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Statistics on cooperatives

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ILO Department of Statistics

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Introduction

It is often said that cooperatives are resilient in times of crisis and that they are essential for small enterprise development. Such statements, however, are drawn from ad hoc studies that cover a limited set of industries for a few countries. Only quantitative evidence that covers the whole economy for a large number of countries can verify that such statements are generally true. Unfortunately, statistics on cooperatives that have these characteristics are missing in most countries of the world.

Many developed and developing countries produce statistics on cooperatives but they tend to cover only a subset of cooperatives in the countries, often only in certain industries. This is mostly because statistics on cooperatives are obtained from registers, or on surveys that are based on these registers, and such statistics have coverage limitations.

- Registers kept by government agenc(ies) will be adequately complete for the industries they cover (which may not be all industries in the economy), in those countries where cooperatives, and enterprises in general, tend to be registered and where these registers are kept fairly up to date and complete. But in most countries of the world the extent of non-registration may be large, and these government registers may not be maintained with the quality needed to produce reliable statistics: in these countries enterprises that function as cooperatives may not be registered and/or their registers may omit those that are, or fail to exclude those that cease to exist. In addition, if more than one register on cooperatives exist, they may not be harmonized to allow aggregation of the resulting statistics to produce a national figure.
- Other registers, kept by cooperative federation(s), will by definition only cover member cooperatives, and it is not possible to know how many cooperatives are not covered. In addition, as a cooperative may be a member of more than one federation of cooperatives, it is not possible to aggregate the figures from the various federations to arrive at a global figure for the country.
- Cooperative surveys which draw their samples from such registers, while useful for understanding the world of cooperatives, will also have incomplete coverage.

In addition, and regardless of the comprehensiveness and quality of the national registers, national registers have two very important drawbacks to produce cooperative statistics. The first is that there may be enterprises registered as cooperatives which do not function as cooperatives. The other is that they cannot reliably estimate the number of persons who are members of cooperatives or the number of workers engaged in cooperatives because of double-counting. This is because a person may be a member of more than one cooperative and aggregating the number of members in each cooperative in the register will count more than once those that are members of more than one cooperative. Since it is not possible to know, from the registers themselves, the extent to which persons are members of multiple cooperatives in the country, this figure cannot be corrected. Similarly, a person may work in more than one cooperative and so there is a risk of double-counting the number of workers in cooperatives.

This paper aims to present other approaches to obtain information on cooperatives to produce statistics in a comparable way across countries at little additional cost, by taking advantage of existing surveys, such as household-based surveys and establishment-based surveys. The paper also discusses important issues concerning the statistical definition of cooperatives, the types of cooperatives for which statistics can be separately produced, the types of statistics that have been and that can be produced and the various methods of data collection. It is hoped that the issues raised in this paper will serve as a basis for discussion and further work in the future.

Why cooperatives are so special

Cooperatives are enterprises that produce goods and services like any other enterprise. They differ from other enterprises in that their owners, known as “members”, organise their activities to serve their needs first, before seeking to maximize profits or increase their share in the market. Cooperatives are interested above all in enhancing their members’ capacity to produce or to consume.

- Cooperatives that enhance their members’ capacity to produce goods or services are those that facilitate (a) the purchase of inputs at lower market prices, (b) the processing of their produce with common efforts, financing, tools, equipment and premises, and/or (c) the joint marketing and distribution of their outputs with greater negotiating power.
- Cooperatives that enhance their members’ capacity to consume are those that (a) provide goods or services at lower prices, that (b) allow access to credit or that guarantee a higher return on their savings and a lower interest rate on credit, and those that (c) facilitate the provision of any other type of services for their members.

Many cooperatives may produce goods or services for sale in the market, and may make significant profits, while others may simply provide a service to their members. Some cooperatives may distribute the profits from the sale of products among the members but most allocate any benefits to the development of the cooperative, limiting the compensation to members in proportion to their transactions with the cooperative. That is why in many countries, cooperatives are considered as non-profit organizations.

As a rule, a cooperative is owned by many members and each member has equal voting rights, independently of the capital they invest. This is known as the “one member one vote” principle.

Why they are important for the economy

The main strength of cooperatives is that they pool the resources of their members and as a consequence they allow their members to reduce costs, face the various challenges of the enterprise and increase their individual visibility and their capacity to negotiate prices and market their products: members, individually, would have greater difficulties running their enterprise. Cooperatives may play an important buffer role in times of crisis because of their associative nature, which makes the economic unit and its individual members stronger and more resilient actors in the creation of solid enterprises. In particular, cooperatives that

provide credit to their members are considered essential for small enterprise creation, development and sustainability (Birchal et.al. 2012). These enterprises are committed to helping members improve their financial health, which is particularly important for small enterprises, especially those in the informal sector, for whom credit unions provide a broader range of loan and savings products at a much cheaper cost to their members than do most microfinance institutions (Microfinance Gateway, 2009). Numerous studies have shown that cooperatives have a significant and stabilizing impact on a number of sectors in the economy, notably the agricultural and financial sector, and this valuable role is the subject of many articles in the media.²

The role of cooperatives for the survival of small entrepreneurs and in particular of informal sector units was recognised by the Fifteenth International Conference of Labour Statisticians which recommended the measurement of membership in cooperatives and associations as a useful variable to understand informal sector behaviour. This variable is included in the Resolution concerning statistics of employment in the informal sector, adopted in 1993 (c.f. paragraph 35 (1) (iii) in ILO, 1993a).

Why we need statistics on cooperatives

Statistics on cooperatives are essential to quantify the impact they have on their members and on the economy as a whole. They can provide evidence on whether members of cooperatives really have higher levels of production and consumption than other business owners, and how they cope in times of crisis. Statistics on cooperatives can also provide evidence of production levels of cooperatives throughout economic cycles. For self employed workers, particularly those in the informal sector can help understand the extent to which cooperatives have a role in entrepreneurship. For workers in general, it can throw light on the relationship between employment, consumption and other areas of work and life.

The types of statistics we need

For these purposes, statistics are needed on, as a minimum, the following four data items:

- The **number of cooperatives** by type of cooperative and other characteristics (such as their kind of economic activity, their size (in terms of number of workers engaged), their location, their date of creation;

² See for example a recent article on cooperative banks in http://www.economist.com/business-finance/displaystory.cfm?story_id=15331269; on cooperatives' resilience in times of crisis in http://www.lemonde.fr/economie/article/2010/02/01/la-crise-met-en-lumiere-les-vertus-des-cooperatives_1299523_3234.html and http://www.elpais.com/articulo/Comunidad/Valenciana/Anecoop/sube/ventas/llega/467/millones/elpepuespval/20100317elpval_13/Tes; on the impact of farmers' cooperatives on rural economies in http://www.cattlenetwork.com/Study-Finds-Billion-Dollar-Economic-Impact-Of-Texas-Ag-Cooperatives/2010-03-15/Article_Latest_News.aspx?oid=1005079&fid=CN-LATEST_NEWS; on their role to boost tourism in former war zones in http://www.huffingtonpost.com/josh-ruxin/tourism-in-the-developing_b_500774.html; on the leading role of civil society (including cooperatives) in times of financial crisis in <http://www.guardian.co.uk/society/joepublic/2010/mar/15/civil-society-carnegie-inquiry>.

- The **number of members** of these cooperatives, by their various characteristics (such as their sex, age, education level, employment status, status in employment, occupation, etc.) and by the type of cooperative (and kind of economic activity);
- The **number of workers engaged** in cooperatives, by type of cooperative (and kind of economic activity), by characteristics of workers (sex, age, status in employment, etc.);
- The **total value of production, expenditure and accumulation of assets** of cooperatives, by type of cooperative (and kind of economic activity); and **value added** in absolute numbers and as a percentage of total GDP.

With these statistics it is possible to monitor the extent to which entrepreneurs and employees are members of cooperatives that service production, and to study their relationship with employment creation, development and sustainability. It is also possible to have an idea of the extent to which persons, whether employed or not, are members of cooperatives for consumption purposes and quality of life. It is possible to have an idea about the importance of cooperatives and the extent to which they create employment and their contribution to national production. It is also possible to throw light on the coping mechanisms of small entrepreneurs who tend to receive less attention by national authorities and conventional financial institutions.

For them to be useful, statistics need to be complete, covering all cooperatives and persons involved. They also need to be adequately disaggregated: cooperatives by type and kind of economic activity; workers by demographic and work characteristics.

Types of cooperatives

Cooperatives can be set up for any number of purposes. Among the best known cooperatives are agricultural cooperatives, food cooperatives and financial cooperatives:

- *Agricultural of farmers' cooperatives* help their members (who are farmers individually responsible for their own production) to carry out their business. They do so by helping them buy consumer goods and farming input, to process the production that requires heavy machinery (e.g., for dairy products or coffee roasting), to manage farming credit and/or to distribute and market the produce. These cooperatives reduce the number of middlemen required allowing individual farmers better negotiating powers.
- *Financial cooperatives* provide credit to their members at reasonable rates and other financial services to its members, such as savings accounts, sharing draft accounts (the right to make cheques), credit cards, share term certificates (certificates of deposit), and even online banking. These institutions service members both as producers and consumers. Normally, only a member may deposit money with the credit union, or borrow money from it.

- *Food cooperatives* are grocery stores for members of the cooperative, and sometimes also for others, at advantageous prices. The first type of cooperative, founded after the Industrial Revolution, was a food cooperative³. Food cooperatives remain the most common consumer cooperative in all countries of the world.

There are many other types of cooperatives, of course, as by definition cooperatives can perform any economic activity. Other common cooperatives include, for example:

- *Shared services cooperatives* assist business in the various stages of production: in the purchasing of goods or services needed for production, in the processing of goods produced and/or in the marketing of these goods or services; they can even assist in the start up of the business and providing credit (c.f. credit unions below). Cooperatives in this group can also perform a combination, or part of, these activities. Agricultural cooperatives are one type of shared service cooperative.
- *E-commerce cooperatives* allow small business to market their products and sell them on the internet with higher visibility. They are also one type of shared services cooperatives.
- *Recycling cooperatives* help small and medium sized businesses gain access to cost-effective, convenient recycling. Members of this type of cooperatives are often small businesses that generate small amounts of similar recyclable materials (such as cardboard, plastics, office paper, bottles or cans) who individually have difficulty finding a recycler willing to serve them at a reasonable cost. These types of cooperatives are part of shared services cooperatives.
- *Producers' cooperatives* create and maintain sustainable jobs and generate wealth. All members of the cooperative work in it and, while the cooperatives may employ paid employees, the majority of workers in the cooperative are members. Bankrupt businesses which are taken and restarted by workers (i.e., employee ownership) enter into this category. Producers' cooperative can be found in all kinds of economic activity (including agriculture).
- *Labour cooperatives* increase the capacity of their members to negotiate for decent work by exerting a stronger pressure on the labour market than if they were not associated. Members of this type of cooperative sell their labour to private or public enterprises with favourable working conditions. Labour cooperatives can also specialise in providing fair conditions of employment to workers with special needs, including workers with disabilities, former detainees or drug addicts.
- *Housing cooperatives* are cooperatives whose members are both tenants and collective owners of the building or block of buildings where they live. They manage and maintain the building according to cooperative principles thus

³ In 1884, 28 artisans in the city of Rochdale, England, created a retail cooperative society in order to supply the workers with food and other goods, as well as with educational and social facilities. They are known as the Rochdale Pioneers and the principles upon which their cooperative was founded are known as the Rochdale principles.

reducing costs and allowing a lower “rent”. There are various forms of housing cooperatives. For example, in some cooperatives each member is the owner of a house (or apartment), in others no title deeds are granted; in some cooperatives the members build the houses they live in (these are also known as “building” cooperatives, and are truly “worker” or “production” cooperatives); and other housing cooperatives also provide financial services (mortgages) to facilitate payment.

- *Utility cooperatives* provide electricity or water supply, communication or transport services to their members. The members are also the users of these services, who then make sure that the service responds to their needs, and the costs are usually lower than if the service was provided by a private enterprise.
- *Mutual insurance cooperatives* provide different types of insurance, including health, car, and home insurance, to their members. Because they are run by and represent a large number of members, they have better bargaining power with insurance providers. This helps keep costs lower than having private insurance. When cooperatives enjoy tax breaks, insurance cooperatives can pass along these savings to their members in the form of reduced premiums and higher returns.

Given the large range of types of cooperatives, it is essential for statistical purposes to group them into homogenous groups in a well-structured classification that needs to be coherent with the existing framework for producing labour statistics. The distinction that is most useful identifies cooperatives that have as their main objective to **service the production of goods and services**, or workers, separately from cooperatives that have as their main objective to **service persons as consumers**. These two groups of cooperatives can be further disaggregated according to the either type of cooperative or the main economic activity carried out by the cooperative, forming a typology of cooperatives that can be used for statistical measurement:

- ***Cooperatives that service production*** are cooperatives where goods or services are produced. Some of these cooperatives take on the whole production process; these are known as “producers” or “worker” cooperatives. Other cooperatives service business by taking on only parts of the production process; these are known as “shared services” or “support services” cooperatives. Agricultural, financial, shared-services, e-commerce, recycling and producers’ cooperatives can be found in this group of cooperatives.
- ***Consumer cooperatives*** supply their members with goods and services for their personal use at the lowest cost. They may also provide services to non-members, but this is always a secondary objective of consumer cooperatives. Some consumer cooperatives may be franchised, i.e., they may use the trade name and logo of another business in return for a fee and the commitment to satisfy a minimum set of product requirements. Financial, food, housing, utility and mutual insurance cooperatives belong to this type of cooperative.

As with all classifications, not all cooperatives will fall neatly into one group. For example, financial cooperatives may service both producers and consumers. In addition, there may be cooperatives carrying more than one type of activity, that can belong to more than one

cooperative category, for example, a cooperative that provides housing and food services, or a housing cooperative that can also be classified as a worker cooperative

Defining cooperatives for statistical purposes

To produce national statistics on cooperatives a statistical definition is essential. This is a definition which is based on criteria that are known, pertinent and sufficient, meaning that they exist and can be observed, that they relate to the issue being defined and that identify the units unequivocally without the need of additional information. They also need to be measurable objectively, meaning that they have to be simple enough to be translated into questions that can be applied in a survey or administrative process, so that their identification will be independent of who is requesting or reporting the information. In the case of cooperatives, a statistical definition should lead to their unmistakable identification, irrespectively of the preconceived ideas about cooperatives that either the respondent or the interviewer may have. The classification of enterprises as cooperatives should be the same regardless of who is making the decision to classify them.

A statistical definition may differ from definitions developed for legal or administrative purposes, in that the latter type of definitions are not necessarily based on criteria that can be measured objectively through a survey instrument, either because they are not easy to apply or because the algorithm used to classify enterprises as cooperatives is based on changing, subjective or unclear steps.

The international Cooperative Alliance

Cooperatives have been defined for such purposes by the International Cooperative Alliance, which developed an international definition of cooperatives in order to build a legal framework necessary for promoting their development. The definition is the following:

“A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.”

The ILO Promotion of Cooperatives Recommendation No.193⁴, adopted by the International Labour Conference in 2002, embraced the same definition of cooperatives. It should be pointed out that this is the only international recommendation advanced by the International Labour Conference on the subject.

According to this definition, a cooperative is an enterprise that satisfies all three of the following criteria:

- it is jointly owned;

⁴ C.f., paragraph 2 of Recommendation 193 on the Promotion of Cooperatives Recommendation, 2002 at <http://www.ilo.org/ilolex/english/recdisp1.htm>

- it is democratically controlled; and
- it is owned by persons who are voluntarily associated.

The three criteria in the definition satisfy the requirements of being known and pertinent as well as measurable. However, they are not sufficient, as they can be satisfied by enterprises that are not cooperatives. For example, an enterprise which is set up by two or more partners, who determine the organization of production, sales or other work of the establishment on an equal footing, will qualify for inclusion as a cooperative under this definition, even if it is not necessarily a cooperative. This is partly because the underlying objective of seeking the interests of its members before seeking to maximize profits, so central to the cooperative ideals, is not included as a definition criterion. If it were, it would be clear that such an enterprise is not a cooperative. However, this very crucial characteristic of cooperatives is very difficult to apply objectively, even for administrative purposes, and so it cannot be a definition criterion. Another criterion which is not part of the definition is that of registration. This is because this definition is intended to be used as a basis to decide whether an enterprise is to be registered as a cooperative. In addition, there may be enterprises registered as cooperatives that do not function as such, and cooperatives that are not registered. Registration is therefore not necessarily a pertinent criterion to identify cooperatives.

In order to provide further clarification of the scope of cooperatives, the International Cooperative Alliance further developed seven “principles” upon which all cooperatives should aim to be based. They are not strict requirements but rather are to be used as guidance to determine whether an enterprise functions as a cooperative. The seven principles are:

- They are voluntary and anybody can become a member;
- They are controlled by their members, who have equal voting rights (“one member, one vote” principle);
- Their members contribute equitably to the capital of their cooperative and receive limited compensation on this capital; surpluses are allocated to development of the cooperative and to members in proportion to their transactions with the cooperative;
- They are autonomous and independent (from governments or other institutions);
- They provide education, training and information to members and others;
- They strengthen cooperation among cooperatives;
- They work for the sustainable development of their community⁵.

There is no cooperative that follows all these principles completely (Tchami, 2007), however. And perhaps with the exception of the “one member, one vote” principle, there is not one of these requirements that needs to be satisfied by any enterprise to be considered as a cooperative. This is because cooperatives take many different forms in different countries and even within the same country there is high heterogeneity between them. For example, in some countries, membership to a cooperative can be compulsory (e.g., farming

⁵ For more information visit the International Cooperative Alliance website at <http://www.ica.coop/coop/principles.html>.

cooperatives in centrally planned economies), and some cooperatives may reserve membership to only some persons (e.g., women); not all cooperatives are autonomous, nor are all in a position to provide training to their members. As a result, these principles do not constitute criteria that can be used in a statistical definition.

The System of National Accounts

The System of National Accounts (2008 SNA) defines cooperatives for statistical purposes as a type of corporation or as a type of non-profit institution, depending on whether the profits can be distributed among its members:⁶

“ ... Cooperatives are set up by producers for purposes of marketing their collective output. The profits of such cooperatives are distributed in accordance with their agreed rules and not necessarily in proportion to shares held, but effectively they operate like corporations.”⁷

And

“Cooperatives are organizations formed freely by individuals to pursue the economic interests of their members. The basic principles of cooperatives include:

- a. democratic control, that is, one person, one vote;
- b. shared identity, that is, members are both owners and customers; and
- c. orientation to provide services to members “at cost”.

As with other institutional units, if the articles of association of a cooperative prevent it from distributing its profit, then it will be treated as an NPI [non-profit institution]; if it can distribute its profit to its members, it is not an NPI (in either the SNA or the satellite account).”⁸

The SNA 2008 definition added two criteria to those of the International Cooperative Alliance, namely that cooperatives are enterprises whose members are both owners and customers, and that they provide services to members “at cost”. By adding this last criterion,

⁶ A corporation is an institutional unit (enterprise) that is principally engaged in the production of market goods and services; a non-profit institution is an institutional unit that is a legal or social entity created for the purpose of producing goods and services but whose status does not permit it to be a source of income, profit or other financial gain for the units that establish, control or finance them An institutional unit is a unit is that it is capable of owning goods and assets, incurring liabilities and engaging in economic activities and transactions with other units in its own right.

⁷ Paragraph 4.41 of United Nations et.al., 2009.

⁸ Paragraph 23.21 of United Nations et.al., 2009

the definition of cooperatives excludes the case of enterprises set up by partners for the purpose of maximizing benefits.

However, it does not solve the issue of other types of enterprises, not registered as cooperatives, which are organised in a similar way and satisfy all or most of its defining criteria. The SNA 2008 recognised this and provided definitions for some of these groups (namely for “mutual societies”, “self-help groups” and “social ventures”) in order to clarify the distinctions. According to the SNA 2008,

- Mutual societies “differ from cooperatives, however, in that they are mechanisms for sharing risk, either personal or property, through periodic contributions to a common fund. Normally the depositors in mutual societies formally control their operations.”
- Self-help groups differ from cooperatives and mutual societies ...”in that they are not principally engaged in commercial activities. As a general rule, self-help groups should be treated as membership organizations and included within the nonprofit sector.”
- “Social ventures are enterprises organized for the purpose of employing and training disadvantaged individuals (handicapped, long-term unemployed, etc.) who would otherwise not find employment. The enterprise is considered an NPI unless it generates and distributes its surplus to owners or stockholders.”⁹

The above distinctions may not be easy or relevant to make in practice because some cooperatives may exist for the same purposes as mutual funds, self-help groups or social ventures. For example, financial cooperatives exist to share the property or personal risk of their members, in the same way that mutual funds do. Recycling, housing and utility cooperatives are created to provide services to their members, not to produce or sell any good or service, just like self-help groups do. Finally, workers cooperatives, which provide training and negotiate work contracts on behalf of their members, are equivalent to social ventures. The only distinguishing feature is that the former are registered as cooperatives and the latter are not. Registration seems to be a central criterion for defining cooperatives from other organizations with similar objectives, and this is a purely administrative difference, far removed from the objective of understanding the role of these organizations in employment creation, development and sustainability.

Therefore, for the purpose of producing statistics on cooperatives, it may be useful to identify these two types of enterprises together as “cooperatives and similar enterprises”.

A proposed statistical definition of cooperatives

As was seen above, the SNA 2008 definition identifies cooperatives and other units that are organised in a similar way, based on their defining criteria. The two types of units can be distinguished on the basis of whether they are registered as a cooperative under a national

⁹ Paragraphs 23.22 to 23.25 of United Nations et.al., 2009.

authority in charge of cooperatives as stipulated by national laws on cooperatives. It is here proposed to add the criterion of registration to the SNA 2008 definition, only as an optional criterion, resulting in the following operational definition of a cooperative:

“Cooperatives are enterprises that:

- a. are formed freely by individuals to pursue the economic interests of their members;*
- b. are owned by two or more individuals or enterprises;*
- c. are controlled democratically, that is, follow the principle of “one person, one vote”;*
- d. have shared identity, that is, members are both owners and customers; and*
- e. provide services to members “at cost”.*

Enterprises which satisfy the above criteria and which, in addition, are registered as cooperatives under the relevant national authorities may be distinguished from those that are not.”

By considering registration only as an optional criterion of the definition, all informal cooperatives, which may be very important numerically in developing countries, are covered. In addition, all those formal associations and organizations that behave very similarly to cooperatives are also included.

Collecting data on cooperatives

Information about cooperatives can be obtained from all types of sources. Traditionally, statistics on cooperatives have been based on registers, but other approaches can also be used, such as conventional establishment surveys and household surveys. Each source has, of course, different strengths and limitations, and each can obtain data on a different set of characteristics. Therefore, they should be viewed as complementary.

Administrative registers can provide regular statistics about registered cooperatives. Cooperative surveys, that target cooperatives identified in these registers, are the only source that can provide in depth information about registered cooperatives, their environment, behaviour, challenges and opportunities, and they are a rich source of information for those who are interested in understanding cooperatives and in drawing policies that target them. Household-based surveys are the only source that can produce complete statistics on the number of members in (registered and unregistered) cooperatives or similar associations and the number of workers in cooperatives, with little additional cost. And establishment surveys may be able to produce more complete and reliable figures, at a reduced cost, on the number and production of enterprises which operate like a cooperative, regardless of whether they are registered as a cooperative or not.

Cooperative registers

There are two types of registers from which statistics may be produced. The first relates to registers kept by the government agency or agencies in charge of cooperatives, as generally cooperatives need to be registered in these agencies in order to enjoy the benefits that are granted to them, such as tax reductions and subsidies. The second type of register relates to those kept by cooperative federations, of which individual cooperatives may be a part. Depending on the extent of registration and the quality of these registers, it is possible to obtain statistics directly from these registers, or to use these registers to select a sample in order to carry out an in-depth cooperatives survey.

Statistics can be produced on the number of jobs, whether held by employees, members or contributing family workers, as well as on production, expenditures and assets. Statistics can also be produced on the number of cooperatives. The estimates need to be corrected for potential double-counting, if more than one register exists, for example, if more than one federation of cooperatives exists, or more than one government agency registering cooperatives. In these situations it is essential to harmonize the various registers in order to identify those cooperatives that are registered in more than one register.

This source of data cannot provide estimates on the number of persons who are members of cooperatives because it does not have information about persons who are members of more than one cooperative, and therefore cannot correct the overestimation that ensues from aggregating the number of members in all cooperatives. Similarly, it cannot produce estimates on the number of workers engaged in cooperatives, as a person may work in more than one cooperative and aggregating the number of jobs in all cooperatives may lead to double-counting.

Ideally, to produce statistics on cooperatives based on registers, a country needs to have a “cooperative law” that provides clear and complete guidelines for the creation and registration of cooperatives. Such a cooperative law would establish the characteristics that enterprises need to have in order to qualify as cooperatives, and put into effect mechanisms for cooperatives to register under a centralized authority or authorities assigned to monitor and assist the cooperatives in that country. At the same time, it should establish mechanisms to guarantee the elimination from the register of cooperatives that cease to operate as such. At least every year, the central agencies would receive a report from each cooperative on the proceedings of meetings and decisions, including information on for example: a) name of the cooperative, address and identification number; b) type of goods produced and/or services provided; c) number of members by sex and other relevant characteristics; d) the number of workers, including employees, by sex and other relevant characteristics; e) expenses, production and benefits. With such a system it would be possible not only to have a full list of all cooperatives but also information on their most important characteristics, i.e., the type of cooperative, the number of members, the value of production, expenditures, assets, etc. More in-depth information would be obtained through a survey to (a sample of) these cooperatives following a standard establishment-based survey approach, that is, a cooperative survey. However,

- not every country has a “cooperative law”;

- as national “cooperative laws” can vary widely in scope and nature¹⁰, not all “cooperative laws” clearly stipulate the requirements and benefits of cooperatives in the country, where a centralized authority(ies) is identified for registration.
- even if these situations hold, not all cooperatives register when they become active or unregister when they cease to operate;
- not all cooperatives send their annual reports to the agency concerned; and
- even among those cooperatives that send their annual reports, not all necessarily contain the minimum information required.

One can expect a lower coverage of cooperatives and quality of information in the lesser-developed countries. This means, for statistics, that:

- statistics obtained from reports to a central authority will be quite (or even extremely) incomplete in terms of coverage of cooperatives and range and quality of information obtained;
- statistics obtained from cooperative surveys (to be described in the next subsection), identified from a central register of cooperatives, will be slightly better, but will still not cover all cooperatives in the country.
- it may never be possible to obtain the exact number of cooperatives in a country.

The quality and coverage of these registers will depend on the level of statistical development in the country and in all cases will exclude informal cooperatives, which by definition are not registered, as well as formal enterprises that are similar to cooperatives but are not registered as such. In addition, they may cover only some industries, for example, cooperatives in agriculture; they may also cover only cooperatives belonging to a specific association or group of associations of cooperatives; and they may cover only large cooperatives.

Cooperative surveys

Cooperative surveys are establishment-based surveys that target only cooperatives, identified in the register of cooperatives kept by the authority or authorities in charge of cooperatives in the country, or by the federation of cooperatives. These surveys can produce statistics on a wide range of subjects, and as a minimum on:

- the value of production, expenditures, assets, inventories, by type of activity carried out by the cooperative (kind of economic activity),
- the number of jobs in the cooperative, distinguishing members from employees and other types of workers (if any), by sex.

¹⁰ The ILO website provides information about laws on cooperatives (c.f., http://www.ilo.org/dyn/natlex/natlex_browse.subject?p_lang=en&p_classification=11). For a compilation of cooperative laws in Latin America, see <http://www.aciamericas.coop/spip.php?article22>

However, when registers of cooperatives are incomplete, statistics based on this type of survey will also be incomplete. In addition, because persons can be members of more than one cooperative, the number of members of cooperatives will be overestimated. Because the information on the average number of cooperatives to which persons are associated is not known through this source, it cannot correct for this factor and cannot provide estimates on the number of persons who are members of cooperatives. The same can be said of the number of persons employed in cooperatives.

Establishment-based surveys of production or wages

As was reviewed above, the SNA 2008 considers cooperatives as one type of enterprise, which may be a corporation or a non-profit institution. This means that conventional establishment-based surveys (of production or of employment and wages) cover cooperatives within their scope. If cooperatives could be separately identified, then it would be possible to obtain from existing production surveys, for little to no additional cost, information about the number of cooperatives, their production, expenditures and assets, and the number of jobs and wages; from employment and wages surveys it would be possible to obtain more in-depth information about the jobs in these cooperatives, their wages and their hours of work¹¹.

It may be worthwhile therefore to explore the possibility of separately identifying cooperatives in existing establishment surveys. One possible approach to do so could be to create an additional category for cooperatives in the data item about the “legal status” or “legal form or organization” of the establishment¹², which is generally requested in all establishment survey questionnaires. If this response category is included, and it is well captured, then cooperatives can be separately identified. Currently, a few countries use this approach. However, even these countries do not seem to produce statistics separately for cooperatives. It is not clear whether this is because the number of cooperatives identified is very low and therefore the sample error too large to disseminate the estimates, or because there is a lack of demand for this information or because the quality of the response is considered too poor.

This last point may be very valid if self-completion is the data collection method, and if adequate instructions are not provided for the manager or owner of the establishment to fill in the answer. For example, the respondent, if not properly instructed, may not understand that an enterprise which is both a cooperative and a corporation should be classified as a cooperative, and that it is not necessary for a cooperative to be registered to be a cooperative. Alternatively, a more thorough inquiry implies obtaining information about the organisation of the enterprise, that includes questions on ownership, voting arrangements

¹¹ For the same reason as the previous two sources, these surveys are not be able to provide information about the number of members of cooperatives nor about whether the enterprise is itself a member of a cooperative.

¹² Legal status or form of organization refers to whether the enterprise is a government unit, a corporation, a partnership, an unincorporated enterprise, a non-profit institution, etc.

(i.e., one member one vote), type of services provided, etc.

An important limitation of establishment-based surveys for producing relevant national statistics is their difficulty to cover small and unregistered establishments. For cooperative statistics this may be important if the establishment survey in the country only covers registered establishments above a certain size and if there are many unregistered or small cooperatives. When these situations are expected to be important, area-based sampling should be used to cover those establishments excluded from the standard establishment survey, as recommended in chapter 5 of ILO, 2013. Such surveys are already carried out in a number of countries, including Colombia and Japan, to ensure full coverage of their national economy.

Household based surveys

Persons may be employed in cooperatives, and any person, whether employed, unemployed or out of the labour force, may be a member of one or more cooperatives. These two types of data (i.e., persons employed in cooperatives and cooperative membership) may be obtained from household-based surveys if the relevant questions are included in the questionnaire. As was said above, this is the only source that can produce complete and reliable information about these two items, and therefore the only source that can show the relationship between the labour status of persons and their membership by type of cooperatives and by demographic characteristics of persons, and of identifying persons who are members of more than one cooperative and thus throwing light on whether this is a common phenomenon.

Currently, however, only some household-based surveys that measure living and working conditions include questions about membership in associations, including cooperatives. For example, the Income and Living conditions survey of the European Union measures the participation in associations, such as political, religious, recreational, charitable and other organisations¹³, and the World Bank Living Standard Surveys request information on membership in agricultural cooperatives. However, no household-based survey that includes an employment component, not even those that aim to measure employment in the informal sector, requests information on membership to cooperatives or other associations.

A point should be made at this stage concerning the category of “members of producers’ cooperatives” which is part of the International Classification of Status in Employment (ICSE-93), adopted by the International Conference of Labour Statisticians in 1993¹⁴. This group of workers is defined as:

¹³ This survey intended to measure participation in activities related to associations, not necessarily membership in associations. Different countries implemented this question differently.

¹⁴ The ICSE-93 classifies jobs held by persons with respect to the type of explicit or implicit contract of employment of the person with other persons or organizations.

“ ... workers who hold a "self-employment" job [...] in a cooperative producing goods and services, in which each member takes part on an equal footing with other members in determining the organization of production, sales and/or other work of the establishment, the investments and the distribution of the proceeds of the establishment amongst their members. (It should be noted that 'employees' [...] of producers' cooperatives are not to be classified to this group.)”¹⁵

Users commonly understand that this category refers to workers who are members of cooperatives. In reality it only includes those workers who work in a producers' cooperative of which they are members, for example, farmers in “collective farms” that still exists in a number of countries. This category excludes a large number of workers who are members of cooperatives. Most notably, it excludes the self-employed workers who own a farm or another economic unit and who are members of a cooperative that provides services to their economic units, such as marketing or processing of the goods produced in their farm: such workers appear as employers or own account workers in ICSE-93. Most of these workers do not work in the cooperative at all and even when they do, it will be as a secondary activity, which is not reflected in national statistics¹⁶. Even if statistics on secondary activities were produced, it would be very difficult to obtain the participation of these workers in cooperatives, unless a specific question was addressed to them, as such workers will most likely not consider that such work was done for the cooperative, but for their own economic unit.

It should be noted that this category of workers is also different from employees in cooperatives: such workers will appear as employees in ICSE-93.

As a result, in national statistics of employment by status in employment, the number of “members of producers' cooperatives” is very low. Because the figure is so low, very few countries report statistics on them. Of 147 countries that reported data on employment by status in employment to the ILO from 2001 to 2010, only 33 reported data on members of producers' cooperatives, and their share in total employment is often less than 1 per cent of all employment (cf. Table 1 below).

Unfortunately, these statistics have been misinterpreted as meaning that cooperatives must be irrelevant in all countries of the world! True figures of cooperative membership are clearly needed to reverse this belief.

¹⁵ Paragraph 11(4) of ICSE-93, c.f., http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087562.pdf

¹⁶ National statistics on employment by status in employment refer to the status in employment of the main job held by persons in employment.

Table 1. Members of producers' cooperatives as a percentage of all persons employed (latest year available)

	Source	Year	Total employment	Members of producers' cooperatives	Share in employment
			('000)	('000)	(%)
Armenia	Official estimates	2001	1020.8	1.7	0.2
Azerbaijan	Labour force survey	2006	3985.9	10.5	0.3
Bolivia	Labour force survey	2007	4672.4	10.9	0.2
Cuba	Labour force survey	2010	4984.5	256.7	5.1
Czech Republic	Labour force survey	2010	4885.2	4.9	0.1
El Salvador	Labour force survey	2007	2419.2	0.3	0.0
Ethiopia	Labour force survey	2010	4798.5	65.4	1.4
France	Labour force survey	2010	25692.5	3.8	0.0
Georgia	Labour force survey	2002	393.4	2.8	0.7
Guinea	Official estimates	2010	5005.5	29.5	0.6
Hungary	Labour force survey	2010	3781.2	3.0	0.1
Israel	Labour force survey	2010	2938.2	18.7	0.6
Italy	Labour force survey	2010	22872.3	39.9	0.2
Kazakhstan	Labour force survey	2010	8114.2	27.5	0.3
Kyrgyzstan	Labour force survey	2010	2243.7	8.0	0.4
Liberia	Labour force survey	2010	1091.0	11.0	1.0
Lithuania	Labour force survey	2001	1273.8	0.6	0.0
Maldives	Population Census	2006	110.2	5.8	5.3
Mauritius	Labour force survey	2008	519.0	0.3	0.1
Mongolia	Labour force survey	2010	1033.7	0.8	0.1
Morocco	Labour force survey	2010	10404.7	199.1	1.9
Nicaragua	Labour force survey	2010	2591.7	3.2	0.1
Panama	Labour force survey	2010	1455.6	0.3	0.0
Portugal	Population Census	2001	4650.9	3.2	0.1
Romania	Labour force survey	2008	9369.1	3.4	0.0
Russian Federation	Labour force survey	2010	69803.6	50.0	0.1
Saudi Arabia	Labour force survey	2009	8148.0	4.9	0.1
Slovakia	Labour force survey	2010	2317.5	5.6	0.2
Spain	Labour force survey	2010	18456.5	32.3	0.2
Tajikistan	Labour force survey	2009	1856.5	4.4	0.2
Thailand	Labour force survey	2010	38037.3	51.4	0.1
Uruguay	Labour force survey	2010	1562.3	2.8	0.2
Venezuela	Labour force survey	2010	12071.4	198.9	1.6

Source: ILOSTAT website (www.ilo.org)

They can be produced by adding a small set of questions to an existing household-based survey that includes employment as one of its topics. Depending on the need to produce accurate estimates of cooperative membership, questions can be designed to target each of the defining criteria. Alternatively, a general prompt may be used that introduces the concept of cooperatives and then relies on the understanding of respondents to that prompt. This approach would use a smaller set of questions, that would obtain information on the number of cooperatives to which a person is a member, and on the type of cooperatives. While clearly more work is necessary to arrive at a suitable set of questions on cooperative membership, the following set of questions may be considered as a starting point:

“I will now ask you a few questions regarding your membership to cooperatives. These are organisations that are formed freely by two or more individuals, that provide services to members “at cost” and where each member has the right to vote on an equal footing (“one member one vote” principle). They may also be known as mutual funds, self-help groups, etc. ”

- *“Are you a member of a cooperative or similar organisation?” Yes/No*
(If Yes: “Do you vote?” Yes/No)
- *“How many such cooperatives or associations are you a member of ?” _____*
- *“Can you please tell me, what types of cooperative or similar organization is it? (more than one category is possible)”*
 - *Credit unions or financial cooperative*
 - *Agricultural or farmers’ cooperative*
 - *Food cooperative*
 - *Housing cooperative*
 - *Other cooperatives, please specify _____*

This information can be collected not only of persons in employment, but of all persons. This would allow to estimate the number of persons who are members of cooperatives, by type of cooperative, and by labour force status (i.e., employed, unemployed, out of the labour force) and status in employment.

It may also be useful to identify persons who work in cooperatives, either as employees, contributing family workers or as members, by expanding the answer categories to the standard question on “institutional sector” or “type of workplace”, which classifies the enterprise by whether it is a private corporation, a public corporation, the general government, a non-profit institution, etc., with an additional answer category called “cooperative”, as follows:

“Is the enterprise where you work ?

- *A government enterprise*
- *A private corporation*

- *A family/unincorporated enterprise*
- *A cooperative*
- *A non-profit organization*
- *A government agency”*

Table 2 below provides a summary of the different sources that can be used to obtain statistics on cooperatives, presenting the type of statistics that each can produce and the limitations that each has.

Table 2. Sources for statistics on cooperatives by type of data item and main drawbacks

Type of source	The source is able to provide information on ...					But...
	Number of cooperatives	Number of members	Number of workers	Number of jobs	Value added	
Cooperative registers	yes	no	no	yes	yes	Will exclude unregistered cooperatives; may include cooperatives that are no longer active Will not be able to produce a national estimate if the various registers are not harmonized, due to the risk of double-counting cooperatives, members and workers Quality of data on production and number of jobs may be weak
Cooperative surveys	yes	no	no	yes	yes	Will exclude unregistered cooperatives
Establishment-based surveys	yes	no	no	yes	yes	Will exclude unregistered and small cooperatives unless area-based sampling is used May not be able to produce separate figures for cooperatives if they are not important numerically or if the sample is small
Household-based surveys	no	yes	yes	yes	no	

Conclusion

This paper outlined some of the issues that may be taken into account for producing statistics on cooperatives. It presented the main measurement methodologies that have been used in countries to produce statistics on cooperatives and argues in favour of using alternative methodologies, based on existing establishment and household surveys, to produce more complete and reliable information on the subject, with the potential of greater international comparability. Household surveys in particular, would allow the estimation of the number of members of cooperatives, and of the number of workers employed in cooperatives, a figure that no other source of data collection can produce.

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