

# **Manual on Statistics and Indicators of School Education**

**Virendra Pratap Singh**

**B.M.K. Raju**



**Department of Educational Surveys & Data Processing  
National Council of Educational Research & Training  
Sri Aurobindo Marg, New Delhi - 110 016**

**March 2006**

## Foreword

---

The statistics on school education in India are collected by various organizations, namely, Ministry of Human Resource and Development, National Council of Educational Research and Training, National Sample Survey Organisation, Registrar General of India etc. The study unit on which the information is being collected varies from organization to organization in the country. It all depends upon their context and objectives of collecting information. Accordingly, operational concepts, definitions and classifications for certain terms and aspects may vary. Eventually, the data collected by various organizations cannot be linked for research, planning and administrative purposes. This necessitates a need for standardization of concepts, definitions and their classifications. The present *Manual* mainly focuses on the referred issue, and presents more generalized concepts, definitions and classifications fit for wide range of surveys as conducted by various organizations. This aspect assumes significance as it facilitates comparability of educational statistics provided by various organizations and makes the data compilation worthy.

The second fascinating issue is about presentation of information in the form of statistics. The absolute information will not be understandable unless it is presented in the form of an indicator even after compilation of educational data collected by different organisations. In this regard, a comprehensive reference book on the educational statistics and indicators is not readily available to the educational planners, researchers and administrators to interpret high priority educational data. The *Manual* presents the definitions, formulae and methods of calculation of important educational indicators that reveal the status of education and future trends.

The literature on the subject is available in scattered form and focussed on different contexts and perspectives. Hence, a need is felt to prepare a *Manual* on educational statistics and indicators of school education in order to bring uniformity in understanding and interpreting the same. The organisation of chapters and sub-chapters in the *Manual* has been done nicely. I congratulate the Department in bringing out the *Manual* timely. I hope that the *Manual* will meet the needs of educational planners, researchers and administrators.

Place: New Delhi  
Date:

Krishna Kumar  
Director, NCERT

# Contents

Foreword	ii
Contents	iii
Preface	iv
List of Abbreviations	v
1. Introduction	1
1.1 Educational Statistics and Indicators	1
1.2 Major Areas in Educational Statistics	2
1.3 Major Sources of Statistics on School Education in India	3
1.4 Purpose of the <i>Manual</i>	5
2. Educational Statistics – How to Arrive at?	8
2.1 Census and Sample Surveys	8
2.2 Objectives	8
2.3 Unit of Enumeration	10
2.4 Target Population	10
2.5 Sampling Design	10
2.6 Development of Tools	11
2.7 Organisation of Field Work	11
2.8 Analysis of Data	14
3. Concepts and Definitions	15
4. Educational Indicators	27
4.1 Indicators of Demography (School-Age Population)	27
4.2 Indicators of Access to Schooling	28
4.3 Indicators of Participation	30
4.4 Indicators of Equity	33
4.5 Indicators of Infrastructure	35
4.6 Indicators of Quality Inputs	37
4.7 Indicators of Finance	41
4.8 Indicators of Efficiency	44
<b>ANNEXURE – I: Methodology of Data Collection Adopted by Major Organisations in India</b>	<b>50</b>
<b>ANNEXURE – II: Levels of Education (As per ISCED – 1997, UNESCO)</b>	<b>51</b>
<b>ANNEXURE – III: State/UT-wise Educational Patterns in India</b>	<b>52</b>
<b>ANNEXURE – IV: Glossary</b>	<b>53</b>
References	64

## Preface

---

The *Manual on Statistics and Indicators of School Education* has been developed as a part of a project of the Government of India (Ministry of Human Resource Development and Ministry of Statistics & Programme Implementation). The present *Manual* is a comprehensive reference document containing relevant information on the conceptual and methodological framework for educational statistics and indicators pertaining to the school education.

In developing and bringing out the *Manual*, the information has been largely drawn up from the national and international publications, and comments received from the Expert Group and Faculty Members of the Department. I express my sincere gratitude to the Members of Expert Group for their kind inputs and involvement at various stages in preparing the *Manual*. I am also grateful to my colleagues in the Department, Dr. (Mrs.) M. Trehan, Dr. S. Srivastava, Mr. M.K. Gupta, Mr. O.P. Arora, Dr. R. Tailor and Mr. P. Kumar for their encouragement and contribution in the development of this *Manual*.

I also take this opportunity to thank Dr. Virendra Pratap Singh and Dr. B.M.K. Raju for coordinating, working hard and bringing out the *Manual* in present form.

I hope that the *Manual* will be useful to the educational planners, researchers and administrator in understanding the basics of educational statistics, concepts and definitions involved in educational statistics including computational aspects of educational indicators. It is hoped that with the feedback provided by the users of this *Manual*, it will be of immense value.

Suggestions/comments of the users, experts and others will be solicited for improving it further.

Place: New Delhi  
Date: March 13, 2006

Avtar Singh  
Professor and Head  
DES&DP, NCERT

## List of Abbreviations

---

CD BLOCK	:	Community Development Block
CD-ROM	:	Compact Disc - Read Only Memory
CSO	:	Central Statistical Organisation
DES&DP	:	Department of Educational Surveys and Data Processing
DISE	:	District Information System for Education
DPEP	:	District Primary Education Programme
EA	:	Enumeration Area
EBMC	:	Educationally Backward Minority Community
ECCE	:	Early Childhood Care and Education
EGS&AIE	:	Education Guarantee Scheme and Alternative Innovative Education
GDP	:	Gross Domestic Product
GNP	:	Gross National Product
GOI	:	Government of India
ISCED	:	International Standard Classification of Education
LKG	:	Lower Kindergarten
MHRD	:	Ministry of Human Resource Development
NCERT	:	National Council of Educational Research and Training
NIEPA	:	National Institute of Educational Planning and Administration
NSSO	:	National Sample Survey Organisation
OBC	:	Other Backward Community
PTR	:	Pupil-Teacher Ratio
RGI	:	Registrar General of India
SC	:	Schedule Caste
SCR	:	Student Classroom Ratio
ST	:	Schedule Tribe
UEE	:	Universal Elementary Education
UKG	:	Upper Kindergarten
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
UPE	:	Universal Primary Education