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THERE HAS BEEN a growing demand for books on sampling methods applicable in survey work. Occasionally mimeographed or dittoed notes and compilations of material on sampling for classroom and reference purposes have been prepared for limited distribution. Two excellent books on sampling have been published previously, *Sampling Methods in Forestry and Range Management*, by Schumacker and Chapman, and *A Chapter in Population Sampling*, by the sampling staff of the Bureau of the Census, but neither filled the need for a well-rounded presentation of modern sampling methods.

Yates' text is comprehensive in terms of its coverage of various types of sampling, methods of estimation, and reference to errors other than those that occur in sampling. It "had its origin in a request of the United Nations Sub-Commission on Statistical Sampling, . . . that a manual be prepared to assist in the execution of the projected 1950 World Census of Agriculture and the 1950 World Census of Population." Instead of writing specifically for that purpose, however, the opportunity was used to write a more general and comprehensive book for persons with some experience or training in survey work and handling of data. The background is primarily agricultural, which is the main source of material for the many examples cited or used.

Scarcely a mathematical symbol is to be found in the first half of the book which discusses various types of sampling and the problems involved in the development of surveys. It opens with a discussion of the place of sampling in censuses and survey work and a description of the requirements of a good sample. Examples are included on haphazard and nonrandom samples which were claimed to be representative by the investigators who used them but which, in fact, were strongly biased.

The two opening chapters are followed by an elaboration of the types of sampling (stratification, multistage, multiphase, systematic, etc.) and their applicability to various situations. Then

comes the planning of a survey, methods of executing a survey, and systems of handling the data. Selection, training, and supervision of interviewers are covered briefly, but there is much emphasis on doing a good job on all phases of the survey, as evidenced by considerations of such topics as the importance of pretests, detection and elimination of bad field work, and control of errors in analysis. The subject of sampling methods is approached as part of the more general problem of survey design and not as a matter of presenting several sampling plans and related mathematics divorced from problems of practical application. Hence, this volume should be welcomed by researchers who have been seeking information on modern sampling procedures, although some parts of even the first half may be difficult to follow. The many examples bring out the adaptability of objective sampling principles to varied situations.

Methods of estimating population values for each of the types of sampling presented in the first part are given in chapter VI with the corresponding formula for estimating sampling errors for each type following in the next chapter. This order of presentation, essentially one of increasing difficulty, may have its advantages, but it means many cross-references and the scattering of the material for each type of sampling through the book. The concluding chapter shows how to estimate the sampling errors or efficiencies of alternative designs from given samples. Efficiency is discussed in terms of relative sample sizes for equal accuracy, relative accuracy of samples of the same size, relative costs for given accuracy, and relative accuracy for given cost. No mathematical proofs are included anywhere.

The book was evidently not written as a text and does not appear to be satisfactory for that use but it does cover the relevant material for an applied course in sampling and should make a very useful reference book for that purpose.

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