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**STATUS OF MANPOWER PLANNING  
AT STATE LEVEL  
A CASE STUDY OF KARNATAKA**

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# STATUS OF MANPOWER PLANNING AT STATE LEVEL A CASE STUDY OF KARNATAKA

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## **1. INTRODUCTION :**

1. A major objective of the Economic Planning is the allocation of scarce resources for maximisation of economic and social benefits. The utilisation of resources in various sectors like social services, education, Medical or / Engineering is mainly to maximise the available human resources. In this context, allocation of human resources play a crucial role in determining the development plans. In this process, there is a need for authoritative determination and coordinated execution of manpower policies and of advanced planning to meet the vastly increased demand for various categories of personnel due to increased industrialisation.

2. A proper co-ordination between Education, Manpower and Employment Policy would involve a systematic effort on the part of Universities, Educational Institutions and the Employers in Public and Private Sectors. Otherwise, the supply and demand position unchoked would lead to imbalances and to distortions initially in the labour market and finally in the process of economic growth. This has to stopped and

requires concerted efforts. In addition, within the different departments of Government, position papers have to be prepared on the available manpower with different kinds of specialisation, the requirements of manpower due to wastage and expansion of activities with a view to have the right persons at the right place. This would help in not only improving efficiency of the implementation of programmes but also to help in tending up the administrative efficiency of different departments. Here, the role of an agency - a nodal agency to keep the situation under constant watch and suggest remedies in important.

3. Organisational arrangements for Manpower and Employment Planning at State / District Levels :

The need for tackling the problem of training an adequate number of persons with technical qualifications for implementation of schemes in the II and III Five Year Plans was realised as early as March 1957. A state Manpower Committee consisting of Chief Secretary and some Secretaries and Head of

Departments was therefore constituted. The Deputy Secretary to Government, Planning and Development Department, functioned as Member-Secretary for this committee. The task of the State Manpower Committee was to assess the position in regard to the availability of trained manpower to make projections of the likely requirements in the various categories for the III Five Year Plan Period. Under the guidance of this committee, detailed assessment was made categorywise for Engineering, Health (including Medical, Agriculture and allied, Education and Administrative Personnel) by the Study groups constituted for this purpose. However, Manpower Planning was considered as an adjunct to each development schemes only rather than a crucial component of the development process. An expanding economy involving rapid industrialisation and a simultaneous social development on a comparable scale requires a large and diverse body of trained personnel. Planning for Technical Manpower required the problems to be considered in an integrated manner and with fore-thought. otherwise shortages in some fields and wastage of Trained Manpower through unemployment or unsuitable employment in others would be the inevitable consequences.

4. Till 1964, Manpower Planning had not been undertaken on a comprehensive integrated basis or the problem considered in this long range perspective. Taking note of the importance of Manpower Planning, a

small manpower wing in the State Planning Department consisting of one Deputy Director, one Asst. Director, and two Senior Investigators was constituted in 1964. The limited objective given to this wing was one of assessing the Manpower requirements for different plan periods. The wing also carried out some field case studies in the related sectors. However, keeping in view the growing importance of manpower planning at different levels, the importance of the issue of strengthening the machinery of Manpower Wing was realised. In 1975, the machinery was strengthened by creating a few more posts of officers and officials. Manpower and Employment Division is now headed by a Director, assisted by one Joint Director, one Deputy Director one Asst. Director and four Senior Investigators. The division is part of the State Planning Dept. and works under the overall guidance of the Planning Secretary.

5. Manpower and Employment Division is associated with different departments in the formulation of development programmes to ensure that manpower requirements are properly spelt out. Efforts are made to estimate supply demand of different categories of personnel and to integrate these estimates into a consistent frame for the economy as a whole. The categories covered are agriculture and allied, Engineering, Medical and Para Medical, Teaching and Scientific Manpower. This involves a close liaison

with all the Educational Institutions has also the State Government Departments, Central Government Departments, Central undertaking and the Private Sectors have not got a comprehensive coverage mainly because the difficulties like the operation of some of these agencies being applicable to the entire country, existence of no separate plans for each state and non-reporting by Private Institutions due to lack of control.

6. In 1978 it was realised that Manpower Planning so far had concentrated on only forecast of demand and supply of high level manpower and attention was not paid to assessment of requirements, stock, training facilities of intermediate manpower which really formed a link between the high level and intermediate manpower and are very essential for implementation of development programmes. This aspect required attention urgently because of the renewed emphasis laid on implementation of block level plans. As a first step, an assessment was made of requirements, stock, training facilities of intermediate manpower for the period 1978-83 which was followed up with another assessment for the period 1980-85. Thus the coverage, quality and content of Manpower Planning has expanded and registered improvements.

7. With a view to institute steps to improve efficiency in administration, for better implementation of various welfare schemes chalked out at the policy framing

level of Government, particularly for the benefit of weaker sections of the Society, Manpower and Training Units have been set up in a large number of departments of the Government in 1985. Among the various functions allotted to these units, the ones that were relevant for Manpower Planning were preparation of periodical position papers on the existing and future requirements of personnel to replenish the usual wastages arising out of retirements etc., adjustments needed consequent on the size of the Cadre strength, Watching and Expediting the timely filling up of the vacancies existing and arising in the department, preparing and following a phased programme under which as early possible of the personnel required to be trained, participate in training courses at the appropriate age group depending on the nature and the level of the duties and responsibilities. Manpower and Employment Division is designated as a Nodal Agency for giving guidance, training and monitoring of the progress.

8. Consequent to the establishment of Zilla Parishads in 1987, for an assessment of unemployment and employment situation within the Zilla Parishads and preparing a Manpower Budget for different programmes under implementation in the Zilla Parishad Sector, a Manpower and Credit Planning Officer has been posted. Thus, the organisational structure for Manpower Planning has expanded from the State level (including setting up of Manpower and Training Units in

Government Departments) to Zilla Parishads (District Level).

## **2. REVIEW OF WORKS :**

9. Manpower Planning had its origin in III Five Year Plan when an assessment of requirements was first attempted. The methodology adopted was to work out the requirements of various categories of Manpower based on the programmes in various sectors to enhance production or services. However, in this exercise no effort was made to match the estimated requirements with the estimate of supply.

10. During the IV Plan period an attempt was made to assess the requirements of technical manpower among agricultural and allied personnel, Engineering Personnel and Medical and Para Medical Personnel was one of direct enquiry method to assess the requirements. But again this report was brought out after the plan commenced and hence was not helpful to achieve balance between supply and demand during the period of Fourth Plan. However, in the light of ad hoc nature of planning, where variations do take place, it is difficult to estimate requirements well ahead of the Plan, because true composition of the schemes and the structure of the Plan goes on varying from time to time. This makes it difficult for the estimating agencies to arrive at precise estimates of both demand and supply, specially making use of the direct enquiry method. The requirements taken into

account for this exercise were only that of Government Departments and Government undertakings.

11. Assessment of requirements of supply for the Fifth Five Year Plan period covered agriculture and allied personnel, Primary and Secondary School Teachers Scientific Personnel and Medical and Para Medical Personnel. This exercise led to some changes. One of the changes brought about was B.Ed., T.C.H. were made as essential qualifications for recruitment of Secondary and Primary School Teachers by amending the C&R Rules of the Department. Measures were taken to reduce the wastage at the course level in agriculture and veterinary courses and steps were taken to meet the shortage of Forestry Personnel. All these exercises resulted in the realisation of the need for a systematised effort and improved method of estimation of demand and supply of technical manpower. Certain improvements in methodology were introduced while working out the estimates for period 1978-83. To arrive at estimates of demand from private sector the proportion of those employed in Private Sector to Public Sector according to decennial census was made use of. A similar effort was made for the estimates of demand under self-employment. All these exercises have led to identification of areas of action for changes in policy. Moreover, there have been identification and improvement in methods of estimation as knowledge available improves both qualitatively and

quantitatively.

12. Manpower Planning thus far covered only assessment of high level Manpower. The need for a proper assessment of intermediate manpower stock requirements and training facilities was realised and an exercise was completed for the period 1978-83 for 125 categories. A similar exercise for 1980-85 was made for 46 categories in Engineering Personnel, 12 categories in Agriculture and Allied Personnel, 8 categories in Teaching and 13 categories in Medical and Para Medical Personnel. Developments of this type have led to improvements in the data base and identification of critical areas of imbalances to initiate remedial action.

13. Based on the paper on Education and Manpower in Karnataka 1978-83, a decision was taken that no Engineering colleges and new Evening Engineering Courses should be started during the year 1981-82. Subsequently, a decision was taken that there should be no expansion of Engineering Colleges in terms of their number of new courses or additional intake for the next three years from 1983-84. Similarly a decision was taken that no more B.Ed., colleges should be started during 1981-82. The minimum marks for admission for B.Ed., courses was fixed at 40 per cent in respect of Scheduled Castes and 45 per cent in respect of Scheduled Castes and 45 per cent in respect of others.

14. To ensure that the admission rules are strictly adhered to by the Institutions, it

was decided to create an inspection cell at the secretariat level. The cell should arrange to inspect all the institutions within one month after the admissions are over to verify whether the rules have been complied with. The management should also be asked to give a certificate that all conditions have been fulfilled in regard to admission and other conditions stipulated in the Government Order. In the case of aided Institutions the salary grant should not be released unless a certificate is given to this effect.

15. To explore the possibility of starting more diversified courses and rationalising and upgrading the existing courses in Polytechnic, a small Committee was set-up. The question of starting new courses and new Polytechnics was deferred till the receipt of the report of this committee. The Committee in its report of 14th May 1982 *inter alia* recommended the following.

- i) Introduction of diversified courses in the field of emerging technologies in (a) Computer Programming, (b) Environmental Engineering, (c) Instrumental Technology, (d) Chemical Engineering (with special reference to fertilizers and acids, and (e) Industrial Engineering
- ii) To make an exhaustive list of emerging technologies based on the detailed survey of the needs of the industry and also to identify some more specific courses to meet the requirements of the

- industries from time to time
- iii) A detailed scheme and Syllabi are to be prepared with the assistance of technical teachers training Institute Extension centre at Bangalore and wherever possible to start courses on a sandwich pattern
  - iv) To begin with, it was recommended that some of the courses may be started in the Government Institutions particularly one at S.J. Polytechnic, Bangalore and one more in one of the leading aided Polytechnic i.e. M.E.I. Polytechnic, Bangalore from the Academic year 1982-83.

16. The report of the Committee was accepted by the concerned Minister on 20th August 1982. Subsequently on 20th May 1985 in a meeting on identification of critical shortages of newly emerging skills on manpower on 7th Five Year Plan, a decision was taken that a detailed survey of the needs of Industry and identification of courses to meet their requirements from time to time should be taken up. In view of the fact that the survey is to be repeated at some regular intervals, a committee to advise and guide in the conduct of the survey was constituted and the work of the conduct of the survey was entrusted to Karnataka State Council of Science and Technology as a Research Project. But the survey has not been completed.

17. In the case of B.Sc. (Horticulture) keeping in view the avenues of employment, there should be a review of

the C&R rules of the concerned Department and preferences should be given to B.Sc. (Horticulture) Graduates for Jobs in Horticulture Department. The review is still in progress.

18. As part of the Seventh Plan exercises an Assessment of recruitments of Engineering Manpower was conducted. This exercise led to following recommendations which are under consideration of Government.

- a) To provide adequate and competent teachers and to equip the laboratories and libraries in order to avoid de-recognition by the All India Technical Education Council.
- b) Not to sanction new Engineering Colleges/Polytechnics/Industrial Training Institute during the VIII Five Year Plan period (1990-91) to (1994-95).
- c) Fixing the levels of intakes of 15,070 in Engineering Degree Courses, 20,537 in the Diploma Courses and 8,312 in the Industrial Training Institute Certificate Courses during the VIII Five Year Plan period.
- d) Reducing the intake in the courses of Civil, Mechanical and Electrical where there are surpluses and distributing the extra intake thus available among new frontier areas involving High Tech., and
- e) Appointing of two committees, one under the Chairmanship of Director of Technical Education with a representative from the Indian Institute

of Science and Other experts and another under the Chairmanship of Director Employment and Training which should take steps to identify the courses for diversification.

19. Taking note of the poor progress in the opening of sub-centres in the departments of Health and Family Welfare and identifying the reason for slow process as lack of trained Manpower at the auxiliary level of a study of Manpower requirements and in Health and Family Welfare Department was taken-up. After detailed discussions of the recommendations made in the report and in March 1987 a decision was taken to amend the agreement bond to provide for the recovery of the amount spent on training from those who had undergone training not reporting in place where posted and work for a minimum period of 3 years, to monitor filling-up of vacancies through direct recruitment and promotion, to prevent delays in filling up of vacancies created due to expansion of activities retirement and transfer, it was decided to set-up a manpower and training unit in the Department. The Shortage of Manpower in the Categories of Primary Health workers, Junior Health Inspectors, Senior Laboratory Technicians were noted particularly in the case of refractionists it was decided to examine the training facilities available for refractionists and either increase the intake or increase the number of training centres by one or two. A special Manpower Plan was to be prepared in collaboration with the

Manpower and Employment Division of the Planning Department. However, due to lack of interest on the part of the department no action has been taken on these decisions.

20. Manpower Planning has two roles to play, one is regulatory and the other is identification of areas where critical shortages are emerging in different skills. The second role of Manpower Planning is a positive one in the sense that it proposes or suggests the opening of new courses or restructuring of the existing courses including weeding out the old-model restructuring of the existing courses including weeding out the old-model skills. This aspect of Manpower Planning had not received the attention that it deserves both at the National and at the State Level. With the commencements of the VII Five Years Plan, at the State level number of attempts were made to develop a futuristic policy of substitution of outmoded courses with new courses and opening of new courses wherever it inevitable through mobilisation of additional resources.

21. In a paper of Investment in Skill formation (prepared for the erst-while Economic and Planning Council-Karnataka), number of recommendations were made by the Manpower and Employment Division of the Planning Department. These included constitution of a district Tripartite Committee at the local level with employers and Industrial Training Institutes to evaluate the training given at

Industrial Training Institute, suggests changes in course content, impart training by exposing the Industrial Training Institutes students to knowledge of day-to-day simple repairs of electrical home appliances, plumbing work, repair of common utility items like Sewing Machines, Bicycles etc, as an extra curricular activity period every week, introduction of production oriented training scheme on a pilot-basis at Industrial Training Institutes, formulations of a scheme to extend the community polytechnics, setting up of a maintenance cell for maintenance of machinery and equipment in Industrial Training Institutes and diversification of courses from the traditional courses like Civil, Mechanical and Electrical Engineering in Polytechnics.

22. However, the follow-up action taken on many of these measures left much to be desired. The extra curricular period for repairs of common utility items has been introduced. Although a Government Order was issued on having production oriented training programmes in a selected Industrial Training Institutes, the scheme has not been implemented. In the Seventh Five Year Plan, a provision of Rs. 5.00 lakhs was made to expand the Community Polytechnics as a state scheme. But in practice the scheme was not implemented. The tripartite committee at the district level has been constituted. On the diversification of courses at various levels, particularly in the Diploma level, the efforts have not yielded much results. The flying squad to

maintenance of equipments in Industrial Training Institute has not been set up. Thus the major recommendations of opening of Community Polytechnics and introduction of production oriented training programmes in Industrial Training Institutes have not been implemented.

23. Utilising an identification of critical shortages of newly emerging skills of manpower during the Seventh Five Year Plan in March 1985 by the Manpower and Employment Division a number of recommendations were made. These included introduction of courses in the area of Computer Programming, Environmental Engineering, Instrumentation Servicing Centres, opening of Crank Shaft Grinding Courses, formulation of a scheme with a help of commercial banks and District Industries Centres to train Industrial Training Institute Certificate holders and apprentice trained to improve their skills, opening of a six months course in Jig Boring at Industrial Training Institute, Hosur Road, Bangalore, with the assistance of teaching staff of the Polytechnics, starting of short term 6 months to one year course in traditional trades like, turner, fitter, welder, moulder and grinder and utilisation of Nittur Technical Training Foundation expertise to train the teachers in Industrial Training Institutes. These proposals were discussed in a number of meetings under the chairmanship of the Chief Secretary and action to open some of these courses were to be taken. Excepting for opening of the Environmental Engineering degree and

Diploma course in a few places, the rest of the decisions taken in the meeting have not been implemented. Although a Government Order was issued to open the Crank Shaft Grinding course, the course has not been opened. The opening a short-term 6 months to one year courses in traditional trade like Turner, Fitter, Moulder, Welder and Grinder were not introduced on the plea that the employment opportunities for these trades were not there and the subsequent proposal by industries Department to have Rural Industrial Training Institutes. The above shows that decisions taken at high level to restructure the technical education system to make it responsive to changing emerging technologies and consequent requirement of skills, the implementation by the implementing agencies is luke-warm and tardy. On the opening of the Jig Boring Course, by utilising the facilities already available at the Industrial Training Institute, Hosur Road, Bangalore, through UNDP Assistance, still the course has not commenced for want of approval from the appropriate authorities.

24. Government of India in the Department of Electronics, had formulated a special programme for Electronics Manpower Development based on a detailed assessment of the Manpower requirements of the Electronics Industry. At the instance of Department of Electronics, Government of India, Government of Karnataka constituted a study group comprising of representative of Director of

Technical Education, Director of Karnataka Government Computer Centre, with KEONICS as the Nodal Agency. This working group made detailed estimate of the Manpower requirements of Electronics and Computers in Karnataka. Based on these estimates and the deliberations of the Zonal meeting in January 1987 held by the Department of Electronics, there were a number of action points in which action was to be taken to promote development of Electronics Manpower within the State. One of them was opening of an orientation programme /conversion course of 6 months to one year duration to help the degree holders and Diploma holders in Colleges to acquire knowledge to be able to work in Electronics Industry. The syllabi had to be prepared in consultation with professors of the Universities and Industry. This was to enable the use of the surplus Electrical Engineering Degree holders in Electronics Industry.

25. In the Industrial Training Institute Electronics Certificate courses was to be opened. For servicing and repairs of Electronics equipments, crash training programmes had to be organised in Industrial Training Institutes. The crash training programmes for service technicians for repairs of Electronics equipments is organised in Industrial Training Institute for Women, Gulbarga, Industrial Training Institute for women, Belgaum. in addition to Industrial Training Institute, Hosur Road, Bangalore. Admissions are made to the certificate holders of Electronics Trade in

addition to those with Electronics trade. But this programme has not been extended, to the Women's Polytechnics at Bangalore as was decided in the Zonal Council Meeting.

26. The conversion or re-orientation course for electrical Engineering has not been started. The programmes to train people in short term courses for Secretarial Practice like word processors has not been formulated an implemented. The Diploma courses in Computer Applications has been started. Based on the guidelines circulated by the Ministry of Electronics for funding or laboratories in Polytechnics assistance has been obtained for eleven Polytechnics. As advisory committee has constituted to review the progress of the crash scheme to certain service technicians and to give guidelines to the trainees for self-employment. The Karnataka State Electronics Development Corporation had proposed setting up of a centre for Human Resources Development in Electronics at Bangalore. This has also not been operationalised. Even here, the achievements are not commensurate with the efforts put in.

27. Thus it is clear that efforts put in so far to redirect the Manpower Development Programme on positive lines has only not with very low or partial success. It is necessary that these efforts are further intensified and the course identified thereafter are introduced by the suitable re-adjustment in the Technical Education System. For this the Educational System

has to be more responsive to suggestions for opening of new courses by weeding out some of the out-model courses and the manpower thus rendered surplus in the Technical Education System should be re-deployed after suitable training in new areas, where there is need for manpower to impart training.

28. As part of de-centralised strategy for promotion of Employment during the Sixth Five Year Plan. District Manpower Planning and Employment Generation Councils were set-up in all the districts in 1981. Detailed guidelines for the proportion of estimation of demand and supply of salaried employment, wage employment, identification and preparation of economically viable self-employment, projects were drafted and given to these councils. A self-employment registration card was also introduced at Employment Exchanges. Those who came for registration to salaried self-employment were to be motivated to take to self-employment. Such of those who were willing to take to self-employment were to be registered for self-employment as an additional registration. Placements were to be made in self-employment by these councils. The working of these councils left much to be desired.

29. Despite the working group on District Planning, set up by Planning Commission, Government of India giving guidelines on this aspect also, in the Seventh Five Year Plan at the All India

Level the strategy for disaggregated employment generation was left-out. Consequent to the setting up of the Zilla Parishads and the decisions to entrust of work given to different committees to the Zilla Parishads, the work of building up a disaggregated strategy was entrusted to Zilla Parishads. But the progress achieved so far levels much be desired.

30. As a measure to improve the efficiency in administration, Government had directed setting up Manpower and Training Units in different Government Departments. Among the functions of these units, preparation of a position paper on requirements of personnel both for replacements, expansion and possible re-deployment of personnel within the department and among the Departments after retraining, preparation of a list of people to be trained and identification of training requirements for the discharge of duties at different levels were relevant to Manpower Planning. Detailed guidelines were prepared and given to various manpower and training Units. A training programme to familiarise the Manpower and Training officers with the concepts and the work. i.e., expected to discharge the functions outlined above was also organised in May 1987.

31. In the area of Employment Planning to arrive at the employment likely to be generated, as a result of the implementation of State Plan Schemes, certain investment and employment norms were developed by making use of the

available information of actual employment generation under various plan and schemes. A specific proforma was circulated among various implementing agencies/departments in the State Government to arrive at the scheme-wise details of employment generation from 1980-85 Plan. These efforts are continued for all the Annual Plans and Five Year Plans.

32. Periodic monitoring of the unemployment situation as reported by the various sources like census, National Samples Survey Organisation and live register figures had lead to identification of areas of policy formulation. The formulation of the stipendiary employment scheme for the utilisation of the services of graduates, post-graduates and Diploma holders whose family annual income was less than Rs.3,600/- per annum and no earning member in the family in the implementation of development activities was one such attempt. Manpower Planning so far had the objective of correcting imbalances of various categories of technical manpower reduce the wastage rates among various courses in the Educational System, correct deficiencies in the utilisation of trained personnel and bring out the need for proper orientation of plan schemes for employment generation by conscious effort.

33. Consequent to the setting up of the Zilla Parishads to help the Zilla Parishads in the preparation of an assessment of employment that gets generated in the district in the district plan, detailed guidelines were prepared and given. But

the results are not very encouraging. Assessment of employment generation in the Zilla Parishad Plan have not been made.

34. Analysis of employment trends and prospects in Mysore, review of Manpower and Employment position in Mysore for 1966 and 1967, utilisation of educated persons, occupational pattern of Engineering personnel, review of intake and out turn 1966-67, assessment of requirements and supply of doctors during 1969 to 1976, utilisation pattern of Foreign trained personnel in Departments of Agriculture, Animal Husbandry, Fisheries and Forestry, utilisation pattern of Medical personnel, assessment of impact of special employment programme 1972-73, manpower requirements of Soil Conservation programmes, nature and quantum of organised sector of industries during Fourth Plan covering large and medium industries, and problems of un-employment among Doctors were some of the studies completed. Informative studies like Hand Book on educational institutions in Mysore, Fact Book of Manpower Mysore State, Population Projections 1969 to 1974, Fact Book on Employment Exchanges, were also completed.

35. After 1976 the Manpower and Employment Division completed 62 studies on diverse topics of manpower and Employment in addition to rendering assistance in the formulation of State's Annual Five Year Plans. Notes on Rural Employment and Un-employment in Karnataka, setting out various estimates of

un-employment and programmes chalked out by State Government to provide employment were prepared for the use of the estimates committee of Lok Sabha and final views of Government of Karnataka on the Report of the estimates committee were prepared. Interesting facts about employment in the organised sector have emerged by a comparative study in trends in employment in organised sector in Karnataka and All India.

36. An analysis of the employment pattern in the organised sector showed that only 8% of the total working force as on 1971 was employed in the organised sector and Women Employment in organised sector was very less. A study of Research Personnel in Bangalore City identified different categories of Research Personnel available in the City for initiating different research programmes. A micro study on the estimates of Khadi and Village Industries in Belgaum district showed that there is good scope for village Industries like Gani oil, Cane and Bamboo work, edible oil and soap, pottery. Handloom and Mat Weaving for increase in employment among Rural population, an analysis of the salient features of the Bangalore Area Skill Survey helped in initiating necessary action to train the required Manpower wherever shortages were identified in the survey.

37. Manpower Profile or Agricultural Personnel build-up by circulation of a proforma showed that replacement requirements of Deputy Directors, Agricultural Assistants and Fieldman in the

department were high. To remedy the situation an examination of the existing situation was undertaken to consider the case for changes, if any of the recruitment policy either by the amendment of the rule for quick recruitment or relaxation of the minimum period required for promotion to even-out the vacancy position to avoid shortages in services. In case of recruitment of persons with specialisation in Horticulture, it was noticed that where the advertisement specified that performance should be given to persons possessing degrees in Horticulture, but in practice who do not have are being preferred. To avoid such a situation a review of the Cadre and Recruitment Rules of the Horticulture Department is under progress.

38. An utilisation pattern study of Rural Youths trained in Horticulture conducted by mail enquiry method brought the need for modification of the procedure of selection of candidates and better utilisation of the services of un-employed horticulture trained people. The procedure of selection of trainees has been modified to select trainees who undergo training and possess land individually or jointly and after the training the trainees should devote his horticulture societies in Mysore and Bangalore have been involved in Kitchen Garden Development in Urban areas and this should give employment to the trainees.

39. An analysis of the Rural Industries in Karnataka in areas where they are concentrated and they account for mere

employment was taken up to analyse the problems faced by these industries to enable formulation of suitable programmes to assist the house-hold and unregistered industries. Based on the findings remedial measures were taken.

40. Taking note of the need and improvement for refined rate of attrition among skilled categories of personnel like Teachers, Engineers, Doctors, Veterinarians, Agriculture personnel and Horticulture personnel in the State sector a study on Stock and Attrition of high level manpower in Government departments and Government undertakings helped in working out the rates of attrition.

41. To ascertain the employment status, B.Ed., degree holders in the live registers of the Employment Exchanges, a survey to identify the waiting period and responsiveness of Employment Exchanges to the job-seekers, based on mailed questionnaire data was taken-up. Random sampling technique was made use for the selection of the sample. This survey revealed that 35.7 per cent of B.Ed. Graduates were employed and there is need to improve the recruitment procedures and employment opportunities.

42. While reviewing the progress of the schemes like National Rural Employment Programme, Rural Land-less Employment Guarantee programmes and Rural Employment Guarantee scheme as part of the Karnataka Development Programme Review, it was observed that the cost per

man-day was on the high side and this requires to be examined in greater detail. Based on a survey through field visits Manpower and Employment Division a study of employment generation in National Rural Employment Programme and Rural Employment Guarantee Scheme was taken up. As one of the recommendations of the study, norms of employment generation were suggested for adoption by the implementing authorities while preparing action plans. These norms would prevent the emergence of wide variation in the targeted employment generation given in the action plan and the actual employment generation. Based on the findings of the study the Zilla Parishads were requested by Government to adhere to the proportion of 50 percent of the total expenditure on wages in the works taken up as stipulated in the guidelines given. The norms suggested for estimating employment generation were adopted.

43. Analysis of wastage and stagnation rates for Engineering Education at Degree and Diploma courses run by Industrial Training Institutes has helped in identifying the areas where wastage rate is high. This in turn has led to action to remedy the situation in the Educational Institutions. Similarly utilisation pattern studies of medical Post Graduates/Engineering Graduates and personnel trained in Horticulture have shown the non utilisation of skills acquired by trainees for variety of reasons. An identification of the factors responsible has helped in initiating

corruptive action. An analysis of the activity pattern of nursing personnel brought out that type of work attended and the preference given in the existing system. This led no systematization of norms of work load for both Nursing personnel and staff in Medical Institutions in Karnataka. This study was conducted by means of four schedules viz., observers schedule, questionnaire for Doctors, interview schedule for patients and interview schedules for nurses. The nurse patient ratio in the sample ward was 1:30 as against the norms of 1:10. As this ratio is not uniform in all the wards and the student nurses are working a need for quick survey of the nurse patient ratio in major and rural hospitals to find out correct position was felt. Such an identification led to changes in the duties assigned.

44. A survey to find out the Nurse-Patient ratio in Government Hospitals in Karnataka showed that the Nurse-Bed ratio was below 1:10 in Teaching General Hospitals, Non-Teaching General District Hospitals and Non-Teaching General Taluk Hospitals. Based on this analysis and the severe shortage of Nurses prevailing in the State, the economy orders of the Government were relaxed to fill up cent per-cent vacant posts of nurses both under Plan and Non-Plan, in the Department of Health and Family Welfare and Medical Education, to render better service to the patients in 1983. In addition to this Government issued orders creating

deputation and leave reserve posts of Nursing Personnel as per the guidelines in force.

45. An analysis of Wastage and Stagnation in Medical Education at Diploma/Degree/ Post Graduate level in Karnataka showed very high levels of stagnations. To remedy the situation, the agreement bond form 19 in Rule 62 of K.C.S. Rules was amended to include a clause that it shall be lawful to the Government to make recovery of the amount including pay allowances, stipend, D.A./Tuition Fees etc., spent on study leave from the salary of the obligator, in case the competent authority comes to the conclusion that he had not showed sufficient progress in the studies and failed to complete the courses in proper time. In case it is not possible to recover the same from the salary, the obligator and the surities should be jointly and severally liable for the repayment of full amount of expenditure incurred by Government.

46. Analysis of Employment status of Engineering, Arts, Science and Commerce Graduates on the live registers of Employment Exchanges has thrown up number of procedural problems in making the Employment Exchanges responsive to the job seekers. The analysis had brought out the need for maintaining separate list of unemployed on the live registers namely of those employed but still on the live registers to seek better jobs and those who are unemployed. The implementation of these

recommendation led to identification of at least those who have given the information that they are employed and continuing their registration to improve their job prospects.

47. Based on an analysis of the Wastage of Stagnation in Agricultural Education in Karnataka, a recommendation was made to introduce a student career card and to amend the regulation pertaining to registration of students in different courses. From the year 1988-89 an attempt has been made to introduce the students career progress card for students who are admitted in 1988-89.

48. A Micro-level study on the employment prospects for the Diploma holders in Agricultural Engineering helped in identifying the prospects of Diploma Holders in Agro Industries Corporation, Command Area Development and Food and Allied Industries. As this was inadequate to start a B.Tech. degree course in Agricultural Engineering, a recommendation was made against opening the course. Some trained Diploma holders in Agricultural Engineering were found jobs.

49. On a proposal from the University of Agricultural Sciences to open B.Tech. Degree course in Agricultural Engineering, Manpower and Employment Division conducted a study to assess employment available to B.Tech. degree holders in Agricultural Engineering and the utilisation these graduates where these courses have already been introduced. Based on this analysis a recommendation was made not

to open the course as the available employment opportunities were limited. However the course was opened.

50. The scope and coverage of the studies undertaken in the areas of Manpower Planning and Employment Planning have widened by inclusion of areas which have not been covered. Constant efforts are made to bring about qualitative improvement of the data collected and refinements in the techniques adopted. It has been a constant endeavour of Manpower Planning to improve the knowledge available of the imbalances, rectifying these imbalances by remedial action and to refine the tools of analysis to bring them in tune with the real situation prevailing in the various sectors of the economy.

### **3. GENERATION AND AVAILABILITY OF DATA :**

51. In Manpower Planning, stock of Manpower according to Educational qualifications has to be obtained by using the results of the survey of degree holders and Technical Personnel. The stock series that is available is that of 1971 Census. Making use of this and the out-turn subsequent to 1971 in the respective courses from the institutions within the State, stock of different categories of manpower at different points of time have been built up. But one of the major limitations of coverage is that this data covers a very limited area pertaining to

stock of educated manpower that too of a few categories. High level teaching manpower is not included. Intermediate manpower stock series have not been built up after 1981. This is only the employed stock. Information on stock of literate manpower with qualifications less than graduates is not maintained. Data on In-migration and Out-migration is not available. The weak data base of the stock series does not permit classification of stock according to sex, or rural and urban and the distribution of the stock by age-group. In the 1981 Surveys there was large non responses and after considerable deliberations the C.S.I.R. have come to the conclusion that 1981 D.H.T.P. Survey data are not suitable for calculating the stock of S&T Personnel. An attempt was made to make use of the data published in Census of India 1981 Part IV-A, Social and Cultural Tables which contain the number of persons according to level of education. But this data is incomplete in rural segment. It does not give the break up of Graduate and above categories speciality-wise. Even unofficially, this information was not available with the Registrar General of Census. Infact, such detailed coding was not undertaken in the Census. In view of this, the information as per 1981 Census was not available.

52. Labour force for the entire population has to be worked out either by using the 1981 Census Workers data or the results of the National Sample Survey on Employment and Un-employment. Census

Labour force participation rates are available for intervals of 10 years and N.S.S. participation rates at an interval of 5 years. These rates too become available only after a considerable time lag from the data of completion of the survey. But there is no escape from dependence either upon Census participation rates or N.S.S. participation rates. The 43rd round N.S.S. data on labour force participation rates are still not available. The indirect method of estimation of labour force is to treat the registrants in Live Registers as unemployed stock and deduct this from the total stock to arrive at the employed stock. This is subject to limitation of coverage as well as obsolescence of data and time lag. Efforts are on to obtain the 43rd round data and work out labour force participation rates for as many categories of educated manpower as possible.

53. Information on capacity, intake and out-turn for Degree in Engineering subject-wise, Diploma in Engineering subject-wise, courses conducted by - the I.T.I.s trade-wise, M.B.B.S., M.D., M.S., Post Graduate, Diploma in Medicine, B.Sc (Ag), M.Sc. (Ag), Diploma in Agriculture, B.F.S.C., Degree and Diploma in Indian Medicine, B'Pharma, M'Pharma, D'Pharma, B.D.S., M.D.S. and other courses like A.N.M.s and Health Inspectors etc., has been collected. The coverage consists of duration of the courses, sanctioned intake for the first year of the course, number of students actually admitted to the first year, total enrolment to

the course, number of students actually admitted to the first year, total enrolment to the course, number of students who successfully completed the course, number of students belonging to other States out of these admitted to the first year and the number who completed the course successfully. This information is collected separately for Males and Females. Information on enrolment in Primary and Secondary Education, retention rates in Primary and Secondary Education for Boys and Girls separately and number of teachers pupil ratio at Primary, Middle, Higher Secondary Schools is also collected at various points of time. Besides, enrolment details in Physical Education Schools are also collected periodically. Sex-wise break-up is maintained for all the courses. There is difficulty in using this data purposes of matching the demand with supply. While working out the surpluses/deficits, the intake and out-turn data on cohort basis is not maintained separately. As a result the pass-out ratio that gets worked out will not take into account separately the changes that take place as a result of repeaters also appearing for the examinations for different courses. Due to considerable time lag in data collection and the need to have pass-out ratio urgently for working out the available supply the solution of conducting a case study over a period of time of 3 Educational Institutions for different categories of manpower is work examination. The institutions selected has to represent are institution in each

category viz., good, average and poor institutions based on subjective judgment. Based on these pass out ratios an average has to be worked out for use. This has to be periodically revised.

54. Again, while working out the supply available, an arbitrary percentage of those who are not in the labour force is assumed. There is need to work out a systematic method of arriving at this percentage. The information that becomes available has a big time lag. This makes it all the more difficult to arrive at correct estimates of surpluses and deficits to influence the intake and out-run policy for different courses.

55. Information on growth of employment is collected either from work-force figures in population census or information published by the Directorate General of Employment and Training in publications on Occupation Patterns for Public and Private Sectors in alternative years. This flow is in the form of Quarterly and Annual Reports. Making use of the proforma designed by the Planning Commission to collect information on employment generation under Plan Programmes of various departments and organisations in the State Sector, estimate of employment generation are made. Investment employment norms have been worked out for various sectors of the economy in generation of direct on site employment and in-direct employment per crore of rupees investment. these have been

developed by using the information available in the Manpower and Employment Division as well as a study conducted by the Institute for Social and Economic Change, Bangalore, on Employment contents of some plan schemes in Karnataka. Efforts are being made to develop employment co-efficient in relation to area cultivated for the crop sector in Agriculture and non-crop sector in Agriculture, and unorganised sector of the economy. However, the information system on employment suffers from many deficiencies like limited coverage and delay in collection. This in the long run, could be rectified only by improving the working of the agencies like D.G.E.T., N.S.S.O. and the State's Statistical Bureau which do the primary work of data collection. Pending this, the results of economic census and the follow-up surveys on a sample bias is used to fill the gap to a certain extent. Growth of employment is being analysed by making use of the results of the N.S.S.O. as well as the Census work-force participation rates. This is subject to checking of the reliability of the rates of work-force according to sex, occupation, industry, age-group of N.S.S. surveys. It is necessary to take up studies to identify the employment intensive sectors as well as to study the employment pattern of the various sectors of the economy in the State. Employment norms developed have to be revised not only due to increase in Price rise, but also for the changes that are taking place in the economy. To arrive at the level of un-employment in the State till

recently, the data of employment and unemployment survey of the N.S.S. 38th round have been made use of. Efforts are on to obtain and use the data of the survey on Employment and Unemployment (43rd round) for the formulation of the State's Employment strategy for VIII Five Year Plan.

56. To have an idea about the unemployment among various educated manpower categories, use of Live Register data with correction factors is being made. The correction factors arrived at from the 1988 Survey of the D.G.E.T. are used to the Live Register figures in different categories like Arts, Science, Commerce and Engineering. Time lag in obtaining the information on employment and reliability of the data generated by the Employment Exchanges are some of the crucial problems. The position is sought to be remedied by undertaking studies of the pattern of utilisation of manpower in selected categories.

57. To work out surpluses or deficits of various categories of technical personnel, the procedure adopted is to get information on requirement from all Government Departments, Central and State Government Undertakings, Demand of Private Sector and Self-employed has been derived at one the basis of the proportion of employed in the Public to Private Sector as revealed by the D.G.E.T. occupational pattern reports. These reports are being published only for the country as a whole

and state-wise reports have been discontinued, with the result at the state level, the All India have to be applied to the State which is not correct.

58. Supply of manpower consists of two components namely un-employed stock at the beginning of the period and additional supply during the period. Live Register figures are taken as un-employed stock after applying suitable correction factors for these already employed. Additional supply is got at by estimating the out-turn from the educational institutions. Out-turn for future years is estimated by making use of the pass ratio. Pass ratio is worked out by taking the percentage of total out-turn of past tyers to the total in take during the corresponding cohort years. A major difficulty in this area is estimating the future requirements in an accurate manner. Thus, of the several methods available for estimation of demand, not all of them are suitable for estimation of requirements of all types of manpower. Besides the plans of the departments are subject to constraints and there is bound to be fluctuations between the estimated demand of actual demand. Still, suitable guidelines so for the projection of demand have been prepared. The methodology adopted for estimation of demand has been given a flexible approach to allow for variation in the functioning of the various sectors of the economy. But there is crucial need to develop an appropriate and suitable methodology to project the data gaps that are prevailing. The suitable

methodology to project the data gaps that are prevailing. The task of estimation of demand for all categories of manpower in Private Sector as well as the self-employment component is a difficult one. Direct estimation is a difficult task. Suitable methods shall have to be devised for estimation of demand in Private and self-employed sectors. Efforts are on to improve the data base. Thus, the position of the manpower information system though satisfactory to a certain extent, cells for improve the data base to make it more oriented towards effective are needed to improve the data base to make it more oriented towards effective manpower planning at as much desegregated a level as possible.

#### **4. INVOLVEMENT OF TRADE INDUSTRY IN MANPOWER PLANNING :**

59. Trade and Industry have a role in Manpower Planning in identifying their requirements of Manpower for different categories in disaggregated manner. These organisations should also inform the Educational Institutions of their requirements of the manpower, the type of training required, the emphasis that they would like to place in the training, and offer on-the-job or shopfloor training to the trainees. This helps in generating the right kind of Manpower in right numbers and have them in the correct positions so that production and the desired goals are achieved.

60. In Karnataka the Centre for Technology Development, a registered Society has been concentrating on all aspects of commercialisation of technology other the basic stage of laboratory research is over to make it available as a marketable technology available to use industries. In this, the Human Resource Development aspect for High Tech Training has got a big fullup Training courses like a one year Diploma course in M.E.I. Polytechnic, Bangalore in the field of Personal Computers, introduction of 8 Module Post Graduate, one year training in the field of Computer Science for Industries and Educational Institutions to be conducted by the Indian Institute of Science, Bangalore have been opened. Proposals for Distance Education through Television of Informatics for schools and colleges, an area development programme for computer science education with emphasis on software development for Dakshina Kannada District with the Mangalore University, the Suratkal Regional Engineering College and the Manipal Institute of Technology as nodal points, establishment of CAD/CAM Training Centre, Venture Capital Schemes for technical entrepreneurs to start outfits for maintenance of CNC/Computer Installations, opening of food processing Engineering Course in the R.V. College, Bangalore and training schemes for the Bakery sector are being developed.

61. All the Craftsmen level and at the degree and diploma holders level to

improve the Manpower Data available, steps are being taken. Centre for Technology Development and Confederation of Engineering Industries are collaborating in the preparation of a realistic projection of Manpower requirements in the High Tech Areas assistance for the speedy Computerisation of Employment Exchanges all over the State. Assistance to Karnataka State Industrial Investment Development Corporation in the Implementation of its tailor made scheme of Technical Training to meet the needs of individual High Tech Units coming with Karnataka State Industrial Investment Development Corporation, are placed contemplated.

62. For the implementation of the World Bank Scheme on skill development of vocational trades in Industrial Training Institutes, the Centre for Technology Development proposes to assist the Project Management Unit of the Directorate of Employment and Training in speedy and effective implementation of the World Bank Project by organising suitable Management Training Schemes. To make Industry contribute for this programme, it is proposed to have a one day presentation/discussion of the state's proposal to the members of the Confederation of Engineering Industry, so that Industry, so that Industry could react to the proposals and suggest modifications/improvements for which Industry is willing to bear the expenditure. Arrangements are being contemplated to have the Training of

Trainees in Industrial Training Institutes through a quick survey on the requirements of training. Such a training scheme will first train the principles of Industrial Training Institutes. For other Industrial Training Institutes, trainers the Centre for Technology Development proposes to confine itself to training in the disciplines which are relevant to its chosen High Tech Areas such as Electronics, Mechatronics, Computers, High Tech soldering etc., through formation of societies for a selected number of Industrial Training in close association with Industry. The Centre for Technology Development proposes to upgrade these Industrial Training Institutes to centres of excellence. Based on the results of quick survey by the Directorate of Employment and Training to assess the need of training of maintenance crews and for repair of existing equipments for which spares are required, arrangements shall be made for supply of spares and services on a subsidised basis from the original machinery manufacturers located at Bangalore like HMT., Kirloskars, BFW etc., wherever possible. The Centre for Technology Development will as arrange for donation of equipment to the selected Industrial Training Institutes. Promotion of High Tech Training Centre for Master Craftsman in Tools and Dies making to be established by N.G.E.F. and aid from Federal Republic of Germany and establishment of two more centres one for CAD/CAM Training at HMT., as the lead organisation and for High Tech Training soldering with BEL., as the

lead organization are aimed at Training Master Craftsmen and provide retraining facilities of those already in Industry.

63. In a co-operative programme with the Directorate of Employment and Training, the Centre for Technology Development and the Industrial Units would upgrade the Apprenticeship Training Programme in the State. The facilities available under this scheme would be available to meet the training needs of new High Tech Units coming in Karnataka. to improve the interface between industry and existing training institutions like CMTI., F.T.I., E.T.D.C., C.E.D.T., G.T.D.C. and N.T.T.F., special efforts shall be made. Similar efforts to up-grade the contents of training at Polytechnic level, Graduate Training, Post Graduate Training and Software Specialists shall be taken-up after detailed deliberations with Industry and the Educational Institutions. Thus a beginning has been made in Karnataka to involve trade and Industry in a big way in Manpower Planning and Development of Human Resource Development. Based on the results of this experiment future efforts shall be made to modify and intensify the efforts in this direction and achieve the objective of developing the required Manpower in right place and at right time.

##### **5. INSTITUTIONAL ARRANGEMENTS FOR TRAINING, RESEARCH OF MANPOWER:**

64. Manpower Planning has to be taken up not only at the State level but also

at the Department/Enterprise level both in Public and Private Sectors. For an effective preparation of Manpower plans by different agencies, there is the need for having a trained personnel. In other words, there is need for trained manpower to be kept ready for these exercises. Apart from preparation of manpower plans which can be operated by the Programme Operators, there is also a simultaneous need for the research in the area of manpower planning. this required to up-date our knowledge, skills in developing tolls for manpower planning, using the tolls so developed up-date the information. Both these are continuous processes. In Karnataka, there are continuous processes. In Karnataka, there was total lack of institutional arrangements for training and research. Realising the need to improve the situation, one or two steps have been taken. Planning Department of the Governments of Karnataka, depending upon the need has been getting research studies conducted by research institutes in addition to taking up studies which are of direct relevance for its own work in influencing the policy decisions in Educational planning.

65. To give training to do manpower planning exercises, training programmes to various officers of different Government Departments who are implementing programmes have been organised. Realising that this step is not enough, starting with the academic year 1990-91, under the University Grant Commission assistance, Bangalore University is

introducing an M.Phil. Course in Manpower Planning. This is perhaps one of the first Universities to start this course. With the introduction of this course and the trained M.Phil. Graduates coming out of the University, the supply position for Manpower Planners in different areas of the Society within the State and also within the country should ease considerably. Thus, Karnataka has taken pioneering initiative in developing manpower for preparation, guidance and implementation of Manpower Plans in Government, Government undertakings and Private Sectors.

#### **6. DISSEMINATION OF INFORMATION AND EXPERTISE- SEMINARS, JOURNALS ETC. :**

66. In the dissemination of information and expertise in the area of Manpower Planning, one finds considerable time lag in collection, processing and making available the processed information. There is need to build up a better interaction between the information generating agency and the user agency so that atleast the key information on the manpower becomes available within six months from the date of completion of the collection. Similarly, there is need to have a follow-up survey in between the decennial population census so that the information that one uses is updated atleast once on five years. There is also the need to streamline the methods and the process of collection of data in agencies like C.S.I.R. so that the stock series based on degree holders, technical personnel survey can be

built and made use of in projecting the stock.

67. On the methods used and the models prepared in the preparation of Five Year Plans and the employment that are prepared by the Ministers of Government of India and the Planning Commission, there is need for greater exchange of ideas and expertise between the State and these agencies. Arrangements to even share the information collected and the methodology adopted in working out estimates on a permanent basis have to be worked out. This could be organised through seminars, workshops, etc. Articles in the Journals like Manpower Journal on these subjects if published would be quite useful.

68. At the State level, whatever the information that gets generated and the reports/papers that are prepared are shared and published for wider circulation. Similarly, a close liaison is maintained between the Institute of Applied Manpower Research and the other Central Agencies. But the main gap as at present is one of lack of dissemination of information from the collecting agencies and the user agencies at the Centre to the State level user. This position requires to be improved through setting up of a permanent mechanism wherein the Manpower planning exercises are taken up as a collective endeavour rather than as isolated attempts by a few agencies.

#### **7. FUTURE DIRECTIONS :**

The organisational set-up which started with a nodal agency at the State level has expanded to the level of setting-up of Manpower & Training Units at the departments and a manpower officer at the Zilla Parishads at district-level. The coverage, which started with the assessment of high-level manpower has been expanded to include intermediate manpower, stock requirements and training facilities. This has resulted in improvements in the data base and identification of critical areas of imbalances to initiate remedial action. Attempts have been made at diversification of courses, rationalising and up-grading the courses in Polytechnics. To improve the utilisation of post graduate Medical manpower particularly of those who take these courses while in service, stringent conditions have been stipulated in case of non completion of the courses within a period of five years in providing for recovery of cost. The qualifications prescribed have been altered for teaching manpower. Efforts have been made to get preferential treatment in recruitment for specialised categories of manpower by amending the recruitment rules. Changes in take policy for teaching and engineering manpower have been brought about. To improve the availability of trained health manpower steps to be taken has been identified. Taking note of the need for a special manpower plan for Health manpower, action for formulation of such a plan is taken up. For formulating a futuristic policy of substitution of new courses

wherever feasible measures have been initiated. But some of these attempts at redirection of manpower development programmes on positive lines have met with low or partial success. A ban on opening of new courses and new colleges was also imposed.

For employment promotion an attempt was made to formulate a decentralised strategy for promotion of self-employment. This has met with little progress. Persistent attempts have been made to widen the areas of coverage of studies taken-up, and refining the tools of analysis and techniques, Qualitative improvements have been brought about in data collected. Norms for employment generation in programme have been developed.

Certain inherent defects in the availability of data for manpower planning have been noticed. Mainly these are (1) Limitation of Coverage and obsolescence of data and time-lags, (2) Lack of availability of data, (3) lack of information on intake and out-turn on Co-hert basis to work out pass out ratio, (4) Limited coverage, delay in collection of data on employment generation, (5) Time lag in obtaining the information on employment and reliability of the data generated by the employment exchanges. To remedy the situation improvements in the data base are brought out by better collection and undertaking special studies to fill in the data gaps. The improvements in data base are oriented towards effective manpower

planning at as much disaggregated a level as possible.

The experience of conduct of Manpower Planning exercises at the State Level has established the need for better interaction between information generating agencies and information user agencies. To bridge the gap in information there is need to take-up a follow survey in between decennial censuses atleast within a gap of five years. The methods and process of data collection by agencies like C.S.I.R. requires to be streamlined. A mechanism for exchange of ideas and expertise in the preparation of models on employment in five year plans between Ministry's of Government of India and the Planning Commission and the State Governments on the other hand has to be established. For ensuring a better dissemination of information from the data collecting agencies to user agencies at the centre and to the State level users, a permanent mechanism has to be set-up where in the manpower planning exercises are taken-up as a collective endeavour.

A beginning has been made to involve Trade and Industry in manpower planning and human resources development. For training manpower take-up manpower planning, studies have been entrusted to research institutions, in manpower planning on a selective basis depending upon the need. An M.Phil course has been introduced in Bangalore University in manpower planning. Thus Karnataka has

taken pioneering initiative in developing for preparation, guidance and implementation of manpower plans in Government, Government Undertakings and private sectors.

Thus far emphasis in manpower planning was on assessing the requirements of skills in accordance with economic development plans and then matching the same with anticipated availability. As a result manpower planning was a derived activity concerned only with the requirements of skills for economic activities. Due to expansion of education and training facilities over the years the concern for anticipated shortages of skills required to be looked into only for a few specialised activities such as emerging technologies. But the concern for providing employment to those who are un-employed or under-employed has grown over-time. Policies and programmes for generating employment needs to be evolved to meet the requirements of specific areas and sections of population. This has not be incorporated in the plan as a development strategy. Approaches to manpower planning have to be re-oriented towards meeting its new role.

Consequent to going in for development planning in a big way the economy has to be modernised by use of more productive methods of working. For this, science and technology have to play an important role. The role of science and technology has to be woven into as an

integral part of the strategy of development in agriculture or industry, traditional household activities or high-tech areas or in poverty alleviation and generation of employment opportunities.

While looking at the problems of the State/Nation one can no longer view them in isolation from the rest of the world. Geopolitical currents are leading towards increasing globalisation as evidenced in eastern and western parts of Europe. Opening up of markets and interdependence in series will have implications in terms of re-organisation of industrial activities and technology transfer. While dealing with some of these issues manpower planning shall have to transcend national boundaries and develop regional perspectives.

A close relationship between employment and some of the social problems exists. Child labour and low status of women are inseparably linked with issue of employment. Likewise, there are other problems whose resolution requires a significant contribution by employment planners. Degrading work methods of scavengers, unhygienic and hazardous work environment of leather workers, exploitation of bonded labour and of those working in stone and clay quarries, and deprivation of access to tribals engaged in minor forests produce are some of the instances requiring improvements in the work organisation, technology, marketing support, safety standards, administrative policies and welfare measures for the

protection of employment and for raising the quality of life.

With the focus of development planning on the removal of un-employment and poverty, manpower planning shall have to respond by addressing the problems of the un-employed and the poor. Formulation of employment generation programmes at a decentralised level requires development of planning models at the district, block and village levels based on specific conditions prevailing therein with regard to agriculture, raw-materials, markets, skills and infrastructure. The aim of such a planning should be for achieving full employment or the right to work in practical terms.

Challenges facing manpower planners are numerous as well as complex. In times like the present where the economy is in the process of a structural adjustment, as a result of a difficult balance of payments situation and the consequent need to control the budgetary deficits, there is need for a re-development of surplus manpower in the organised sector both in the Public and Private sick units. Redundant units shall have to be revived through a package of measures including redevelopment of surplus manpower, after retraining. For effectively dealing with situations of re-development of surpluses as well as provision of employment for all, there is the need for building up a body of knowledge and research base in Manpower Planning to respond to societal needs.





**CMDR Monograph Series No. - 1**

**STATUS OF MANPOWER PLANNING  
AT STATE LEVEL  
A CASE STUDY OF KARNATAKA**

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## PREFACE

The Centre for Multi-disciplinary Development Research (CMDR) is a social science research institute in a moffusil area of Karnataka and is sponsored by the Indian Council of Social Science Research, New Delhi. The Centre aims at undertaking analytical studies of conceptual and policy significance on the socio-economic and cultural issues using multi-disciplinary perspectives and state level and micro level information.

As a part of its publication programme, the Centre has initiated a CMDR Monograph Series, consisting of both invited contributions and the research studies completed at the Centre.

We are happy to present the first monograph in this Monograph Series under the title "Status of Manpower Planning at

State Level : A Case Study of Karnataka" by Dr. M.A. Sreenivas. The monograph presents an incisive analysis of the practice of manpower planning in Karnataka, highlighting the major problems and providing the future directions for the considerations of the policy makers.

The Centre for Multi-disciplinary Development Research expresses its grateful thanks to Dr. M.A. Sreenivas for his valuable contribution to the CMDR Monograph series.

**P.R. Panchamukhi**

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*Director*