

THE INTEGRATED ECONOMIC SURVEY OF SAUDI ARABIA
-- A VARIATION ON A THEME

Ali Rashid
Central Department of Statistics
Kingdom of Saudi Arabia

John Rumford
U. S. Bureau of the Census

The backbone of any well-built body of knowledge profiling a nation's economic structure is a series of systematic censuses and surveys covering every major sector of the economy.

This is very important in the Kingdom of Saudi Arabia, where current economic growth is probably unprecedented in the world today. The creation of a solid set of economic statistics usually requires a large cadre of professional economic statisticians working for an extended period of time. Unfortunately, Saudi Arabia does not now have the statisticians nor the luxury of time.

The current five-year plan of the Kingdom states that by 1980 censuses or surveys of manufacturing and industry, construction, and the distributive and service trades are to be completed. To meet these obligations within the two-year deadline, it was decided not to attempt any censuses but, instead, to implement a series of economic surveys.

Individual surveys, however well executed, are again limited in scope, particularly when they stand alone. Moreover, they are not especially useful in providing current trend data unless backed by a census or a series of previous surveys. In addition, administratively and logistically speaking, gearing up and carrying out individual surveys by sector of the economy is usually as time consuming and as complicated as conducting a series of proper censuses. To minimize these problems and at the same time enhance the information collected from each individual survey and provide an instant, albeit limited, trend-detecting capability, it was decided to integrate the surveys into a single vehicle. The system is called the Integrated Economic Survey of Saudi Arabia.

The survey is comprised of four major components. These include a triannual longitudinal economic trend survey and annual surveys of industry, construction, and wholesale, retail and service trades. By combining these components, many advantages accrue without additional costs in personnel, time or money. First, a single survey vehicle, including field enumeration and supervisory personnel, and a common administration and logistical network, is used to conduct three different types of establishment surveys. Second, redundancy of enumeration effort is avoided because common core questions are asked of all establishments regardless of their specific classification. These questions appear on all questionnaires. Pertinent industry or business specific questions are asked after these core questions and on a separate questionnaire. A third advantage is that many establishments

in Saudi Arabia, though classified as to one primary economic activity group, conduct several secondary activities of near equal importance. Through integration, these secondary activities can be detected, evaluated, and cross-classified by computer linkage methods.

This integrated approach is not new to Saudi Arabian statistics. It was patterned after the highly successful continuing Multipurpose Demographic Survey established in 1976.^{1,2,3,4} As a matter of fact, one of the main reasons that this economic survey system could be implemented in such a short period of time was that many of the enumerators who formerly worked on the demographic survey in sampling units that have since been replaced, were available to work on the economic survey system. Although the subject matter and certainly the enumerator techniques were different, the composure, self-discipline, and confidence gained by the enumerators in one type of survey carry over to the next. Moreover, the field supervisory super-structure formerly established in the most important urban areas could be reconstructed in most instances.

Other advantages resulted from the collaboration of these two normally unrelated statistical systems -- control staff supervisory/inspection teams, when not employed in one survey, were used by the other; enumeration recruitment and training facilities are shared between the two systems. Probably the most important advantage is that the same administrative, financial and logistical infrastructure is used by both systems.

As indicated previously, the economic survey system is composed of four major components: a longitudinal economic trend survey, an industrial survey, a construction survey, and a wholesale, retail and service trades survey.

The semicontinuous economic trend survey is conducted three times a year. Its purpose is to provide the minimum amount of information necessary to establish and evaluate broad economic trends for all types of establishments in the Kingdom. The trend surveys are conducted at the same time and as an integral part of one of the detailed economic activity surveys.

The triannual survey encompasses a sample of the following sectors: mining and quarrying; manufacturing; electricity, gas and water; construction; the distributive and service trades; insurance and social and community related services. The survey cohort consists of approximately 4,000 establishments, of which 1,500 are classified as certainty cases and 2,500 as non-certainty. A certainty case is defined as an establishment with 20 or more employees for all sectors except construction, where 50 or more employees is used. The non-certainty cases were selected on a probability basis within each sector and employee size group.

In order to take advantage of the computer linkage capability, all certainty strata establishments in the trend survey were formed from certainty strata of each individual component survey. In this way, cross-classification by primary and

secondary economic activity is made and specific trends for individual economic sectors generated.

The first trend survey round was executed in May 1978 in conjunction with the industrial survey component. The second round is scheduled for September, along with the construction survey. The third round will be in January 1979 with the distributive and service trades component.

The trend survey includes a simple set of questions that require a minimum of effort on the part of the establishment owners. The questionnaire itself consists of only four questions. All questions concern the month immediately prior to the enumeration. In most instances, the questionnaires could be completed in one visit.

The questions included are (1) a description of all primary and secondary activities, including the estimated share of each; (2) the total number of Saudi and non-Saudi workers; (3) total wages and compensation paid during the period; and (4) the total value of operating revenue.

After completing the trend survey questionnaire, the detailed specific establishment questionnaire, that is scheduled during the particular triannual period, is either left with the proprietors to be filled out or completed with the assistance of trained enumerators.

The industrial survey component, conducted simultaneously with the first round of the triannual trend survey, was designed to collect detailed information for the year 1977. The following economic activities are included within the scope of this survey: mining and quarrying, manufacturing, electricity, gas and water. Nearly 900 establishments were included in the survey; about half of these were certainty cases. As indicated previously, these establishments form a subsample of the trend survey and are reinterviewed in September and January, using the short trend questionnaire.

The construction survey component poses several unique design and execution problems. This sector ranks second in the percentage of the Kingdom's total employment and there are indications that construction will play an even greater economic role in the future.

There has never been a Kingdomwide construction survey. Moreover, construction as a secondary activity is a very common practice among Saudi Arabian industrial and manufacturing firms. One of the biggest problems encountered in designing this survey was caused by the fact that much of the construction activities in the Kingdom are done by small-scale, own-account proprietors with no fixed address. Because of this, a special subsample of "on-side" construction will be conducted. The sample frame for this subsample will be developed from the records of a public financing agency. This same frame will also be used to collect information on own-account construction and maintenance and repair services.

The construction survey component will begin in September 1978. Approximately 400 firms are

included in the survey. Up to sixty days have been allotted to complete the field enumeration.

The distributive trades and services survey component will be conducted in January 1979. This sector accounts for nearly thirty percent of all private employment in the Kingdom. The Central Department of Statistics has never collected definitive information on wholesale and retail trade. The survey is designed and executed so that the data can be integrated via computer linkage with the construction and industry survey components. These activities are particularly interrelated in the Kingdom because many wholesalers, retailers and service establishments carry on manufacturing and construction activities as a part of their regular business.

Data from the distributive trades survey will be integrated with foreign trade information so that trade margin studies and indexes can be generated. Approximately forty-five days have been allotted to complete the enumeration of about 2,600 establishments.

The integrated economic survey of Saudi Arabia is more than a combination of four distinct surveys. Rather, it is designed and executed as a single unitized system based on an interwoven and interdependent sampling framework. The common theme of a longitudinal type survey, reminiscent of demographic rather than economic designs, ties together the individual variations to form a composition of economic intelligence that could not be obtained by any series of individual surveys. It is certainly not the only solution to the problem of collecting the maximum amount of economic information in the minimum amount of time, using the fewest number of people. It may not even be the best, but it is working in Saudi Arabia today, and the idea may prove useful to other nations tomorrow.

REFERENCES

- ¹Ali Rashid and John Rumford, "The Multipurpose Survey of Saudi Arabia -- An Experiment in Compression," *Proceedings of the American Statistical Association, Social Statistics Section*, 1976.
- ²Ali Rashid and Michael McElroy, "Comparison of Male Occupation Specific Labor Force Separations Obtained Through Standard Working Life Tables," *Proceedings of the American Statistical Association, Social Statistics Section*, 1977.
- ³Ali Rashid and Robert Casady, "Methods and Preliminary Results of the Saudi Arabian Multipurpose Survey," *Proceedings of the 41st Session of the International Statistical Institute*, 1977.
- ⁴Abdul Rahman Aba Btain and John Rumford, "The Integrated Longitudinal Survey -- A New Approach to An Old Problem," *Proceedings of the 41st Session of the International Statistical Institute*, 1977.