

About the Book

Small Hydro Projects in the 1980's were given a thrust to substitute the larger hydro power projects because of the issues associated with environment and rehabilitation of large population, since then, new technologies , for planning and design of small hydro projects developed both in public and private sectors. These new technologies were disseminated to the engineers and students through seminars, conferences and short term courses in the institute. Some Institutes even started graduate courses on this subject for students and engineers.

The author with his long field and teaching and consultancy experiences on the subject felt the need for a comprehensive book on the subject. This book covers the basic concept and the methodology of layout, planning and design of structures of all types of small hydro projects including recent developments. This concise book on the subject covering all aspects will be found useful by professionals

Contents

- 1) Introduction
- 2) Layout of small Hydro Projects
- 3)Electro- Mechanical Equipment
- 4) Layout and Dimensioning of Small Hdyro Power Plants
- 5) Planning a Small Hydro Project
- 6)Field Investigations
- 7) Hydrological Studies
- 8)Power Studies
- 9)Sediment Management
- 10) Scope of Design of Structures
- 11) Diversion Structure
- 12) Design of Dams
- 13) Intake Structure
- 14) Design of Water Conductor System
- 15)Design of Structures on Water Conductor
- 16)Design of Surge tank and Forebay
- 17) Penstocks and Pressure Shafts
- 18)Design of Power House
- 19) Hydro Mechanical Equipment