Rural Health Centres to Community Health Centres.

b) Roorkee

- * Construction of Health Sub-Centre/PHC/Community Centre Staff in sub-growth centres.
- * Increasing staff and bed capacity at the hospital in Roorkee.
- * Training Programme for medical staff (male and female) and general nursing
- * Opening up of Medical Institute.
- * Construction of lower order health centres to serve at least all the rural population/atleast every central village.

	* Establishment of Research, Monitoring and evaluation cell in health directorate.	1) Maternity and Child Welfare Programme
	* Schemes to provide for free medical facilities to backward or EWS(SC/ST) families.	2) Opening of Health Sub-Centre under Family Welfare Programme.
e) Laksar	* Opening of dispensaries/PHC /health sub-centres/community centres for redressal of regional imbalances	1) PHC for population of 30,000. 2) Dispensary/subsidiary centre for population of 5000
	* Extension of health facilities from basic level to serve the deficient rural areas	
	* Strengthening of services and staff of existing institutions	
	* Training programme for general nurses and other medical staff	
	* Lower level hospital facility to serve the rural areas to increase bed capacity	
	* Producing additional incentives under family welfare programme	1) Opening health sub-centres under family welfare programmes
	* Grant-in-aid to various voluntary health organisation	
f) Khanpur	* Opening of dispensaries/PHC /health sub-centres/community centres for redressal of regional imbalances	1) PHC for population of 30,000. 2) Dispensary/subsidiary centre for population of 5000
	* Extension of health facilities from basic level to serve the deficient rural population	
	* Strengthening of services and	

- * Upgradation of infrastructure facilities in Piran Kaliyar
 - 1) Infrastructure facilities and amenities including shelter for floating population of Piran Kaliyar.

6. SOCIAL WELFARE PROGRAMME

a) Bhagwanpur

- * Schemes for rural development
 - 1) Assistance to block (in the form of subsidy) including expenditure on TRYSEM
- * Integrated rural development programme
 - 2) Strengthening of block level administration
 - 3) DW CRA infrastructure
- * Integrated Rural Energy Programme
- * Scheme taken up to serve population under Non-conventional energy resources.
 - 1) Smokeless Chullah
 - 2) Domestic solar lighting system.
- * Minimum Needs Programme
 - 1) Drinking Water Programme
 - 2) Low cost housing & sanitation programme, Rural Housing, water supply and sanitation scheme
 - 3) Health for all under National Health Policy by 2000.
- * Special Nutrition Programme
 - 1) Integrated Child Development
- * Special Employment Programme
 - 1) Setting up Labour Welfare Centre.

b) Roorkee

- * Schemes for Integrated Rural Development Programme (IRDP)
 - 1) Assistance to Institute of Training and Research in Rural Development
 - 2) TRYSEM infrastructure
 - 3) Vocational Training to women of EWS(SC/ST) families
 - 4) Grants in aid to entrepreneurs starting cottage industrial units.
 - 5) Scholarship to meritorious students of EWS (SC/ST) families.

- * Integrated Rural Energy Programme (IREP)
 - 1) Project Implementation for Energy Efficient store
 - 2) Demonstration and installation of improved water units at 50% of the cost

- * Minimum Needs Programme
 - 1) Rural Health Scheme Conversion of health centres into community health centres.
 - 2) Accelerated rural Water Supply Programme

- * Special Employment Programme
 - 1) Special programme for rural labour - enforcing minimum wages for unorganized labour in agriculture and industry

- * Jawahar Rozgar Yojana employment scheme
 - 1) Introduction of self
 - 2) Employment Services in Rural Areas (NREP) for Rural Artisans

- | | | |
|----------------------|--------------------------------------------------|------------------------------------------------------------------------------------|
| | * Social Welfare Programmes | 1) Welfare of Handi capped stipends/scholarships to such students |
| | | 2) Child welfare- Rehabilitation and vocational assistance for Bal/Balika inmates. |
| c) Narsan | * Integrated Rural Development Programme | 1) Subsidy to rural population including administrative expenditure |
| | | 2) TRYSEM training and strengthening of extension training centre |
| | * Minimum Needs Programme | 1) Improvement of Rural Sanitation Schemes |
| | * Jawahar Rozgar Yojana | 1) Employment schemes for unemployed youth (educated unemployed) -RLEGP |
| | | 2) Promotion of self employment in service sector |
| | * Social Welfare and Special Nutrition Programme | 1) Rehabilitation allowance for welfare of destitute |
| | | 2) Vocational training to women. |
| d) Bahadrabad | * Schemes for Rural Development Programme | 1) Strengthening of DWCRA infrastructure |
| | | 2) Strengthening of block monitoring cell |
| | | 3) TRYSEM training |
| | | 4) Welfare of SC/ST/OBC. |

* Integrated Rural Energy Programme	<ol style="list-style-type: none"> 1) Project Implementation for Portable Chullah at subsidised rate 2) Solar pressure cookers for IRDP families 	
* Social Employment Programme (Labour Welfare Programmes)	<ol style="list-style-type: none"> 1) Employment Programmes rural unskilled labour 2) Anti-poverty programmes 	
* Jawahar Rozgar Yojana	<ol style="list-style-type: none"> 1) Under NREP the schemes for provision of employment to service sector for rural youth 	
* Social Welfare and Special Nutrition Programme	<ol style="list-style-type: none"> 1) Integrated Child Development Scheme 2) Supplementary Nutrition Programme for the economically backward. 3) Housing subsidy/sites for SC/ST under welfare of SC/ST schemes. 	
e) Laksar	* Integrated Rural Development Programme	<ol style="list-style-type: none"> 1) Assistance to block for subsidy including expenditure on TRYSEM 2) Strengthening of block level monitoring cell 3) Training and Motivation Programmes for EWS families for employment 4) Grant in-aid to cottage industrial units of non - SC/ST EWS

		families
	* Minimum Needs Programme	<ol style="list-style-type: none"> 1) Low Cost Rural Housing 2) Low Cost Sanitation 3) Rural Water Supply Scheme
	* Integrated Rural Energy	<p>For schemes under non-con-Programme (IREP) ventional and renewable energy devices to provide total energy requirements of remote villages.</p> <ol style="list-style-type: none"> 1) Bioenergy including energy plantation 2) Devices for utilising Solar energy including photovoltaic cells 3) Devices for utilising wind energy
	* Social Welfare Programmes	<ol style="list-style-type: none"> 1) Identification and rehabilitation of bonded labour 2) Economic betterment for Scheduled Caste/ O.B.C. 3) Environment Improve ment of Harijan Bastees 4) Special Award to progress of backward panchayats.
f) Khanpur	* Integrated Rural Development Programme	<ol style="list-style-type: none"> 1) Assistance to block for subsidy including expenditure on TRYSEM 2) Strengthening of block level monitoring cell

- * Minimum Needs Programme
 - 1) Low Cost Rural Housing
 - 2) Low Cost Sanitation
 - 3) Rural Water Supply Scheme

- * Integrated Rural Energy Programme (IREP)

For schemes under non-conventional and renewable energy devices to provide total energy requirements of remote villages

 - 1) Bioenergy including energy plantation
 - 2) Devices for utilising Solar energy including photovoltaic cells
 - 3) Devices for utilising wind energy

- * Social Welfare Programmes
 - 1) Identification and rehabilitation of bonded labour
 - 2) Economic betterment for Scheduled Caste/ O.B.C.
 - 3) Improvement/Environment of Harijan Bastees
 - 4) Special Award to progress of backward panchayats.

7. OTHER SECTORS

- Minor Irrigation**
- * Minor Irrigation Schemes under Irrigation and Public Health
 - 1) Lift Irrigation Scheme Flow Irrigation Schemes Field channel
 - 2) Renovation and remodelling of Tubewells

Hydel Power Generation	* Power generation scheme hydel energy mostly for rural electrification	2) Micro hydro-mini Hydel Project in Roorkee Block.
Pisciculture	* Scheme for fisheries development	1) Inland fisheries in waterbodies 2) Processing, preservation and marketing 3) Extension and Training 4) Promotion and Development of fisheries in potential areas
Poultry	* Scheme for Poultry development	1) Promotion and/ development of Poultry farms. 2) Subsidy to SC/ST/ E.W.S. families for setting up poultry farms.

CHAPTER - 8

8.0 SUGGESTED PLANNING PROCESS, MANAGEMENT MACHINERY AND INVESTMENT PLANNING FOR UTTAR PRADESH

8.1 INTRODUCTION

8.2 SYNTHESIS OF RECOMMENDATIONS

8.3 SUGGESTED FORMULA FOR DISAGGREGATION TO PLAN FUNDS OF DISTRICT LEVEL IN U.P.

8.4 INVESTMENT PLANNING

8.0 SUGGESTED PLANNING PROCESS, MANAGEMENT MACHINERY AND INVESTMENT PLANNING FOR UTTAR PRADESH

8.1 INTRODUCTION

The district planning machinery in Uttar Pradesh is considered to be one of the best established in India with a number of hierarchical organisations with specified and non-overlapping functions. However, the so called 'District Plan' being formulated by DPCAC (statistical officer) is only the compilation of outlays of series of schemes and programmes of various sectors from different District Line Departments (DLDs). District plan in real sense reflecting the intra-district disparities and an area planning is not being exercised. Besides, although UP has a well established PRIs starting from Gram Sabha to Zilla Parishads, the District Plans being approved by DPMC & DC does not reflect the people's representative schemes and programmes. The sectoral targets and schemes are again prioritised by SLDs and the DLDs act accordingly to incorporate into District Plan. Horizontal coordination in true sense is lacking. Realising the above drawbacks. (Paneerslevam A . (1993).

The suggested planning process and management machinery envisages an appropriate district planning machinery system in a long run. It ensures an appropriate technical cell, management and administrative decentralised units and financial power to machinery at various levels.

It also proposes a new statutory body called State Finance commission (SFC) at the State level also proposes an enactment of 'Uttar Pradesh District Planning and Development Act' thereby ensuring legal tool for District Development.

Some of the features are as under:

- a) The District Planning Co-ordination and Action Committee (DPCAC) would function as technical cell of District Planning Monitoring

Committee (DPMC) would be created and headed by a Urban and Regional Planner (Spatial Planner).

- b) The Urban and Regional Planner would be preparing SEP, IDDP, FYP and District Budgets in close coordination with five working groups viz., agricultural & allied, industry, physical development and infrastructure, human resource development and finance.
- c) Working groups (WGs) would be proposed in order to facilitate, coordinate, synthesise and formulate plans.
- d) At the PRIs level, the gram sabha would identify the need based schemes and compiled at Blocks Planning Committee (BPC) and passed to SPU through BDO to be incorporated in SEP and IDDP.
- e) The function of DDC, BPC panchayat samitis, Gram Sabhas would be as explained below :

The functions of DDC would be :

- i) Apex body to function as policy planning council at district level.
- ii) To approve the FYP for every five years and Annual Plans being prepared by DPC.
- iii) Onward transmission of FYP and Annual Plans to State Planning Board for allocation of outlays.
- iv) To supervise the implementation in terms of monitoring and review.

Functions of Block Planning Committee (BPC):

- i) To prepare a resource inventory and issues related to various sectors, needs etc. and forward to DPC as an input towards preparation of FYP.
- ii) To prioritise the schemes and programmes compiled from various Panchayat samitis.
- iii) Implementation of various programmes at block level other than those implemented through district line departments (DLDs).
- iv) Monitoring of implementing process and periodical reporting to DPC.

- v) Function as link between District Administration and Panchayat.
- vi) To coordinate the activities of Block /level officers/Extension officers of various line departments.

Panchayat Samiti Functions:

- i) To arrange periodical meeting with gram sabha pradhans and collect the identified schemes and programmes needed for village level.
- ii) To forward these schemes to Block Development Officer (BDO for onward transmission to DPC.
- iii) Implementation of programmes at Panchayat level through Village Development Officers (VDOs) and Executive Officers(EOs.).

Gram Sabhas Functions :

- i) To identify the schemes and programmes and submit Panchayat Samities.
- f) The SEP, IDDP and District Budgets would be finalised and approved on draft stage by DPMC chaired by Cabinet Minister and District Magistrate as Member-Secretary.
- g) The present Executive Committee (EC) who is responsible in finalising the schemes need for institutional financial and credit planning through lead banks is eliminated in the suggested system. This is mainly because the element of credit plans through lead banks, institutional finances and so on would be part of IDDP & SEP and district budgets and would be taken care by SPU while preparing IDDP and SEP.
- h) The SEP, IDDP and budget is passed to State Planning Commission (SPC) through Divisional Committee for final approval. The SPC sends information on the budget outlay to State Finance Commission (SFC) for release of funds.
- i) The formula for allocation to various districts would be as mentioned in table 8.3.
- j) The disaggregation of outlay for the state and district sector would be

on the ratio of 60:40 for plains and 50:50 for hilly districts as against the existing system of 70:30 and 53:47 respectively. The reason being that by and large the district sector schemes face problems of paucity of funds. So, 30% share have been raised to 40%.

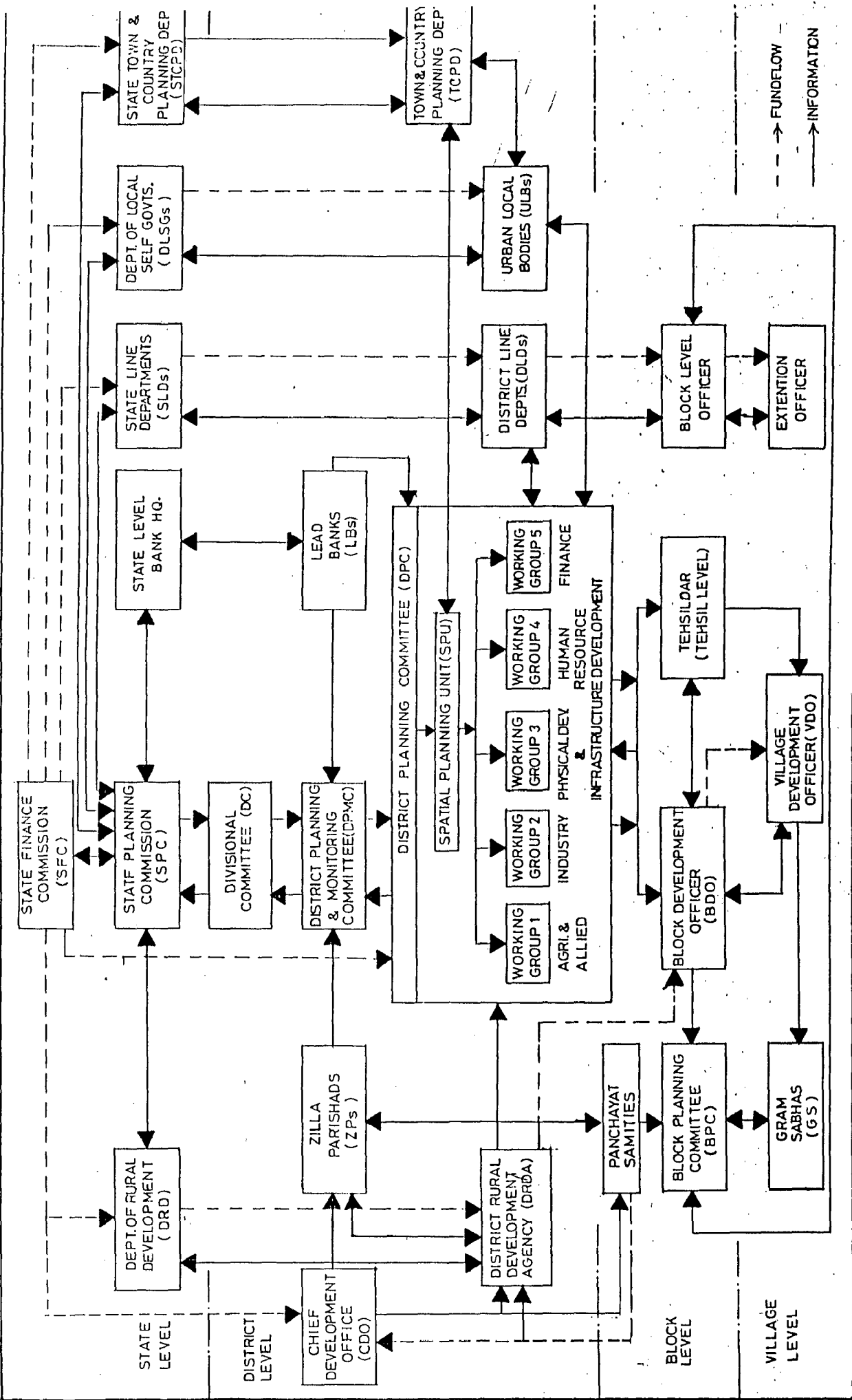
8.2 SYNTHESIS OF RECOMMENDATIONS*

- a) The management machinery would have a technical unit called Spatial Planning Unit (SPU) headed by an Urban and Regional Planner (Spatial Planner) and will formulate SEP & IDDP with the help of five working Groups (WG) viz; Agriculture and Allied, Industry, Physical, Development and Infrastructure, Human Resource Development and Finance.
- b) The SEP & IDDP at its draft stage would be discussed with all DLDs, Politicians, PRIs and other varied people by the Spatial Planner and comments would be incorporated while finalising the SEP and IDDP.
- c) The SEP & IDDP would then be approved under the legal provision of a proposed Act called "Uttar Pradesh District Planning and Development Act (U.P. DPDA)". Further it would be submitted to DPC for approval and allocation of funds.
- d) The fund would be supplied by the proposed State Finance Commission (SFC) under State and District Sector Schemes.
- e) Consistant monitoring and review meetings would be organised by DPCAC in the presence of Urban and Regional Planner.

The suggested framework is attempted to be simple and straight forward considering the fact that limited professional expertise may be available for preparation of Spatio-Economic Plan (SEP), Integrated District Development Plan (IDDP) and Village Development Plan (VDP).

* *Paneerslevam A. (1993): Research Study on Methodology for District Level Spatio-Economic Planning and Development, ITPI, New Delhi.*

FIG 81: SUGGESTED MANAGEMENT MACHINERY AT STATE, DISTRICT, BLOCK & VILLAGE LEVEL IN UTTAR PRADESH



The suggested machinery has emerged out of the extensive discussions held with the district level officers of Haridwar District. The suggested mechanism for the state as a whole would be directly applicable for Haridwar district. With radical changes, a new machinery, an appropriate planning process and management machinery at the district and state level has been suggested. However, it is to be noted that such a radical change will not happen in a overnight, but in due course of time. A gradual and incremental change would be essential to ensure a stable and successful machinery at district level. It is hoped that the proposed approach would form a base for initialising Integrated District Development planning at the district level where the dream of decentralized planning would become true in the real world in light of the 73rd and 74th Amendments and will be helpful for carrying out similar studies in the state of Uttar Pradesh.

8.4 INVESTMENT PLANNING

This stage is important in the sense that, the total outlays for a five years plan period have to be worked out. After determining the total amount of investment required for the district annually and five yearly, the sectoral allocations have to be worked out. An attempt has been made to assess the financial resources available within the district and the gap to be filled up by the State and Central Governments. The District Budget for every Annual Plan would, hence be the outlays required for each scheme and programmes under each sector.

8.3 SUGGESTED FORMULA FOR DISAGGREGATION TO PLAN FUNDS OF DISTRICT LEVEL FOR HARIDWAR

Sr.No.	Criteria	(Weightage in Percentages)	
		Existing	Suggested
1.	Population		
(a)	Total population	50.0	50.0
(b)	Urban population	-	5.0
2.	Backwardness of Weaker Sections		
(a)	Population of SC & ST	5.0	5.0
(b)	Small & Marginal Farmers & Number of Agri. Labourers.	10.0	5.0
3.	Backwardness in		
(a)	Agri, Production/value of output	5.0	5.0
(b)	Irrigation	-	2.0
(c)	Industrial output	5.0	5.0
(d)	Communication	5.0	2.0
(e)	Drinking Water	5.0	5.0
(f)	Financial Infrastructure as measured by the size of population served by each commercial & Co.op. Bank.	-	1.0
(g)	Medical & Health facilities (No. of Hosp. bed)	5.0	5.0
(h)	Power supply	5.0	5.0
(i)	Backwardness in respect of the targets of other selected minimum needs	-	2.0
4.	Special problems		
(a)	Drought Prone area	5.0	1.5
(b)	Coastal areas	-	-
(c)	Forest Area	-	1.5
Total		100.0	100.0

CHAPTER - 9

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.0 CONCLUSIONS AND RECOMMENDATIONS

The 73rd and 74th Constitutional Amendments have been indeed a milestone in the decentralization of planning functions among different tiers. After reviewing the various approaches being followed in India, a holistic approach with priority assigned to grassroot development with rural-urban integration of various sectors has been attempted. The scientific approach and methodology suggested in the beginning of the thesis have helped in carrying out research work in a systematic way.

A comprehensive District profile of Haridwar has provided an overview of the resource endowments, demographic status, sectors of economy and the levels of industrial, agricultural and infrastructure availability which has led to the identification of the issues, potentials priorities and thrust areas. The discussions with communities and villagers and subsequently with Block Development Officers have helped in prioritising the issues and needs of the various settlements. The audio visuals (Video-Tapes) have also added a strength to the problems, needs, priorities and potentials of the grass-root people, area and community facilities will fulfil needs and priorities during various phases of development in multiples of 5-years and the objectives of the thesis. The proposed Integrated District Development Plan basically indicates the set of schemes and programmes at the blocklevel under each sector to be taken up for implementation reflecting the proposed development scenario of 20 years. It is to be added here that the programmes and projects have been proposed to be developed based on the needs and priorities of the people in different areas of the district.

The investment requirement of each programme will have be worked out for district plan over a period of five years as well as annually for all sectors. The assessment of existing financial resources generated within the district and the proposed financial resources required for the district.

The proposals have been prepared with a view to overcome these problems

and use potentials to the fullest extent. To arrive at these, a long term (20 years) Development Scenario (1997-2017) has been formulated based on projections and planning for various sectors viz. Agriculture and Allied Activities, Forestry, Industrial Development, Infrastructure Development etc. have been proposed. The whole district has been proposed to be developed based on the suggested concept of Hierarchy of settlements. The highest order hierarchy is proposed to be Growth Centre followed by Sub-growth centre/Mandi Town/Growth Point as second order, Service Centre as the third order and the Central Villages the four order hierarchy. The facilities have been proposed to be provided based on this hierarchy. It is expected that the proposed facilities based on the Norms suggested by Planning Commission and Central Building Research Institute, Roorkee for Infrastructure and community facilities will help in estimating the financial resources gap to be filled up by central and state governments. It has been estimated that by the year 2017, the district will become self-sustainable.

To conclude, it is recommended that the suggested approach and methodology for preparation of Integrated District Development Plan as well as this comprehensive study would form a basis for similar types of developments to be done in India in the times to come.

ANNEXURES

ANNEXURE - I SUMMARY OF DATA BASE /INFORMATION NEEDED
FOR PREPARATION OF SPATIO - ECONOMIC PLAN
AND INTEGRATED DISTRICT DEVELOPMENT PLAN AT
DISTRICT LEVEL

ANNEXURE- II POPULATION PROJECTIONS AND METHODS FOR
CALCULATING PROJECTIONS

ANNEXURE- III GLOSSARY OF LOCAL TERMS AND ABBREVIATIONS
USED

Type of Data	Levels	Source
Animal Husbandary (Livestocks and Poultry)		
i) Population Distribution	Village/Block/ District	Dept. of Animal Husbandary
ii) Production of the Produce	Village/Block/ District	Dept. of Animal Husbandary
iii) Intrastructure and facilities	Location specific	Dept. of Animal Husbandary
Irrigation		
i) % Area under Irrigation (Crop Wise)	Village/Block/ District	Public Works Dept. of Agriculture
ii) Source of Irrigation	Village/Block/Dist.	Dept. of Agriculture
Human Resources		
i) Distribution of Population (Sexwise rural and urban)	Village/Block/ District	Census of India
ii) Sex Ratio	Village/Block/ District	Census of India
iii) Literacy	Village/Block/ District	Census of India
iv) Occupation Structure	Village/Block/ District	Census of India
Industries		
i) Large and Medium Units		
* Location	Location Specific	District Industry Centre
* No of Units (According to types)	Location Specific	District Industry Centre
* No. of Workers (According to types)	Location Specific	District Industry Centre
* Investment	Location Specific	District Industry Centre
ii) Small Scale Units		
* Distribution (According to types)	Village/Block	District Industry Centre
* Employment (According to types)	Village/Block	District Industry Centre
* Investment(According to types)	Village/Block	District Industry Centre

ANNEXURE-I

SUMMARY OF DATA BASE/INFORMATION REQUIRED FOR PREPARATION OF SPATIO-ECONOMIC PLAN AND INTEGRATED DISTRICT DEVELOPMENT PLAN AT DISTRICT LEVEL

Type of Data	Levels	Source
Base Map	District 1:250,000	Survey of India
	1: 50,000	National Remote Sensing Agency, Hyderabad
	Block 1: 25,000	District/Tehsil Revenue Office
	Village 1: 10,000	
Land Resource		
i) Landforms : Topography	District	Survey of India
ii) Geology:Rock Types and Minerals	District	Geological Survey of India
iii) Soil:Types and Quality	District	Soil Survey of India
iv) Water:Underground and Surface	District	
Land Use		
i) Area Under different uses	Village/Block/ District	Census of India
ii) Forest		
* Area under forest types	Village/Block/ District	Conservator of Forests
* Production (Quantity)	Village/Block/ District	
* Revenue generated	Village/Block/ District	Department of Agriculture
iii) Agriculture(including Horticulture and others)	Village/Block/ District	Department of Revenue and Department of Agriculture
* Area under different crops		
* Size of land holdings		
* Agriculture infrastructure	Location specific	

Type of Data	Levels	Source
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Animal Husbandary (Livestocks and Poultry)

i) Population Distribution	Village/Block/ District	Dept. of Animal Husbandary
ii) Production of the Produce	Village/Block/ District	Dept. of Animal Husbandary
iii) Intrastructure and facilities	Location specific	Dept. of Animal Husbandary

Irrigation

i) % Area under Irrigation (Crop Wise)	Village/Block/ District	Public Works Dept. of Agriculture
ii) Source of Irrigation	Village/Block/Dist.	Dept. of Agriculture

Human Resources

i) Distribution of Population (Sexwise rural and urban)	Village/Block/ District	Census of India
ii) Sex Ratio	Village/Block/ District	Census of India
iii) Literacy	Village/Block/ District	Census of India
iv) Occupation Structure	Village/Block/ District	Census of India

Industries

i) Large and Medium Units		
* Location	Location Specific	District Industry Centre
* No of Units (According to types)	Location Specific	District Industry Centre
* No. of Workers (According to types)	Location Specific	District Industry Centre
* Investment	Location Specific	District Industry Centre
ii) Small Scale Units		
* Distribution (According to types)	Village/Block	District Industry Centre
* Employment (According to types)	Village/Block	District Industry Centre
* Investment(According to types)	Village/Block	District Industry Centre

Type of Data	Levels	Source
iii) Khadi & Vill. Industries		
* Distribution (Location if possible)	Village/Block	District Industry Centre
* Employment	Village/Block	Specific from each type of village Industries for respective dept. in the District.
iv) Infrastructure	Location Specific	
Tourism		
i) Tourist Spots	Block/District	Dept. of Tourism
ii) Tourist Arrivals (seasonal)	Block/District	Dept. of Tourism (Domestic and foreign)
iii) Tourist Infrastructure	Block/District	Dept. of Tourism
Settlement		
i) Growth and size of settlements	Settlement	Census of India
ii) Functional status	Settlement	State District Town and Country Planning Dept.
iii) Master Plan (wherever available)	-	State District PWD
Infrastructure		
i) Physical		
* Length of roads (typewise)	Block/District	State/District PWD
* Length of railway (typewise)	Block/District	Min. of Railways
* Distribution of water	Block/District	State/District PHED
* Network of water supply system	Block/District	State/District PHED
* Source of water supply	Block/District	State/District PHED
* No of Electricity connections (typewise)	Block/District	State Electricity Board
* Source of electricity	Block/District	State Electricity Board
* Distribution network (gridwise)	Block/District	State Electricity Board
* Consumption Pattern (typewise)	Block/District	State Electricity Board
* Tele-Communication and Network	Block/District	Department. of Tele-communication

Type of Data	Levels	Source
ii) Social		
* Distribution of Schools (According to types)	Block/District	Deptt. of Education
* No of teachers/students	Block/District	Deptt. of Education
* No of Drop Outs	Block/District	Deptt. of Education
* Distribution of medical facilities (According to type)	Block/District	Deptt. of Health
* No. of Doctors/Nurses	Block/District	Deptt. of Health
* Distribution of Post office, Telegraph Office	Block/District	Deptt. of Posts & Telegraphs
iii) Economic		
* Distribution of Banks, Agriculture Credit Societies	Block/District	District Lead Bank
* Distribution of Markets	Block/District	Mandi Samiti
* Agriculture Mandis	Village/Block/District	Mandi Samiti
* Weekly fairs etc.	Village	Mandi Samiti
* Agriculture produce (Incoming and outgoing)	Village/Block/District	Mandi Samiti
Quantity and Revenue generated	-	-
Development Programmes		
* Types of Development Programmes (Central, State and District)	Village/Block/District	District Collectorate DRDA
* Targets of Schemes under each Programme (Physical & Fiscal)	Village/Block/District	Urban Local Bodies, State Line Depts.
* Achievements under each Programme (Physical & Fiscal)	Village/Block/District	Urban Local Bodies, State Line Depts.

Source : Prof. Gupta R.C. (1996): Manual on District Planning.

ANNEXURE-II

POPULATION PROJECTIONS AND METHODS FOR CALCULATING PROJECTIONS*

The population parameter serves as the denominator in all endeavours to development. The process of planning entails directing the process of development towards providing maximum good for maximum people. Planning exercise therefore, becomes predominantly futuristic, the fruits of the process is enjoyed by future generations. Estimates of future population are therefore, required by planners to analyse the magnified image of the consequences of current trends and differentials.

The future population magnitudes need to be taken into account so that human needs may be met in the various fields of economic and social policy. In planning, both short term and long term projections are necessary for arriving at important decisions. Thus, apart from its importance in demographic discussion, projections become a crucial component of the planning process.

Population projections can be made for two kinds of purposes which are logically distinct. *The basic purpose of most population projections is to provide, roughly, a forecast for future based on the assumption of reasonable continuation or modification of observed population trends implied in such projections is the assumption that population trends.* Reasonable forecasts can orient the targets to be included in national economic and social programmes and can sometimes indicate priori among those programmes.

Some projections, on the other hand, are of a more theoretical nature, and these are often referred to as model. These provide material for the discussion of the possible demographic consequences which might result from particular economic and social policies among which there is a choice.

* *Prof. Gupta R.C. (1996), Manual District Planning.*

Projections may be classified on the basis of autonomous and normative components also. Those projections which assume some continuation of past demographic trends, irrespective of any influence which other factors might exert on these trends, are called "autonomous" projections in contrast, in the theoretical "normative" projections, it is assumed that an already approved programme of national, economic and social plans will be carried out with precision. The demographic consequences of the programme are then incorporated in the population projection.

Methodology for Calculating Projections

Projections are usually based on some factual information and assumptions. The accuracy of estimates, therefore, depends on the accuracy of available data and assumptions. Therefore, the data to be used must be evaluated and adjusted for errors, incompleteness and other inconsistencies.

The methods in general used for calculating the estimates of population are

i) Conjectural estimates

ii) Mathematical and statistical estimates

iii) Demographic estimate

i) **Conjectural Estimates** are resorted to in the absence of national census or numerical data relating to population. These estimates, based on quantitative and qualitative information on one or more factors, related to population size. Conjectural estimates are not of any analytical value and have been used in the past mainly to fill the gaps during the break of national census.

ii) **Mathematical and statistical methods** are in general employed for intercensal and post censal estimation and for estimating the future population for shorter time periods. These are basically the techniques of interpolation, with the assumption of the form of the time series. The mathematical expressions that are often used for estimation vary in the complexity and the following expressions are widely used for estimation.

* Linear Function $P_t = P_0 (1+rt)$

* Geometric Growth Function $P_t = P_0 (1+r)^n$

- * Exponential Growth Function $P_t = P_0 e^{rt}$
- * Logistic Curve $P_t = K / (1 + e^{-a+bt})$
- * Polynomial of degree - $P_t = a_0 + a_1 t + a_2 t^2 + \dots + a_n t^n$

Where P_t denotes the population at time t and a , a_0 , a_1 , are the parameters of expression

r -refers to the rate of growth and

P_0 - represents the population at the time of origin.

Therefore, population projections should not be limited to empirical formulae only but should take into account the external factors that influence the development in order to arrive at a realistic development scenario for the horizon year.

Thus, population projections as a methodology for planning holds a position of critical importance and needs to be studied in detail with regard to all the components of population viz. total rural and urban and projected working age group.

ANNEXURE - III

GLOSSARY OF LOCAL TERMS

<i>Domat</i>	-	Heavy Loamy Soil
<i>Gur</i>	-	Unrefined Sugar
<i>Kharif</i>	-	Crops Grown During Rainy Season
<i>Khadar</i>	-	Regularly Inundated Part of Land close to River
<i>Lekhpal</i>	-	Revenue Clerk at Village Level
<i>Matiyar</i>	-	Silty Loam Soil
<i>Rabi</i>	-	Crops Grown During Winter Season
<i>Sanai</i>	-	One of the Green Manure Crop, also <i>Diacha</i>
<i>Tarai</i>	-	Area Next to Foot-Hill Zone of Loose Talus where water Stagnates Producing Reeds and Grasses
<i>Jayad/Zaid-</i>	-	Crops Grown Inbetween Winter and Rainy Seasons

ABBREVIATIONS

ADM	Additional District Magistrate
AP	Annual Plan
ASI	Annual Survey of Industries
BDO	Block Development Officer
BHEL	Bharat Heavy Electricals Limited
BPC	Block Planning Committee
BC	Block Committee/Backward Classes,
CADP	Command Area Development Programme
CBRI	Central Building Research Institute
CDO	Chief Development Officer
CDP	Community Development Programme
CFI	Commulative Function Index
COPP	Committee of Plan Projects
CPC	Central Planning Commission
CSO	Central Statistical Officer
DB	District Budget/District Boards
DC	Divisional Council / District Collector / Deputy Commissioner
DDC	District Development Council
DDO	District Development Officer
DES	Directorate of Economics and Statistics
DIC	District Industrial Centre
DISNIC	District Information System of National Information Centre
DLDs	District Line Departments
DM	District Magistrate
DMA	Directorate of Municipal Administration
DPAP	Drought Prone Area Programme

DPC	District Planning Cell/District Planning Committee
DPB	District Planning Board
DPCAC	District Planning Co-ordination and Action Committee
DPMC	District Planning & Monitoring Committee
DRD	Directorate of Rural Development
DRDA	District Rural Development Agency
DSO	District Statistical Officer
DTCP	Directorate of Town and Country Planning
EC	Executive Council
EO	Executive Officer
EPC	Executive Planning Committee
ESS	Environment Support Systems
FYP	Five Year Plan
GOI	Government of India
GS	Gram Sabha
GP	Gram Panchayat
HIPA	Himachal Institute of Public Administration
HYVP	High Yielding Variety Programme
IADP	Intensive Agriculture Development Programme
IDDP	Integrated District Development Plan
IRDP	Integrated Rural Development Programme
IREP	Integrated Rural Energy Programme
JRY	Jawahar Rojgar Yojana
KVIB	Khadi & Village Industries Board
LB	Lead Bank
LPA	Local Planning Authority
MAP	Metropolitan Area Plan
MP	Mandal Panchayat/Member of Parliament
MLA	Member of Legislative Assembly
MMR	Monthly Monitoring Report

MNP	Minimum Needs Programme
MPC	Metropolitan Planning Committee
NAC	Notified Area Committee
NCU	National Commission on Urbanisation
NDC	National Development Council
NGO	Non -Government Organisations
NIRD	National Institute of Rural Development
NRDMS	National Resource Data Management System
NREP	National Rural Employment Programme
NSS	National Sample Survey
OBC	Other Backward Classes
PRIs	Panchayati Raj Institutions
PS	Panchayat Samiti
PUC	Panchayat Union Council
PWD	Public Works Department
RBI	Reserve Bank of India
RLEGO	Rural Landless Employment Guarantee Programme
RTCP	Regional Town & Country Planning Office
SC	Scheduled Castes
SEP	Spatio-Economic Plan
SFC	State Finance Commission
SLD	State Line Departments
SPC	State Planning Commission
SPU	Spatial Planning Unit
SSI	Small Scale Industries
ST	Scheduled Tribes
STC	State Transport Corporations
TADP	Tribal Area Development Programme
TDB	Tribal Development Boards
TLO	Tehsil Level Officers
TRYSEM	Training for Rural Youth for Self Employment

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MNP	Minimum Needs Programme
MPC	Metropolitan Planning Committee
NAC	Notified Area Committee
NCU	National Commission on Urbanisation
NDC	National Development Council
NGO	Non -Government Organisations
NIRD	National Institute of Rural Development
NRDMS	National Resource Data Management System
NREP	National Rural Employment Programme
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OBC	Other Backward Classes
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STC	State Transport Corporations
TADP	Tribal Area Development Programme
TDB	Tribal Development Boards
TLO	Tehsil Level Officers
TRYSEM	Training for Rural Youth for Self Employment

ULB	Urban Local Bodies
ULSG	Urban Local Self Government
VDO	Village Development Officer
VLO	Village Level Officer
VP	Village Panchayat
WGs	Working Groups
ZPs	Zilla Parishads

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