

*Basic Demographic Techniques and Applications* by K. Srinivasan, New Delhi: Sage Publications India Private Ltd., 1997, 224pp. Rs. 295.00.

THIS is a text book on Demographic Techniques and Applications which will cater to the masters level students of Population Studies. One very important distinguishing feature of this book is that, besides providing fundamentals of technical demography, it deals with the application of demographic techniques for health policy and management, and evaluation of programmes. Because of this feature the book will be useful for the field workers in the field of health and family planning as well as to the students of demography. In this text book Prof. Srinivasan has described all the important statistical and analytical tools required by any one using demographic methods. The lucid and straightforward presentation of the book has made it student friendly.

In ail, there are 13 chapters which deal with various aspects of technical demography. Chapter 1 opens with definition and scope of demography, and touches upon two important topics which are not covered in other books on formal or applied demography namely, the linkages of demography with epidemiology and public health and applications of demography in health policy and management of programmes. Following topics are covered in the text book:

- basic concepts and measures such as rates, ratios and proportions and demographic transition theory
- demographic data sources, compilation and presentation of basic demographic data, such as, age and sex structure of the population
- basic measures of fertility
- basic measures of mortality and construction of Life Table
- nuptiality analysis (analysis of marriage data)
- population projections
- evaluation of the quality of data and adjustment
- evaluation of programmes
- application of health policy and management

Chapter 13 provides information about selected software packages which is another very useful aspect for the teachers and learners of demography. Appendix I describes Key Concepts in Health from Medical Sociology, Epidemiology and Health Care Administration. Appendix II provides Glossary of selected demographic measures, and other useful measures such as nutritional status measurement. In

order to make the presentation more meaningful and interesting, data and examples used are drawn from the real life experiences of Kerala and Rajasthan. At the end of some chapters exercises are provided for the student.

The relationship between population sciences and epidemiology and the commonality of approach between the formal demography and epidemiology is explained in an easy manner with the illustrations from the day to day experiences. For example, the necessity and importance of data on the population size of the elderly people by the age, sex, marital status distribution etc., separately for the rural and urban areas, for planning health programme for the aged in the population is explained by taking various dimensions of the problems of the elderly population.

Chapter on Evaluation of Programmes discusses various approaches to evaluation and points out the importance of the evaluation of the quality of care in health delivery services. For example, the author suggests that the evaluation of the MCH programme should include following six dimensions of service delivery:

1. Availability of service facility at short distance;
2. Availability of relevant information to pregnant women and mothers who have delivered recently at their home or in the neighbourhood;
3. Technical competence of service providers;
4. Client-provider interaction;
5. Continuity of care and appropriateness and
6. Acceptability of services.

The same chapter brings out a relevant point regarding the need for numerator based indicator system for evaluation. In many developing countries denominator data to compute rates and ratios are not available or are of poor quality. In such circumstances, development of appropriate indicators concentrating on numerators only could be very useful. The characteristics of the events such as births, infant deaths, maternal deaths do reflect the underlying mortality and morbidity conditions in the population and this type of numerator analysis seems to offer exciting possibilities for the evaluators of the programmes.

While discussing the applications of demographic techniques in health policy and management the author has introduced a relatively new applied science of Health Demography. The interdependence of health status, health care and demographic characteristics is explained by taking contrasting examples of two Indian states namely, Kerala and Rajasthan and with the simple diagram.

The application of various demographic techniques in the policy formulation and management of health programmes including family planning programmes, are

directed towards assisting the policy makers and programme managers in finding answers to the following six questions confronted by them in any situation:

1. What is the magnitude of the problem or a disease situation under investigation in the area?
2. What is the relative priority in relation to other diseases of similar kind and the extent of societal and political concerns?
3. How effective are the existing programmes in dealing with the disease or problem either in tackling or controlling the problem or in terms of cost-effectiveness?
4. What are the socio-cultural and programme related factors closely associated with the prevalence of the disease or the problem under study?
5. What are the significant action points at which monitoring and evaluation of the programme can be undertaken?
6. What are the recommended new interventions or modifications in the old interventions that are under implementation that are needed for improving the effectiveness and efficiency of the programmes and what are the financial and other resources needed for the same?

At the end, the author introduces three computer software packages, namely, DEM-LAB, Dem Proj and PAS. DEM-LAB is specifically intended for the course "Teaching Demography through Computers", the Dem Proj is a demographic projection model and PAS (Population Analysis Spreadsheets) provides illustrated application of the demographic techniques.

This text book is important as it deals with formal demography and the applications of demographic techniques to other related fields of evaluation of programmes and health. It is unique in this sense. The student of demography for whom this book is intended will no doubt draw benefits. This book will be also useful to the students of sociology, economics, anthropology and public health and programmes and policy makers in the field of population and health.

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