

**The Present Statistical and  
Census Programme in Burma**

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## The present statistical and census programme in Burma

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It may be said that statistics like smoke inevitably accompany any industrial and social development. In the newly independent countries of South East Asia the amount of smoke being generated by the development programmes and schemes is still negligible, but the use of statistics for successful implementation has been widely recognized. Burma may be considered as a representative of the area.

As part of the British Empire for upwards of 65 years, Burma has long been associated with the colossus of South East Asia, India. In 1937 it was separated from that country but continued in the British Empire until 1948, when full independence, outside of the Commonwealth, was achieved. The British administrators had long recognized the utility of regular statistical reports in their colonial administration. As a matter of fact, regular Censuses were taken by the British, starting in 1872 in conjunction with the Census of India. These Censuses continued until 1941, even under war time circumstances. The Japanese occupation of Burma in 1942 unfortunately caused the destruction of the 1941 Census records and only a few provisional totals remained.

In other statistical activities the British were just as zealous. The office of Settlements and Land Records collected and maintained extensive statistics on agriculture production. Other areas of governmental activity likewise produced statistical data which were used internally and sometimes published. The techniques used were somewhat antiquated but in general were effectively administered. The point is that the kind of data needed by colonial administrators and foreign commercial firms who were busy extracting teak, oil, and rice were generally available. The more refined and detailed type of demographic, social, economic and agricultural information which democratic and independent nations require was largely not available.

As a consequence the newly organized Government in 1948 took immediate steps to fill in some of the more apparent gaps in the body of statistical knowledge which was then available. A group of English economists came to Burma in 1948 and prepared an economic survey in which the absence of good statistical data was noted. Immediately after the establishment of the Union of Burma a short period of peace within the country gave promise that the fledgling nation would have a normal opportunity to get its affairs in order and proceed with the business of Government. Based on recommendations of the foreign experts some immediate steps were taken to secure needed interim data. A sample survey for Rangoon was planned

and was completed during 1950 and plans were inaugurated for a nation wide Census to be taken in either 1950 or 1951. This Census was to have been in conjunction with the attempt by the Food and Agriculture Organisation of the United Nation to have Censuses taken by all member nations around the 1950 period.

The period of tranquility did not last long however, and by the latter part of 1948 severe fighting with several insurgent groups had broken out. At several points the future of the Government itself was threatened. Nevertheless in that period the officials kept moving forward in the direction of a coordinated statistical programme based on a comprehensive Census. The Government recognized that it would be necessary to bring in foreign experts who had the requisite skills to put over such a coordinated statistical programme. These experts were largely recruited by the United Nations and were assigned to Burma by the United Nations Technical Assistance Administration in accordance with the requests made by the Union Government.

It was not until 1951 that the Government felt that it could proceed with a comprehensive Census programme. With the advice of Dr. Phillip M. Hauser, formerly Acting Director of the United States Bureau of the Census, and serving as Statistical Advisor to the Union Government, a detailed programme of Census and other statistical activities was drawn up. Certain areas of immediate statistical activity were set out and the Union Government proceeded to improve the statistics and shorten the time of issuance of data needed by internal agencies of the Government as well as fulfill commitments to supply statistical data to international agencies. The most important single activity was the preparation of a Central Statistical Act which was presented by the Government to Parliament in 1952.

The Central Statistical Act as passed created the framework for conducting all major statistical functions of the Government. Certain continuing statistical activities which are associated with the day to day administration of Government departments are not included under the provisions of the Act. The Act itself is most significant since it creates a centralized structure along modern lines and may be considered to be as enlightened as most of the pieces of statistical legislation currently in force among the nations of the world.

The Central Statistical Authority Act prescribes rules for the collection of statistics concerning any matters so far as they relate to the economy of the Union of Burma or the social conditions and welfare of the people. The position of Director of the Central Statistical and Economics Department is established and the main functions and powers are described. Included is the power to collect data « relating to any matter » and in such manner and in such time as may be desired. Access to documents required for statistical purposes is provided but the returns are to be completely confidential; penalties for disclosure of confidential returns are prescribed.

In summary the Central Statistical Act has placed into the hands of the Director a great many written and implied powers. Until May of 1954 the Director's position was vacant and the duties of the office were being performed by an Acting Director. Actually while the legislation has been

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on the books for nearly two years the Act still remains as a frame for the future maturation of the Statistical programme. Much of the statistical work of the Government continues in a decentralized manner and consists primarily in the collection and compilation of various forms of social and economic data which are by products of regulatory and administrative action.

The leading producers of Government statistics are the Labour Directorate, the Collector of Customs, the Office of the Commissioner of Settlements and Land Records, which also administers Land Nationalization, the Department of Agriculture, the Burma Railways Board, the Controller of Immigration, the Union of Burma Airways, Ministry of Finance and Revenue, Directorate of Medical and Health Services, and the Union Bank of Burma. Statistics from these various sources are now collected and compiled by the Central Statistical and Economics Department and issued as the « Quarterly Bulletin of Statistics ». This bulletin brings together the more important social and economic statistics collected in Burma which heretofore were either unpublished or were scattered in many individual reports.

Under United Nations Technical Assistance expert guidance changes and innovations were made in the functions and activity of the Central Statistical Office. Additional staffing commenced and organisational strengthening followed. This was in part accelerated by the creation of a Statistical and Economic Service within the Government. The service provides positions and grades for statisticians and economists and is designed to attract and hold qualified personnel in their jobs. A Central Machine Tabulation Unit was created which was to have performed almost all statistical and accounting work done by punch cards. This proved somewhat unrealistic when the Census of 1953 started and it became necessary for the Census Office to set up its own machine installation.

A programme of Wholesale Prices collection, leading to the computation of wholesale price indices, was started. The Central Machine Unit started to prepare reports covering the Government's Pyidawtha plan, the Eight Year Development plan, and other agencies also sent their punched cards in for processing. A new Director has assumed office and the Central Statistical and Economics Department appears ready to play a bigger role in the fast developing statistical programme of the Government. Much, of course, depends on the ability and aggressiveness of the Director since the broad powers of the Department are vested in him. He is Tun Thin, Ph. D. Harvard formerly Head of the Economics Department at Rangoon University, who gives every indication that he will supply the dynamic direction of the chief statistical agency of the Union of Burma.

It was recognized because of the scope and complexity of the Census plans that a separate organization would be required to carry out the vital Census programme. As a matter of fact the Burma Census Act of 1940 is still in force and all authority for the Census was vested in the Commissioner of Census. The Act further designated the nature and kind of respondents, the confidentiality of the data, general procedures, financial responsibility, and penalties for non compliance and fraud.

Since the first modern post war Census of Independent Burma was expected to be more than a simple count of inhabitants a sizeable pretest

of Census questions, methods, and procedures was made in 32 towns. The schedules were, in general, of the same scope and complexity as found in the Censuses of Western countries. The innovations to Burmese Census taking were instituted during the test Census of 1952 and included the preparation of Census block maps to control field procedures; some extra remuneration to Government servants taking the Census; the use of sampling in conjunction with the Complete Population Census; and finally the utilization of the most modern tabulating equipment both electrical and electronic which utilizes the punched card system for Census tabulations.

The 1952 Census Pretest was most successful and proved that Burma could take a national Census along modern lines utilizing new techniques and produce data which were comparable with those of western countries. A general plan of conducting the Census in stages was adopted since security conditions did not permit synchronous enumeration of all areas of the Union. This plan called for the enumeration of most cities and towns of the Union plus several thousand villages during 1953. Subsequently one to three additional stages were to be taken until the complete enumeration of the territory of the Union of Burma was accomplished. In addition there was to be a sample enumeration of areas included in early stages simultaneously with the field operations of the final stage so as to permit the « weighting » of the Census data from the early stages and hence make them additive with the last stage data.

To translate the multi stage plan into practical language, it was contemplated at the time of the first stage Census in 1953 some 250 to 300 cities and towns plus 3000 adjacent village tract areas would be enumerated. This would represent a sizeable portion of the Nation's population, economic resources, and even a substantial area of farm land under cultivation. The second stage to be taken in 1954 would cover either all the remaining towns and village tracts unenumerated in the 1953 stage or if this entire coverage were not possible then a very substantial portion. If a third stage were needed then it would be a final one in which the remaining unenumerated areas including hill tracts and other border areas would be enumerated.

During the formulation of the stage plan it was the Government's considered opinion that the insurrection would be substantially ended, if not by the first stage in 1953, then certainly in time for the second stage operation in 1954. Further enumeration plans were made with these conditions in mind.

While security conditions improved measurably during 1952, 1953 and 1954 the area of Census coverage did not come up to the original estimates. After two separate stages, 1953 and 1954, which covered 253 towns and some 2500 village tracts it became necessary to reevaluate the stage plan as it was originally proposed. It had never been contemplated that the Census programme carry on year after year covering only small areas of the country at each stage. Therefore after the 1954 stage was enumerated it was necessary to determine what were the enumeration possibilities in the remaining unenumerated areas. Preliminary reports have indicated that the Government will not proceed with further Census enumeration in 1955 since the total number of areas available for enumeration does not warrant the expenditure of funds. This does not mean that all unenumerated

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areas are not in control of the Government; on the contrary the populated geographical area held by the insurgent groups is relatively small. The insurgent harassment is directed against communications and transportation facilities and consequently many villages *not* under control of insurgent forces can not be reached for enumeration.

Censuses under these conditions, as were conducted in 1953 and 1954, are certainly unique since complete security is a normal prerequisite for ordinary enumeration work. The Census personnel were subjected to many risks during the course of their field work. During the 1953 stage two seniors officers were captured by a group of insurgents and were robbed of all their possessions, physically manhandled, but fortunately released. In other places the Census officers and inspectors had to pass themselves off as traders and other private citizens rather than identifying themselves as Government servants. During the 1954 enumeration a new twist on the security problem was encountered when, in certain areas, persons attached to insurgent forces, carried on the Census enumeration work and from all accounts did a creditable job.

While the Union Government will probably not be able to secure national Census totals during the present decade, nevertheless the data from the two Census stages of 1953 and 1954 will be invaluable for planning and operating purposes. For one thing the separate subjects covered provide a wealth of demographic, social, and economic data. In the population field they include place of birth, citizenship, religion, race, years of residency in one place, education, labour force status, occupation, economic activity, employment status, income, and fertility information for married women. Housing inquiries covered type of structure, number of dwelling units, materials of construction, size of dwelling unit, number of storeys, tenure, rent or value, occupancy data, and facilities which include water, electricity, bedrooms and latrines.

A whole host of questions relating to industry, cottage industry and home produced and consumed industry establishments delved deep into the economic life of the nation for the first time in its history. From these data the value added to the total national product for each kind of industry activity will be computed. In the agriculture field the Census information collected are most useful in giving the agricultural planners in Government as well as the operating personnel vital data in land utilization, crops, costs, financing, labour, transportation, equipment, tenure and other items.

There has been much reliance placed in scientific sampling to produce certain types of data and to reduce costs. Many of the population inquiries and all of the housing questions refer to a 20 per cent sample of all households enumerated. Sampling has also been utilized to control the quality of data during the processing operations. The sampling techniques used are comparable to those used in the western countries and, in general, the expected results are being achieved. It is quite likely that the Government will continue to use the sampling techniques in subsequent surveys to be taken. This technique lends itself to the use of Census data as a suitable « frame » and it is anticipated that enquiries in the fields of consumer expenditures, labour force status, manufacturing and distributive activities will be made within the next two or three years.

The existence of several operating machine tabulation installations which utilize some of the latest type of punched card equipment in the world makes it comparatively easy to produce data shown in extensive cross tabulations quickly and inexpensively. The Burmese nationals have become good machine tabulation supervisors and operators and will soon be able to plan and install complicated procedures.

A Census along modern lines, for a country with an estimated population of over 19 million people is no small undertaking. Add several insurgencies and the job gets most difficult. The great skills required to produce the results from such a Census have not been available to any significant degree but tables of good quality are being published. I would venture to say that the accuracy of the results for the larger areas are certainly comparable to the accuracy achieved by the countries of the west.

All is no bed of roses however; the processing and training must continue and the required traits of verification, neatness, diligence, and trustworthiness so essential for the clerical processing operations must be constantly reiterated and emphasised. There is now a statistical and Census consciousness which has been blooming since shortly after Independence. The bloom must be carefully nurtured and protected for some years yet. If the present activities continue without diminution of emphasis, funds and enthusiasm there should be no reason that Burma's statistical position should not compare favourably with any other nation in Southeast Asia and with many in the west.

While much of the policy and planning relating to economics and statistics remains in the hands of foreign experts, the brunt of the programmes rests with the Burmese Government servants. In Burma a tradition of competence in Government service has been continued for many years. Subsequent to the war however, there has been some deterioration of the service standards. Now as the Government is taking aggressive steps to modernize and improve its services some attention is being given to training and developing young people in the administrative and technical fields of Governmental activity. For example, the University of Rangoon has offered a course in statistics in their Economics Department. Under the U. N. Fellowship system a number of Burmans have been sent abroad to study demographic, social and economic statistics, and for some years now trainees have been sent to the International Statistical Educational Centre at Calcutta which is affiliated with the Indian Statistical Institute. These are bare beginnings however, since in most cases the training is elementary and the number of trainees is still comparatively few.

It is probably in the field of « middle management » where the greatest improvement should be made. Most of the Department Heads are men of considerable experience but this is not the case of the junior officers. Expanding Government activities have required accelerated hiring and consequently comparatively inexperienced people hold down some key jobs. In addition some archaic administrative practices, which were suitable in pre war days, severely hamper and delay the administrative and technical activities of day to day Government. There is an awareness of the problem and studies are being made which all hope will lead to corrective actions. Naturally the statistical programmes are as affected as other Governmental functions.

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A very effective motivating source for the collection and issuance of regular statistical data has been the influence of the Engineering and Economic teams which are currently in Burma. The American firm of Knappen, Tibbits, Abbot and McCarthy has prepared a blue print of engineering and industrial activity running to 1960 while the firm of Robert Nathan Associates has done the same job in the economic field. Both of these organisations were formerly employed by the Technical Cooperation Administration of the United States but subsequent to August, 1953 are being employed directly by the Government of Burma.

The individual experts of these organisations have been hampered by the lack of good up-to-date information. Consequently their needs have created a real visible demand for the data now being turned out. Unquestionably the data will have wide usage and application within the country and internationally.

The Census publication and tabulation programmes are very comprehensive. Tables will be issued as they are produced, in series and later will be bound in volumes. The number of subjects which will be separately covered will provide much analytical data for demographers, sociologists, economists, and administrative managers. It is expected that the Government of Burma will give wide distribution to its publications.

It is reasonable to anticipate a balanced statistical programme provided the basic facts for Government and the general public for the balance of this decade. The next decennial Census tentatively scheduled for 1961 may culminate in the fulfillment of ten years of statistical development. The new techniques of mark sensing and electronic tabulation may well be used by 1961 and the data should be issued very much sooner after enumeration. In addition a real systematic quality check probably taking the form of a post enumeration survey should be made of the Census so that the quality of the data can be evaluated along systematic lines. For this a relatively small sample will suffice.

At the completion of two years in Burma as Census Advisor, the writer feels highly gratified that two separate and satisfactory Census stages were taken and that the general statistical development is so marked. The next few years will determine if the gains made will be kept and whether there is to be continuing progress in the statistical development of the nation.