Record Nr. UNINA9910787578403321 Autore Chaudhuri Arijit <1940, > Titolo Network and adaptive sampling / / Arijit Chaudhuri, Applied Statistics Unit, Indian Statistical Institute, Kolkata, India Pubbl/distr/stampa Boca Raton: .: CRC Press, Taylor & Francis Group. . [2015] ©2015 **ISBN** 0-429-10216-X 1-4665-7756-8 Descrizione fisica 1 online resource (132 p.) Classificazione MAT029000 Disciplina 519.5/2 519.52 Soggetti Adaptive sampling (Statistics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia A Science Publishers book. Note generali Nota di bibliografia Includes bibliographical references. Front Cover; Dedication; Preface; Acknowledgment; Chapter-wise Nota di contenuto Summary; List of Abbreviations; Contents; Chapter 1: Notations and Introduction: Chapter 2: Sampling and Estimation Methods: Chapter 3: Plea for Network Sampling: Chapter 4: Need for Adaptive Sampling: Chapter 5: Adaptive and Network in Tandem with Constraints; Chapter 6: Applications and Case Studies; Chapter 7: A Brief Review of Available Literature; Appendix; Bibliography Sommario/riassunto Combining the two statistical techniques of network sampling and adaptive sampling, this book illustrates the advantages of using them in tandem to effectively capture sparsely located elements in unknown pockets. It shows how network sampling is a reliable guide in capturing inaccessible entities through linked auxiliaries. The text also explores how adaptive sampling is strengthened in information content through subsidiary sampling with devices to mitigate unmanageable expanding sample sizes. Empirical data illustrates the applicability of both methods--Preface Network Sampling was possibly invented by Sirken (1970. 1983) while Chaudhuri and Stenger (2005) briefly narrated his theory: and J.N.K. Rao (1999) further elaborated about this subject as

introduced by Sirken. Chaudhuri's (2000) exposition on it thrives on the

foundation laid by Thompson (1990,1992) and Thompson and Seber (1996) on 'Network Sampling', named by the latter two researchers. In this treatise we shall follow this approach. Adaptive Sampling too, from what is understood, originated through the researches made by Thompson (1990, 1992) while Thompson and Seber (1996) and further strengthened by Chaudhuri (2000). Salehi and Seber (2002) and Seber and Salehi (2013) have also contributed immensely to the subject. But the aspects of Network Sampling and Adaptive Sampling which will be discussed in the present volume are confined mainly to the contributions published in the following documents bearing participation by us: Chaudhuri (2000, 2010), Chaudhuri and Saha (2004), Chaudhuri, Bose and Ghosh (2004), Chaudhuri and Stenger (2005), Chaudhuri, Bose and Dihidar (2005) and an exposure by Chaudhuri and Dihidar (2010) plus the current involvement as in Chaudhuri (2011). First, let us shed some light on the subject. In a standard household survey our intention may be to serviceably estimate the population total or mean of a variable which is an important consideration but is valued zero for many households while it is substantial for many others. However, before conducting the survey viii Network and Adpative Sampling--