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QUESTIONNAIRES; OTHER FORMS AND PROCEDURES FOR SMALL  
AND HOUSEHOLD TYPE UNITS IN INDUSTRIAL INQUIRIES  
(Prepared by the Statistical Office of the United Nations)

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## I. INTRODUCTION

1. In devising and developing a system of industrial statistics, all countries in the ECA region face the important but difficult question of what to do with regard to so-called household or cottage industries. Though these units can account for a significant portion of the output and employment of the industrial sector of the economy, and in particular of selected kinds of industrial activity, the units are difficult and costly to find and enumerate. Furthermore, the number of household and cottage industrial units is probably very large, and these units are generally spread throughout the country and are not infrequently operated on a part-time basis by persons engaged in agricultural, trading or other pursuits. Moreover in some countries it may be a matter of deliberate national economic policy to stimulate the development of small industries which usually make minimum demands on such scarce resources as foreign exchange and highly trained man power.

2. As was noted in the paper, "Objectives and Contents of a System of Industrial Statistics" work in Africa in the field of inquiries into household industries is sparse, if not completely non-existent. It is therefore essential to focus attention on the need for, the problems of, and suitable techniques for, including household and cottage industries in the various inquiries of a system of industrial statistics, and this paper is devoted to those questions. The discussion presented in this paper consists, to a great extent, of materials which have been dealt with in a more summary fashion for the most part, in other papers considered by the Seminar. <sup>1/</sup>

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<sup>1/</sup> In particular, the Seminar papers, The Objectives and Content of a System of Industrial Statistics, Sources and Methods of Gathering Industrial Statistics, Including the Use of Sampling and the Industrial Directory.

## II. DEFINITION OF THE FIELD

3. Because of the diverse and vague meanings that have been assigned to the term, "household and cottage industries", before dealing with the questions involved it is necessary to decide, in a precise and efficacious fashion, on what kinds of industrial units are to be included in that industrial sector. The term, "household and cottage industries", often carries connotations such as the following: The involved industrial activities are carried on in premises utilized primarily for living purposes and may be intermittent, small-scale and devoted, to a significant extent, to production for own use; and the personnel engaged in these activities may be members of the same family who are often engaged, as well, in agricultural, trading and/or other pursuits. However, none of these connotations furnish useful or practical definitions for distinguishing the so-called household and cottage industries from other industrial units for purposes of designing or carrying out industrial inquiries, (for example) in many of the countries of the ECA region, well-organized, commercial, not insignificantly small industrial activities are conducted in the family quarters or compounds (e.g., in sheds or other make-shift structures), and the family (household) is a rather extended economic and sociological unit. Further, it is often difficult, if not impossible, to distinguish between residential and non-residential structures or premises, or to draw a dividing line between intermittent, seasonal and regular industrial activity.

4. For reasons such as outlined in the foregoing paragraph, the countries which have surveyed the so-called household and cottage industries, have generally defined this field in terms of criteria of size and/or type of operation. As was noted in an earlier paper for the Seminar, these criteria have been based on whether or not power equipment was installed and/or the number of persons engaged in the industrial activity. <sup>2/</sup>

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<sup>2/</sup> See, for example, paragraphs 24 and 67 of The Objectives and Content of a System of Industrial Statistics.

In order to separate the so-called household and cottage units from other industrial units, it would seem desirable to draw the line at a relatively low number of persons engaged - perhaps five or even three and fewer whether or not power equipment is installed. Otherwise, the significance of that segment of industrial activity becomes considerable, and industrial units are included which exhibit great differences in characteristics and problems of gathering data. In other words, the industrial sector of the economy might be considered to consist of very small units (the so-called household and cottage industries), somewhat larger but still small units and finally large units. The Seminar may wish to consider uniform dividing lines for regional use, between such segments of the industrial sector.

5. It was noted above that very small-scale industrial activities are not infrequently carried out in households also engaged in agricultural and other pursuits and that part, if not all, of these industrial activities may consist of production for own use. The question therefore arises as to the circumstances under which very small-scale industrial activities should be of interest for purposes of industrial statistics. Or, in other words, which of those activities should be considered to constitute industrial establishments.

6. The International Standard Industrial Classification of All Economic Activities (ISIC) and the International Recommendations in Basic Industrial Statistics, taken together, furnish guidance as to how to deal with the question raised in the preceding paragraph.<sup>3/</sup> According to the ISIC, whenever it is possible, distinctions, in the form of separate statistical and tabulating units (i.e., separate establishments), should be made between the various divisions of economic activity - for example, between agriculture and manufacturing or manufacturing and retail trade. It would seem advantageous, in

<sup>3/</sup> See International Standard Industrial Classification of All Economic Activities Series M, No. 4, Rev.1 and International Recommendations in Basic Industrial Statistics, Series M, No. 17, Rev. 1.

the case of the countries of the ECA region, to make particular efforts to separate industrial from agricultural activities carried on by the same family or household unit from one another. In addition, International Standards in Basic Industrial Statistics indicate that the field of interest for industrial inquiries consists of all units which engage in any production for the market and that all of the production of an industrial unit so included in this field is to be covered, whether or not the production is for the market. However, it should be noted that the International Recommendations indicate that it may not be practical to cover small units which are not in business during the time an inquiry is actually being taken though these units may have been active during the year of reference of the inquiry.

7. This criteria suggested by the Statistical Commission is offered as the best compromise available between what is statistically feasible and what is economically meaningful. In the sphere of the household and cottage industries there is a spectrum of establishments ranging from those household units spending the whole of their time producing for sale into the so-called money economy, through those units producing partly for the money economy and for exchange in the subsistence economy and for own consumption, through to those, probably hypothetical, units operating entirely in the subsistence economy exchanging nothing and satisfying all needs themselves and in the process producing items which are classified in the I.S.I.C. as industrial. At which point the spectrum is cut for inclusion in the industrial sector of the economy, and thereby in an industrial inquiry, depends on the requirements and resources of the particular country concerned. The one suggested by the Statistical Commission above is the one most commonly used.

### III. THE INCLUSION OF THE VERY SMALL UNITS IN VARIOUS KINDS OF INDUSTRIAL INQUIRIES

8. A fundamental step in dealing with the very small industrial units is to assess their significance and role in the industrial sector of the economy. As a major goal of an infrequent (e.g., decennial), comprehensive inquiry is to furnish information on the structure of the industrial sector, the very small units should, at the least, be included in the field of coverage of these inquiries. And, in order to obtain the data required to determine the

contribution of the very small units to industrial activity and to describe the structural characteristics of these units, infrequent statistics should be compiled for these units on the number, employment, wages and salaries, capacity of installed power equipment and gross output as a minimum, classified according to kind of industrial activity and size, and perhaps other characteristics. In fact, the content that was proposed in an earlier Seminar paper with regard to inquiries in the ECA region which are part of the 1963 World Programme, as well as in the recommendations of the Statistical Commission on this score, provides for the inclusion of the formentioned statistics for the very small industrial units. <sup>4/</sup>

9. The urgencies and practicabilities of including the very small units in the field covered are far less in the case of annual industrial inquiries than in the case of large-scale, infrequent industrial censuses. The emphasis in the case of annual inquiries is on measuring changes in the level of industrial activity, and the contribution of very small industrial units to these changes is likely to be quite small relative to the number of such units. Furthermore, the inclusion of the very small units in the field of coverage of the annual inquiries could seriously impede the rapidity with which the results of these surveys would be available, and most countries of the ECA region may be unable to afford the annual expenditures and resources involved in covering the very small industrial establishments, even on the scale of a very small sample. Because of circumstances such as those, most countries have excluded the very small industrial units from the field of coverage of their annual industrial surveys on the condition that they are included in their infrequent, comprehensive inquiries, a similar course of action was recommended by the Statistical Commission and was proposed in the Seminar paper, The Objectives and Content of A System of Industrial Statistics. <sup>5/</sup>

<sup>4/</sup> See part II of, International Recommendations on the 1963 World Programme of Basic Industrial Statistics, Statistical Papers Series M, No. 17, Rev.1, Add. 1.

<sup>5/</sup> See, for example, paragraph 23-24.

10. Nevertheless, in the case of the countries of the ECA region, the contribution of the very small units to the level of activity may be significant enough for some kinds of industrial activity (e.g., the manufacture of textiles, clothing or footwear, carpentry and cabinet making, repair work of various kinds, construction), or even the industrial sector as a whole to demand the inclusion of these units, despite the difficulties and costs, in the field of coverage of industrial inquiries more frequently than once every ten years. This may also be the case because of the concern about, and attention paid to, particular kinds of very small units in programmes for economic development. Under these circumstances, countries of the ECA area may find it necessary to carry out special industrial surveys of the very small units engaged in particular kinds of industrial activities or even in all types of such activities, once every two, three or, at least, five years. To keep the difficulties and costs of such inquiries to reasonable dimensions, it would seem essential to restrict the statistics sought to a minimum - perhaps, data on employment and value of gross output or value added only.
11. It might be noted, in passing, that the field of coverage of monthly or quarterly industrial surveys should not be extended to include the very small industrial units, irrespective of the contribution of these units to the employment and/or output in any particular kind of industrial activity.

#### IV. DIFFICULTIES OF FINDING AND ENUMERATING VERY SMALL INDUSTRIAL UNITS

12. The considerable difficulties and costs of including very small units in the field of coverage of decennial or more frequent industrial inquiries arise both in identifying and enumerating these industrial units.
13. In order to find and identify the very small industrial units, intensive field canvassing is required of all types of premises. Adequate or usable lists of small industrial establishments are not available in the countries of the ECA region as a by-product of governmental or other administrative activities and cannot be compiled as a result of registration laws or proclamations. Many of these establishments may be housed on premises that are not designed for or exclusively devoted to industrial activity - for example, in households, compounds, sheds or stalls; and the small industrial units are widely scattered



over the country and are considerable in number. Further, small-scale industrial activities are often performed on an intermittent or seasonal basis, in conjunction with agricultural, trading, service or household pursuits, and, not infrequently, it is not clear whether the industrial activities being carried on constitute an independent statistical unit or a group of homeworkers in the employ of an industrial establishment. Many of the small units are on the borderline between manufacturing and agriculture, manufacturing and trade or services or construction and trade or services. Examples of such borderline activities involve making of ghee or cheese and the curing of fish, on the margin between manufacturing and agriculture; the making and selling of soft drinks or confectionary, at the borderline between manufacturing and retail trade; carpentry, plumbing or sheet metal work, on the margin between construction and retail trade. Questions as to whether or not the small-scale industrial activities constitute a separate establishment are likely to arise in such cases as household weaving, binding of periodicals and books, or making of artificial flowers. Thus, even after it is ascertained that industrial activities are engaged in, on or from a given location or premise, it is essential to obtain additional information to determine if these activities are carried on, at least to some extent, for the market and whether they make up an industrial establishment.

14. In order to enumerate the very small establishments, field visitors must be employed. Those industrial units cannot be expected to complete and return questionnaires, no matter how abbreviated, by themselves. Moreover, even trained and skilled enumerators will encounter considerable difficulty in completing questionnaires for the very small industrial units due to the lack of systematic, or even any, records and the need to assemble and estimate the wanted data depending, to a great extent, on such devices as comparisons between the present and past situations, the memory of the operator(s), data from the organized records of the major suppliers of raw materials for and/or the major purchasers of the products of the unit, or perhaps information from the local tax, licensing or other governmental authorities. Enumeration of small industrial units is therefore a time-consuming and specialized task, not infrequently involving reconstruction

of the required data from the details of the resources, activities and dealings of these units.

#### V. THE USE OF SAMPLING

15. In order to keep the resources, time and costs involved in dealing with the so-called household and cottage industries within acceptable bounds, it is necessary to utilize probability sampling in carrying out all or, at least, some phases of these surveys. <sup>6/</sup> It has been somewhat more common to utilize samples in enumerating small units than in locating and identifying these units. In part, this may have been due to the fact that complete lists of small units from which to choose efficient samples of these units for enumeration were constructed during field canvassing for censuses of population or censuses of non-agricultural establishments.

Listing and identifying all very small industrial units (e.g., obtaining information on their name, address, kind of industrial activity, and number of engaged) has the additional advantage of being a census of the most important aspects of the structure of the industrial sector of the economy. As a result, for example, detailed geographic data can be issued concerning the very small as well as other industrial establishments.

16. However, unless censuses of population can be utilized as a medium for constructing a reliable list of very small industrial units, it would seem desirable to restrict the location and identification of small industrial units to a sample of areas. This would not only materially reduce the costs and time involved in listing small units but would also lead to more reliable and accurate lists. For purposes of enumeration, a sample of the small units listed for the sample areas might be selected, since the unit-costs of enumeration are likely to be much higher than those of listing. As compared to a one-stage sample of small units to be enumerated, which is spread over the entire country, a multi-stage sample for enumeration such as the fore-mentioned, which is concentrated in a restricted number of sample areas will

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<sup>6/</sup> See also paragraphs 9-10 and Annex I of the Seminar paper, Sources and Methods of Gathering Industrial Statistics Including the Use of Sampling and the Industrial Directory.

be less costly and more easily controlled and supervised, and the enumeration will be smaller in number and higher in quality. In order to carry out such an area sampling plan efficiently, however, information such as that derived from a census of population, is required for purposes of deciding on the number of areas to be selected, stratifying the various area sampling units, and assigning probabilities of selection to these areas. Further, the use of area sampling might be complicated by any concentrations, in particular areas, of small units engaged in selected kinds of industrial activities, especially if little reliable information is available on this question. Also it would not be possible to issue detailed data on the geographic distribution of small industrial units if sample areas only are canvassed.

17. A further refinement to the sampling technique which might be used for the household units and small establishments which are likely to keep few or no records, is sampling in time. This would help to reduce errors arising from memory lapses and inability to recall the necessary facts. When the sample is taken, a recent short period such as a month is used for enumerating the required data, instead of asking the respondent to recall for the entire reference period of the inquiry which is usually twelve months. Of course in order to build up reliable annual aggregates from these samples requires a number of independent sub-samples over the inquiry reference period (e.g. 4, 6, or 12 in a year).

18. For countries with no experience in sampling techniques careful preparation is necessary, and a pilot test sample is often advisable as is the erring on the side of a larger sample rather than adhering to the minimum requirements.

## VI. METHODS AND PROCEDURES FOR LOCATION AND IDENTIFICATION

19. As was noted above, intensive field canvassing involves systematically searching for industrial units in all structures and grounds, whether these structures and grounds are residential or non-residential, permanent or temporary, recognizable from streets, roads or paths or hidden and whether or not the industrial units are identified by signs or other indications of business activity. In order to ensure that field workers canvass for industrial

units systematically and thoroughly; they should be assigned well-defined districts which are described by means of detailed maps, including the boundaries for their district and they might be instructed to indicate on the map for their district each structure and compound canvassed. In canvassing the various parts of each structure and compound for industrial units, field workers would, of course, be required to ask certain questions of occupants. These questions might be specified in the form of a register, each line of which is devoted to setting down the answers to each of the pertinent questions and to controlling the required work of location, identification and enumeration for each premise. <sup>7/</sup> The queries to which the field worker would be requested to seek answers from the occupants of each premise (e.g., household, portion of a compound, shed), might be such as the following:

- (i) The address of the structure or compound being canvassed as well as the identification of the premises (i.e., portion of the structure or compound) of the occupants;
- (ii) whether, during a given period, any of the occupants of the premises sold, on their own account, or made any goods or rendered any services at or from the premises and
- (iii) if so, the name or the names of the person(s) engaged in these activities and the business name, if any,

utilized for this purpose, a description of the nature of the economic activity engaged in, and how many persons were engaged in the economic activity during a short given period.

20. The queries outlined above would serve to find and identify any establishments operated at or from premises in canvassed structures or compounds. The description of the units found would be classified according to kind of economic activity later in order to determine whether or not these establishments are engaged in industrial activity. The use of the phrase "made any goods at the premises" in determining whether or not economic activity is carried on at the premises is directed to the inclusion of homeworkers in the industrial inquiry as separate establishments in view of the difficulties of distinguishing them from small-scale independent household businesses. The

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<sup>7/</sup> For an example of such a register, see Exhibit 3, page 196, Volume II of Studies in Methods: Industrial Censuses and Related Enquiries.

period for which information is sought regarding economic activity carried on at the premises and the number of persons engaged in this activity should be a short, preferably recent period -for example, a recent calendar week. However, the recency of the period would depend on the extent of coincidence between period of carrying out the survey and the period of reference of the survey. It should be noted that there are considerable advantages to coincidence or close proximity between the two periods from the point of view of not only listing but also enumeration.

21. A somewhat different approach to that outlined above that was utilized in locating and identifying industrial units is to find, the thorough canvassing of households, the owner(s) of incorporated business units, whether or not these businesses are conducted from the household premises of the owner(s), and to trace this kind of business unit through the owner(s). This approach would result in duplicate listings, which presumably would need to be matched for unincorporated business units owned by partners. It might also result in missing more industrial units than where the listing is devoted directly to finding economic activities located in the premises being canvassed. For example, queries designed to identify the owner(s) of businesses might not be as direct or easily understood as the type of questions outlined above.

22. As exhaustive field canvassing generally involves entering all premises and locating and identifying units engaged in all kinds of economic activity, it is advantageous to engage in listing industrial units as part of a more comprehensive inquiry into population, all kinds of economic activity or, at least, all kinds of non-agricultural establishments. Combining listing for purposes of the industrial survey with listing for purposes of broader inquiries not only ensures more complete canvassing but also helps avoid the making of subjective, inaccurate judgements by the field staff as to which units fall within the field covered in the industrial inquiry. In order to avoid the latter kinds of errors it was suggested above that the units located should be classified according to kind of economic activity at field offices, based on fairly complete descriptions of the activities engaged in by those units. It should also be noted that following such a procedure in listing results in valuable information on the structure of all kinds of small-scale economic activities.

## VII. METHODS AND PROCEDURES FOR ENUMERATION

23. As was noted above, the major problems of gathering data for very small industrial units are due to the serious deficiencies in the available records, if any, for these establishments and the intermittent, unsystematic fashion with which these businesses are often carried on. In order to minimize these difficulties it has been recommended that the most essential items of data only be gathered for the small industrial establishments.<sup>8/</sup> Even where those recommendations are followed, many difficulties will be encountered in gathering reliable data which relate to an extended period of time (e.g., data on gross value of shipments or output) or which relate to a short period of time, much before the time of actual enumeration. It would therefore be advantageous to shorten, as much as possible, the periods of time for which figures are sought to periods immediately preceding the time of actual enumeration. In the case of data on employment or installed power equipment this might be accomplished by starting enumeration immediately after the week or day to which the data relate. In the case of data on output and inputs, this might be accomplished by utilizing as the period of reference the month immediately before enumeration takes place. However, as data on output and inputs are desired for a year, such a procedure, as pointed out earlier, would involve use of sub-samples of the sample of units to be enumerated which are spread over the twelve months of the year of reference.

24. Even after reducing the difficulties and biases arising from resorting to the memory rather than the records of the owners of very small industrial units, special precautions and somewhat involved estimating procedures are likely to be required in the case of items of data on output and inputs. It may be necessary, for example, to estimate the data on these phases of the establishments' activities from details on each of the articles they produce or consume in conjunction with local information on prices; data abstracted from the records of their major suppliers of key materials and/or purchasers of key products, if the suppliers and/or purchasers are few in

<sup>8/</sup> See Part II International Recommendations on the 1963 World Programme of Basic Industrial Statistics.

number; or receipts, taxes paid or other scattered records on their transactions. Following such procedures involves detailed training and instructions for field enumerators and is, of course, time-consuming.

#### VIII. METHODS AND PROCEDURES FOR PROCESSING QUESTIONNAIRES

25. In the case of sample surveys of very small industrial units, there are decided advantages to assigning to field offices the responsibilities of coding and editing. Because of the weight in the final result of the inquiry of each unit included in the sample, it would be necessary to return to the respondent unit in order to correct any omissions, inconsistencies or other deficiencies in the data gathered. And, the required revisits to the respondent units could be made most cheaply and effectively if those deficiencies are detected in offices out of which the field staff work. Furthermore, the coding and editing of registers and questionnaires at field offices would furnish a valuable means of supervising field staff and of detecting defects in the survey procedures and instructions or in the training of field staff.

#### IX. DESIGN OF QUESTIONNAIRES AND INSTRUCTIONS

26. The design of a questionnaire is to a great extent determined by the items of data which it is intended to collect, the type of sample survey intended to be used, the character of the respondents to be enumerated, and the skills and experience of the field workers to be employed in this work. In designing the questionnaire appearing in Annex 1, only those items are included which were given a priority of 1, in the column "for smaller statistical units", in the table shown in Part II of the Statistical Paper, Series M, No. 17, Rev. 1, Add 1, International Recommendations on the 1963 World Programme of Basic Industrial Statistics.

However, in the following discussion consideration will be given to other items which might be considered suitable for collection in a sample survey of small and household units.

27. The items of data that were assigned a priority of one relate to the kind of activity of the industrial unit, employment, wages and salaries,

capacity of power equipment, electricity consumed and value of production. In addition it will be essential to gather information in order to identify the unit - for example, name and location. Within and beyond this list of items, there is considerable scope for variation to fit the requirements and resources of an individual country.

28. In addition to deciding on the items of data to be gathered, the statistical authorities need to determine the length of the period for which figures are to be sought from each respondent on such items as wages and salaries paid, electricity purchased and generated and output. In making this decision, account needs to be taken of the ability of respondents to furnish reliable data as well as of the implications of the choice for the sample design to be adopted. Though figures are wanted on the forementioned type of items for a full year, it is unlikely that respondents engaged in small-scale industrial activity will be able to recall reliable information for that lengthy a period. Shortening the length of the period of recall from a year to one, or even three, months is likely to improve materially the reliability of the information gathered. If the period of time for which data are gathered during any one visit to small units is shortened in this fashion, twelve or four visits during a year would be required. These successive visits may be made to the same or differing samples of units. In the former case, a single sample of units would be chosen for the entire year. In the latter instance, four or twelve sub-samples of the sample for the entire year might be selected, depending on whether data are gathered during a single visit for a three-month or one-month period. The early stage sampling units for the year as a whole (e.g., the first and second stages if three stages are utilized) should in general, be areas. For example, the first and second stages in the case of non-urban parts of the country might be districts and villages, respectively. In the case of urban parts of the country, the first two stages might be towns and suitable sub-divisions of towns. Where sub-samples of the master sample for the year are employed, the most efficiently selected sub-samples would also be based on the use of area sampling units at the first and second stages of sampling, at least for the non-urban parts of the country.



29. The use of four or twelve sub-samples has some advantages over the use of the same sample in gathering data for three or one-month periods, respectively. The costs of travel associated with the visits required to gather data is likely to be less in the former approach than in the latter in several parts of the country. Also, some of the units included in the sample may go out of business during the year, and a sample of newly established units within the sample areas will need to be enumerated during each round. Furthermore, co-operation in the inquiry may be attenuated by successive visits to the same respondent. On the other hand, the familiarity with the inquiry that is developed through successive visits to the same respondent may contribute to improvement in the quality of the data gathered. Moreover, the techniques and methods of selecting the sample and making estimates are somewhat more complicated where four or twelve sub-samples are utilized than where one master sample is employed.

30. The length of the period of reference for such items of data as on wages and salaries paid, electricity purchased and produced and output is not indicated in the specimen questionnaire in Annex I in order to allow for the alternatives outlined above for the gathering of data from small and household-type industrial units.

A. Sample Identification

31. It is not possible to suggest a standard method of identifying the sample, as it will vary with the details of actually choosing the sample. It is however, included as a heading to emphasize the importance of its inclusion.

B. Establishment Description

32. The identification of the location of units in organized or official urban areas should not be too difficult, as the roads or streets will usually be named and possibly the buildings numbered. However in those settlements which exist in Africa at the edge of official urban areas, built by people recently moving in from the rural areas, identification of location can be difficult. The Statistical Office will need to organize their own identification

system. This also applies in the rural areas when location more specific than the smallest administrative unit is required.

33. A relatively complete description of the activities of the unit is required so that the unit may be correctly classified according to kind of industrial activity. The query is also designed to elicit information that is required to ascertain whether or not the unit is primarily engaged in industrial activity. The section of the specimen questionnaire on output should yield considerable supplementary information for accurate classification.

34. It should be noted that in the section on the first page of the specimen questionnaire devoted to "office use", spaces are allowed for coding small industrial units according to location, kind of activity, size and type of operation. As suggested in an earlier paper, the size of these units would be based on the number of persons engaged and their type of operation on a combination of numbers of persons engaged and the use of power equipment.<sup>9/</sup>

#### C. Number Engaged

35. The total might be sub-divided into working proprietors and unpaid family workers, employees and perhaps homeworkers. The number taken should be that engaged during the most recent pay period preceding the date of the inquiry or for the most recent calendar week. The distinction between Working Proprietors and Unpaid Family Workers as has been mentioned in an earlier paper<sup>10/</sup> is often blurred and difficult to make, and is marked in the questionnaire as optional. The inclusion of Homeworkers in this section, that is in the employment data of the establishment for which they work, is also optional. If they are included here then payments to them are dealt with in exactly the same way as wages and salaries payments to other workers.

#### 9/ Classification Systems, Tables and Methods for Compiling and Publishing Industrial Statistics

#### 10/ Paragraph 71 of the Paper, Objective and Contents of a System of Industrial Statistics

However, Homeworkers can be treated as separate establishments in themselves, in which case the payments to them by the establishment (s) for which they work are the sales of the homeworkers establishment. 11/

36. The numbers engaged should be distinguished according to sex. A distinction on the basis of degree of skill might be useful but classification would be of an extremely arbitrary nature. A useful and feasible distinction which could be made, and is made in the questionnaire, is by the number of hours worked in a week or perhaps working days in a month.

#### D. Wages and Salaries

37. It is recommended that total payments to employees and homeworkers, if they are included under number of engaged, should be distinguished according to whether they are cash payments or payments in kind. Payments of kind to employees may be in the form of the goods produced by the industrial unit for which they are working. Payments in kind are usually valued at cost to the establishment, but if these payments are in the form of the products of the industrial unit, they should be valued at sales price at the unit. This is the same valuation as used in valuing production under Part VIII of the specimen questionnaire.

#### E. Capacity of Power Equipment

38. The specimen questionnaire is designed to gather data on the capacity of installed power equipment that is the sum of the rated horsepower of installed prime movers connected directly to machinery other than electric generators and of all installed electric motors. At the same time, queries on the rated horsepower of prime movers connected to electric generators are included in order to furnish a complete inventory of installed prime movers. The measurement of capacity used in the rated horsepower, i.e., that shown by the maker on the name plate, rather than the effective horsepower, which as well as being difficult to specify, is subject to considerable judgement.

11/ See Paragraph 71 of the paper, Objectives and Content of a System of Industrial Statistics

39. In addition to prime movers which can be readily measured in terms of rated horsepower, there may be, in small industrial units, equipment which it is practical to count only. In the specimen questionnaire, a list is made of the likeliest of such kinds of prime movers, and it is suggested that they merely be numbered, provided that it is not generally feasible to estimate rated horsepower. All of the data on the capacity of power equipment should refer to that installed for use as at a given date. It is desirable, for example, to use the position as on the day of the inquiry.

F. Electricity Purchased and Generated

40. Both the quantity and value of electricity purchased should be requested and estimates should be made of quantity only in the case of electricity that is self generated. Where necessary, care must be taken to separate the electricity used for domestic living purposes from that consumed for productive purposes. It can fairly safely be assumed that a negligible amount, if any, of self generated electricity is sold to other users by small and household-type establishments. Consequently, this item of data is omitted entirely from the specimen questionnaire.

G. Value of Production.

41. It is important to make clear that, if the recommended definitions of the Statistical Commission are adhered to, the total value of the non-agricultural production of the establishment is covered. All disposals of the output of non-agricultural products and services must be covered and valued at sales prices at the establishment. In the questionnaire, the value of the production is sub-divided into the following constituent elements: (i) The products which are simply sold or exchanged; (ii) the money sales value of the products which are used by the members of the household or to pay wages in kind to the employees; (iii) goods sold or exchanged in the same condition as purchased; (iv) repair services and sub contract work and (v) other non-agricultural services rendered. Excluded, of course are the wages and salaries earned by members of the household

in which the establishment is located, who are employees of other establishments. Itemization of data on the five or so main products of small industrial units will not only be of assistance in gathering figures of output but also furnish information for purposes of classifying small and household-type units according to kind of activity and determining the amount of selected individual commodities produced by these units.

42. Even where the items of data on production relate to a one-month or three-month period, it will, in many cases, be necessary for enumerators to work out estimates with respondents based on such information as recall of individual sales, quantities of individual commodities made relative to current output, or quantities of various materials utilized relative to current consumption or, at best, on scattered records. Secondary sources of information that might be fruitful for these purposes are major purchasers of the products of the small industrial units, major suppliers of materials to them, or local tax and licensing authorities. In general, it will be necessary to furnish detailed instructions and suggestions to enumerators on the sources of information, methods and devices that they might utilize in assisting respondents to furnish reliable data.

#### H. Other Items of Data

43. There are, as mentioned earlier, a number of items of data to which the Statistical Commission did not give priority for small establishments. Though these items have not been included in the specimen questionnaire, some countries might find it desirable and feasible to include some of these items - for example, type of legal organization, other fuels used, in addition to electricity, or raw materials consumed.

##### a. Type of Legal Organization

44. Information on this aspect of small industrial units can be valuable in countries where changes in legal organization are taking place - for example, through the introduction of co-operatives. The data would probably chiefly be of interest to countries which were attempting to stimulate the growth of a particular kind of institutional organization, such as co-operatives or collectives, in the small establishment sector. In Africa, with the conditions which

prevail at present, it would possibly be sufficient to distinguish those establishments which are parts of co-operatives from those which are not. However, some countries may consider it worth while to obtain this data in greater detail, and determine whether the small units are individual proprietorships, partnerships etc., as well as co-operatives.

b. Cost of Fuel and Raw Materials consumed.

45. In the recommendations for smaller statistical units contained in Part II of the Statistical Paper, International Recommendations on the 1963 World Programme of Basic Industrial Statistics,<sup>12/</sup> a priority of two is given to all the constituent parts of the costs of goods received or consumed and payments for services rendered. However, some countries may consider it necessary to collect these items of data in order to obtain fuller information on their household and small establishment industrial sector. The Statistical Commission has suggested that if this input data is not collected, value added for these small statistical units might be estimated on the basis of gross output, taking into account the relation between gross output and value added in the smallest size class within the same industry group for which the full range of data is available.<sup>13/</sup> Underlying this suggestion is the assumption that the smallest size class for which the full range of data is available does not differ in input-output ratios from the household and small establishment sector to an extent which is sufficient to invalidate its use as a basis for estimation. If the characteristics of the two relevant size classes are materially different and the small and household-type units make quite substantial contributions to value added, it would be necessary to gather data from them on cost of fuels and raw materials consumed in order to have adequate data on value added. It should be emphasized however that this will often be difficult, even where short recall periods are utilized. It may be necessary for the enumerator to work backwards from output figures, resort to scattered records, if any exist, or

<sup>12/</sup> Statistical Paper Series M, No. 17, Rev. 1, Add. 1.

<sup>13/</sup> See Footnotes to Part II of Statistical Paper Series M, No. 17, Rev. 1 Add. 1.

information from the supplier of fuels and raw materials. In the case of household units, care must also be taken to distinguish domestic consumption of fuels, and perhaps even raw materials, from consumption for industrial purposes. It would be useful to supply the enumerator with lists of important raw materials relevant to important products so that he is in a position to jog the memory of the respondent.

I. Enumerators Manual

46. In order to ensure accuracy and uniformity in the completion of the questionnaire it is necessary that each enumerator be provided with a set of detailed instructions. These should cover every aspect of the survey as it affects the enumerators duties and contacts with the respondents. These can range from the authority for and purpose of the survey to the method to be used in dealing with specific and detailed aspects of an establishments activities.

**ANNEX I**

**SPECIMEN QUESTIONNAIRE FOR HOUSEHOLD AND SMALL SCALE MANUFACTURE**

<b>PART I. SAMPLE IDENTIFICATION</b>							
<b>PART II. ESTABLISHMENT DESCRIPTION</b>							
1. Description of location of establishment (Space to be provided for identification of province, district, town, village or the like and description of location within the smallest administrative unit)							
2. Name of owner of establishment or head of household in which establishment is located							
3. Description of business carried on, work done and kind of products made							
For office use	Identification (1)	Location (sample segment) (2)	Industry (3)	Size (4)	Type of operation (5)	Power capacity (6)	Gross output (7)



PART III. NUMBER OF PERSONS ENGAGED				
4. Give the number of different persons, distinguished according to sex, engaged in the activities of the establishment during the pay period or calendar week ending nearest the (specify date)				
A	B	C	D	E
Type of Engaged	Male		Female	
	Working —hours or more during pay period or week	Working less than —hours during pay period or week	Working —hours or more during pay period or week	Working less than —hours during pay period or week
a. Working proprietors (for individual proprietorships and partnerships include all who gave any time to the activities of the establishment)				
b. Unpaid family workers (include all members of the household(s) of the owner(s) of the establishment who worked during the period but who did not receive payments specifically for their work)	Optional distinction			
c. Employees (include all persons, other than working owners, unpaid family workers and homeworkers, who worked for the establishment during the period, whether part time or full time, or who received pay during the period) (include all employees on sick leave, vacation leave or strike) (exclude all employees on pensions or who were in the armed services)				
d. Homeworkers (include all persons who worked for the establishment in their own homes, regardless of the time worked during the period)	Optional (can alternatively be treated as separate establishment)			
e. Total number engaged				
For Office Use	(8)		(9)	

**PART IV. WAGES AND SALARIES PAID**

5. **Total Wages and Salaries Paid During (Specify Period):** Give the amount of all payments for work to employees and homeworkers (unless treated as separate establishments both in cash and in kind and before deductions (if any) for Social Insurance, Contributory Pensions and similar obligations of employees and homeworkers. Include all payments for overtime, bonuses, commissions, dearness allowances, sick and casual leave and vacations. Exclude payments for obligations of establishment (if any) to social security schemes, family allowances, pensions etc. (Estimate the value of payments in kind, as in Part VII of this questionnaire at wholesale prices)

A	B	C
	Total Wages and Salaries Paid During the (specify period) in	
	Cash Payments	Payments in kind
a. Employees (include all payments to persons other than working owners, unpaid family workers, and homeworkers who worked in the establishment during the period)		
b. Homeworkers (unless treated as a separate establishment) (include all payments to persons who worked for the establishment in their own homes)		
		For Office Use (10)
		(11)

PART V. CAPACITY OR POWER EQUIPMENT IN USE AND IN RESERVE				
6. Give the rated horsepower of prime movers (i.e. equipment, which converts forms of energy, other than electrical, into mechanical energy - see list below), in place for use by the establishment or at ( <u>specify date</u> ). Include both stationary and mobile, except those used for moving vehicles.				
A	B	C	D	E
Type of Prime Mover	Number	Rated Horsepower (i.e. on name plate)		
		Total	Connected to electric generator	Connected to other machinery
Diesel engines				
Steam engines				
Other engines				
Water wheels		XXX	XXX	XXX
Windmills		XXX	XXX	XXX
Wheels and similar devices driven by animals		XXX	XXX	XXX
Wheels and similar devices driven by persons		XXX	XXX	XXX
Other prime movers (Please state)				
	(12)	(13)	(14)	(15)
For Office Use				
7. Give the rated horsepower of electric motors in place for use by the establishment as at ( <u>specify date</u> ). Include all stationary and mobile electric motors except those used for moving vehicles.				
A	B			
Electric motors	Rated Horsepower (i.e. on name plate)			
	(16)			
For Office Use				

## ELECTRICITY PURCHASED AND GENERATED

8. Give the quantity and cost of electricity purchased and quantity of electricity generated during the period (specify period)

A	B	C
	Quantity	Value
a. Electricity purchased		
b. Electricity generated		XXXX
	(17)	
For Office Use		

**TOTAL VALUE OF PRODUCTION**

9. Give the money sales value of the products of the establishment during the (specify period)

[illegible]

	Money value during (specify period)
10. Give the money value of goods sold or exchanged in same condition in which they were obtained from others	
11. Give the money value of repair service or sub-contract work done for other people or establishment during	
12. Give the money value of any other services rendered by the establishment to others	