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CHAPTER 1

OF THE HANDBOOK ON RURAL HOUSEHOLD, LIVELIHOOD AND WELL-BEING: STATISTICS ON RURAL DEVELOPMENT AND AGRICULTURE HOUSEHOLD INCOME.

Paper submitted by the Task Force
on Statistics for Rural Development and Agriculture Household Income*

* The Task Force is comprised of experts from the following national agencies, universities and international organizations: Statistics Canada, Hungarian Central Statistical Office, National Statistical Institute of Italy (ISTAT), Swedish Board of Agriculture, Dept. for Environment, Food and Rural Affairs (United Kingdom), Economic Research Service (United States), Imperial College (United Kingdom), University of Verona (Italy), University of Pescara (Italy), Food and Agriculture Organization of United Nations (FAO), World Bank, Statistical Office of the European Communities (Eurostat), Organization for Economic Co-operation and Development (OECD) and the United Nations Economic Commission for Europe (UNECE).

I INTRODUCTION AND BACKGROUND

I.1 Background to the handbook

I.1.1 Why is the handbook being produced?

Over the past couple of decades rural development has become a priority area for governments and international organizations. The background to setting the priorities may differ between countries.

Among the developed countries (in the present text often referred to as the OECD countries) the focus is on how to ensure that people in such areas have good living conditions and opportunities and that rural areas are not de-populated. It also recognized that “*living rural areas*” play an important role for the environment at large and for the recreation and well-being of the urban population. Funding for rural development has so far been channelled mainly through support for agriculture, much of which is aimed at ensuring an equitable income level for the agricultural population. Notwithstanding the fact that the size of the agricultural population is generally small and dwindling¹, this support is of quite remarkable proportions. Almost half of the EU budget, for instance, is still devoted to agriculture, although broader support for rural development is about to increase. Because of this there is a policy-need to monitor the income situation of agricultural households both from the perspective of monitoring sectoral performance as well as its impact on rural development. Some analysts argue, however, that public funding for agriculture is not always a blessing for rural development because it might, when production and productivity targets are set, encourages the adoption of labour saving technology, which has exacerbated rural development. Instead, they argue that a proactive rural policy should focus on ensuring equal access and equal quality of education and health and on improving other infrastructures.

The policies described above are of course to a varying degree also valid for the developing countries. In addition to these generic agricultural policy elements, many developing countries have a special focus on rural poverty and it is the fact that most of the rural populations are either directly or indirectly dependent on agriculture. In the UN Secretary General’s report to the 2003 meeting of the Economic and Social Council (ECOSOC) of the United Nations it was stated that:

“Three quarters of the world’s poor live in rural areas of developing countries and depend mainly on agriculture and related activities for their livelihood. In 2025, when the majority of the world population is expected to be urban, 60 per cent of poverty will still be rural. Thus, the millennium development goals of halving the proportion of people living on less than a dollar a day and the

¹ In the OECD area, national shares of agricultural employment range from over 20% in Turkey, Greece and Mexico to less than 5% in most other countries. However, it should be noted that in addition to farm employment there are many other activities up-stream and down-stream that depend on primary agricultural production (OECD, 1994a), e.g. food processing industries.

proportion of those who suffer from hunger by 2015 cannot be achieved unless rural poverty is urgently reduced” (UN, 2003).

Having recognized the high priority given to rural development policies, it is of course obvious that there is strong demand on statistics and indicators for monitoring rural development targets and, in particular, the incomes of rural and agriculture households, benchmarked against urban households and/or all households. Policy is likely to be more effective if the design and operation of programmes are based on reliable information about the extent of the problems the policy is attempting to tackle and how they are changing over time.

A strong contrast exists between the statistical provision for, on the one hand, agriculture as an economic activity and, on the other, rural policy. In most countries there is a strong and long-established system of **agricultural statistics**, with government agricultural departments often acting as the supplier as well as the main user. The basic data have come from a range of surveys and (increasingly) administrative records. The focus of agricultural statistics has been quite narrow, concentrating on the production of agricultural commodities (volumes, prices, values etc.), the use of resources in this process (variable inputs, labour, land etc.) and the residual rewards. In many countries the statistical systems have been slow to recognise that household-firms, that comprise the numerically dominant form of institutional unit in farming, are increasingly engaged in other economic activities, which they combine with agriculture in various ways (Hill, 2000).

In contrast, until very recently **rural statistics** have been weaker and highly fragmented (Hill, 2003). Often there is no single department having the responsibility, so that commentators find themselves gathering data from a wide range of sources - official statistics as well as many different non-official or private sources - many of which are not on a compatible basis.² It is clear that statistics for rural areas must go **beyond agriculture** and cover many economic, social and environmental parameters for rural residents, businesses and resources.

The present handbook illustrates some key steps in setting up a **system of rural statistics**. While *ad hoc* research exercises that collect data and publish results relevant to specific policy aims have value, particularly when there is an information vacuum, these are likely to involve many different sets of definitions and approaches, preventing easy integration and synthesis. Methodology designed for a single purpose is unlikely to be well suited for others. In contrast, what was looked for here was the basis of a system for rural statistics in which there was a degree of commonality of methodology that permitted combination of data sources. Such a system was intended to be capable of providing answers to a range of policy questions by the flexible use of accumulated data. Such a system needed to be built up over time.

In assembling such a system of rural statistics five main issues need to be addressed. These are:

² Official statistics are a specialised form of quantitative information, their distinguishing characteristics being that they are generated by the public sector, involve data collection, and are typically repeated at intervals. Principles of quality in public statistics can be summarised as relevance, objectivity, transparency, accuracy, timeliness, comparability over time and space, and accessibility (Hill, 2003).

- ◆ **Coverage of rural statistics**, in the sense of determining what aspects of rural areas should be described, what are the appropriate indicators for each, and consequently what data are needed.
- ◆ **Finding what data exist, who are the owners, and how they are accessed**. Comparing this list with what is needed gives an idea of where gaps in data exist, which in turn can lead to proposals for filling them.
- ◆ **Choice of variables, time periods and basic geographic unit** for data aggregation, and the classification of these units into rural and non-rural.
- ◆ **Data acquisition and management**: reviewing organisational issues that need to be addressed when considering the establishment of a system of rural statistics by bringing together data sets from across government.
- ◆ **Structure for the management** of the statistical collection, tabulation and publication of the statistics.

In the specific subject of producing statistics on the income situation of agricultural households a further set of issues have to be tackled. These include:

- ◆ **Defining the household** in terms of the membership and the criteria for belonging to it, which determines the individuals whose incomes are aggregated when creating income indicators at the household level.
- ◆ **Classification of households** into those that are agricultural and those that belong to other socio-professional groups.
- ◆ **Defining income** for which measurement is to take place (total income, disposable income, money income etc.) and, where statistics on wealth are to be produced, the appropriate concept to be used.

International organizations have already done a considerable amount of work on rural statistics. In a series of reports starting as early as in the middle of the 1980s, the **OECD** has developed a system for international rural development statistics (see list of references). Not all of this, however, is applicable to developing countries. These, have received attention by the **United Nations, FAO, the World Bank**, among others. In Europe, considerable work has been carried out by **Eurostat** which, as a result of the new rural development regulation, is now accelerating and being lifted above the agriculture dimension. In the more specialised area of statistics on the income situation of agricultural households **Eurostat** has constructed a methodology that has been applied at sector level and has tackled many of the issues that would also need attention in any microeconomic approach. The **OECD** has reviewed what information exists on farm household income and has highlighted the differences between approaches and definitions that are found among its member countries. In particular the **Canberra Group** of experts on household income statistics (comprising *inter alia* representatives of the **Luxembourg Income Study (LIS)**, Eurostat, the **International Labour Office (ILO)**, OECD and the **World Bank**), have developed and published recommendations that, while not dealing explicitly with agricultural households, are likely to form the methodological

foundation of future international work, and this Handbook has taken due regard of these proposals (Canberra Group, 2001)..

As for **national organizations** - national statistical offices and other agencies responsible for monitoring rural development - there are **large differences** between countries concerning definition of rural areas, choice and definition of indicators as well as how far they have arrived in setting up a system of rural development statistics. In this context the issue of **scope** is becoming increasingly important. Most countries think of their statistical program in a national sense. The emergence of the global economy and cross-border environmental concerns means that statisticians need to consider the international situation. In simple terms, data need to be additive and comparable across countries, which means that the basic metadata must be the same. A similar disparity of approach is experienced at national level with regards to statistics on agricultural household incomes, though within the European Union the framework of a harmonised methodology now exists.

The **objective** of the present handbook is to **consolidate** work done by international organizations, **highlight** where differences occur and as far possible to **fill gaps**. A special focus is also made on the **quality** of rural statistics and indicators, including those relating to the income of agricultural households. A salient feature of rural areas and their associated problems is that they can differ very significantly not only between countries but also within the same country. It is therefore not advisable to prepare a handbook which is prescriptive but rather one that through drawing on international and national experiences can **highlight good practices**. At a practical level, a secondary type of objective is also to make an **inventory** of national rural development statistics, including the particular focus on income measures. The overarching aim is to enable the **benchmarking** of ways of collecting data and constructing indicators so that they can be used assist policy discussion and design.

I.1.2 Who is the handbook intended for?

International handbooks in the field of economic statistics have traditionally been intended to provide guidance about concepts, definitions, classifications, coverage, valuation, the recording of data, aggregation procedures, formulae, etc. They have been intended mainly to **assist compilers of the relevant statistics** in individual countries. This handbook has the same principal objective.

The handbook is also intended for the benefit of a **wide range of users of rural development statistics and of household income measures**, such as government and academic economists and policy analysts, regional and local agencies and their experts and participants in multilateral trade negotiations on agriculture. Rural statistics and income measures are key information for policy purposes. They attract a great deal of attention from the media, governments and the public at large in most countries. This handbook is therefore also intended to promote greater understanding of the properties of these statistics, what they are attempting to measure and the underlying economic and statistical theory.

The resulting handbook is unavoidably voluminous. As the various kinds of readers may have different interests and priorities, it is not possible to devise a

sequence of chapters that suits all. Many readers may be interested in only a selection of chapters. Indeed, international handbooks are not necessarily intended to be read from cover to cover in that order, being more of the nature of reference material.

I.1.3 The role of statistics

It is a well-known that statistics should be policy driven. In a first step statistics have to provide all necessary elements allowing policy makers to analyse the situation easily and correctly in order to identify policy needs. In a second step, once policies have been formulated, statistics have the function of monitoring the effects of specific policies. This allows policy makers in turn to evaluate the policies and adapt them if necessary.

In the ideal case – for step two - statisticians should be able to provide as quickly as possible the necessary elements to policy makers to confirm their general policies or to warn them that certain policy measures do not show the desired effect(s). This calls for quickly reacting indicators.

The quality of indicators

Statistical indicators are the tool to formulate policies and to monitor changes/development/progress of policies. Indicators should fulfil the following criteria:

- ◆ They should be relevant
- ◆ They should be simple and easily understandable
- ◆ They should be problem oriented
- ◆ They should be clearly defined
- ◆ They should be based on the same statistical units
- ◆ They should result in conclusions which easily could reach policy makers
- ◆ In the ideal case, they should react rapidly to changing situations

However, the selection of indicators will always be a compromise because:

- ◆ They often depend on available data, because financial resources are limited in almost all countries. Therefore it is necessary to exploit all kind of available data and sources in the first place.
- ◆ Priority is often given to indicators that are capable of assisting in the routine monitoring of policies. For example, policies addressing rural development for a whole country have to describe problems/targets common to all rural areas of that country. Indicators addressing specific problems for particular rural areas are less likely to be developed.

There is a broad spectrum of issues to be assessed within the social, economic and environmental fields of rural development. It could be argued that any indicator at national level could be developed for rural areas.

Data sources to be used

The basic information for indicators for rural development and agricultural household income could originate from a variety of sources, each having own advantages and disadvantages. **Censuses** give very useful information because the sample size is generally large (perhaps a total coverage). But normally censuses are performed only periodically and are separated by large time intervals, which make it difficult to construct appropriate time series. Nevertheless, they are very helpful to establish a base line. **Sample surveys** are normally carried out with a higher frequency but the sample size makes it difficult to make conclusions for small geographical units because the statistical significance is not good enough (e.g. the EU Labour Force Survey mainly gives statistically relevant results for NUTS2 areas).³ The use of **administrative data** for the purposes of generating rural development indicators is not that common yet but it seems that their importance is growing, and tax records are already used in some countries to generate income data for farm operators. If the relevant registers are well kept and also well linked this is a very powerful tool. **Geo-referencing of data**, more a mechanism for linking sources than one in its own right, can be very helpful in the calculation of certain indicators. However, at present expense means that this can only be used for robust information like locations of schools, hospital etc. .

The geographical unit / reporting unit

In order to combine information from different sources the statistical reporting unit has to be defined. This has to be the same for all information used, be it a census, a survey or administrative data. Examples of a consistent unit are the individual (using a personal identity number) that enables various datasets to be combined in the income statistics registers of several Scandinavian countries, and the GIS locator that can bring physical and environmental data together (as practiced in the UK). For comparability purposes, it is necessary to be able to define and delimit rural areas so that, for example, the employment rates or incomes of rural households can be compared with those of urban dwellers. An internationally accepted concept or rurality is the OECD approach, based on the NUTS system using the communes as the basic geographical building block. The ways of defining and applying definitions of rural are described in a later chapter.

³ NUTS = Nomenclature of Statistical Territorial Units.

I.2 What is rural development and why is it a policy area?

The starting point for statistics intended to inform decision-makers and other stakeholders must be the nature of the underlying policies. Some attention therefore has to be given at the outset to what constitutes rural development and the problems that it is attempting to address.

Rural development used to be a sectoral issue with agriculture as the main focus. In many developing countries agriculture is still the corner stone of the rural economy. In the OECD countries, on the other hand, it has more and more become a **territorial concept**, dealing with spatial differences in problems and perspectives, opportunities and options (OECD, 1995). It is also a **multi-sectoral concept**, concerned with a wide range of demographic, economic, social and environmental issues. It stresses the importance of cross-sectoral horizontal integration of activities and policies. Finally, rural development is a **dynamic concept**, concerned with medium to long term changes and adjustments in technology and ecology, economy and society. Rural indicator should therefore provide information on a variety of economic and social factors.

A large part of rural development is concerned with a process of ensuring that the population distribution doesn't get too skewed towards urban areas. To prevent this, analyses of **demographic pressures, employment, job creation and economic well-being** are of course issues at the forefront of rural development. Rural development policies are important elements within the overall package of long-term national development strategies that can preserve employment and create new jobs and thus prevent de-population of whole areas. However, there has also been a recent shift in thinking from the idea of development as a process mainly or entirely linked with **economic growth** to one based on increases in the **quality of life**. In fact, some rural areas contribute to the quality of life of society as a whole because they contain important public or quasi-public goods such as a clean environment, attractive landscapes and cultural heritage (OECD, 2001).

Common problems of rural areas in OECD countries

It is obvious that the problems rural areas face in OECD member states are as diverse as the rural areas themselves. However, there are certain commonalities arising from the intrinsic characteristics of rural areas which should be addressed at any level, be it national or international. These can be a guide to the statistics needed.

The traditional economic base of rural areas was the primary sector, especially agriculture. Thanks to a lot of progress in farming systems and mechanisation only a small percentage of the workforce of most OECD countries is now occupied in this sector. In almost all rural areas, businesses in the secondary and / or tertiary sector can be found. Often they are related directly or indirectly to the agricultural activities in the area (agricultural machinery repair and maintenance, supply for farming e.g. seeds, fertilisers, establishments processing agricultural products of the area). A more fundamental diversification of the economic base would mean establishing businesses less dependent on local agricultural activities.

Taking into account that economies of scale are rather difficult to build up, small enterprises seem to be an option to establish an economy independent from agriculture. This requires a workforce equipped with suitable human capital (skills, education), for which farming may not be a suitable preparation.

Rural areas have historically provided the work force needed to build urban environments and to operate urban factories. This migration of young people out of rural areas has continued in the recent past encouraged by policies concentrating on investment and employment at a limited number of urban centres. Depopulation of rural areas has been further accentuated by efficiency improvements in farming in combination with the lack of alternative off-farm employment in some rural areas. On the other hand, repopulation of rural areas is also observed over the last decades. Decentralisation of certain types of economic activities towards the periphery, the attractiveness of the countryside coupled with better transport facilities (private car ownership, public transport infrastructure) for commuting to urban centres as well as retirement migration are reasons contributing to the repopulation of rural areas. However, the combination of these developments may mean that a structural imbalance develops in the demographic profile, with a predominance of elderly people and a relative deficit of younger ones. A “viable” age structure is a precondition for developing an area; the area could lose population simply because the birth rate cannot match with the death rate (natural population loss). There may be implications for the need for and provision of health, education and other services and amount of human and social capital available to the local community..

Characteristic often associated with rural areas are high poverty rates and social exclusion. These depend on a number of factors (financial poverty, social transfers, life expectancy, long-term unemployment etc.). Accessibility can be assessed as an absolute and as a relative concept. Here accessibility is interpreted in broad terms. It may refer to the transportation infrastructure allowing residents to commute, people to visit rural areas for recreation and businesses to have easy access. It refers also to the accessibility of services and social infrastructure of a modern society.

Thus, despite important economic and demographic challenges, **rural areas are not necessarily synonymous with decline**. There are rural areas with remarkable economic success, ranging from dynamic clusters of Small and Medium Enterprises (SMEs) to niches marketing in the agro-food industry and rural tourism. The OECD (2001) gives the following reasons for this:

- ◆ Urban manufacturing and service industries started to relocate to suburban and rural green-field sites.
- ◆ Sustained endogenous development has also been observed, including dynamic SME clusters and industrial districts, development of diversified agro-industries, and rural tourism.
- ◆ Residential location decisions place increasing emphasis on quality of life factors, including proximity to open countryside and natural amenities.
- ◆ Increased demand on the part of urban dwellers for amenities in rural areas.

It is worth noting that the declining employment opportunities provided by primary industries (largely agriculture) in OECD countries is also seen in many of the upper-middle-income developing countries (e.g. the so-called NICs and the OPEC members)(OECD, 2001).⁴

Developing countries

Even though many developing economies are becoming more and more urbanized, according to the UN Population Division the rural population still comprised 59.5 per cent of the total population in less developed regions in 2000 (with an estimate of 56.8 per cent for 2005) and in the least developed economies the share was even higher at 74.8 per cent in 2000 and 72.3 per cent in 2005. Despite ongoing structural transformations in many of these economies, around 75 per cent of the poor still live in rural areas (IFAD, 2001) and the agricultural sector employs 40 per cent of developing countries' workers and contributes over 20 per cent of their GDP (ILO, 2004a).

In terms of employment, in 65 out of the 162 developing economies for which employment data are available by sector, the agriculture is still the main employer.⁵ This is especially the case in Sub-Saharan Africa, where on average more than six out of ten people work in this sector. The share is also high in Asia where around five out of ten people work in agriculture. In contrast, in the Middle East and North Africa the figure is only two out of ten and in Latin America and the Caribbean only between one and two out of ten people. In the Middle East and North Africa, this is mainly the result of the low share of agricultural employment in the oil-producing economies. In Latin America and the Caribbean, the figure masks a wide range of differently structured economies, but for many economies in the region agriculture still plays an important role in terms of employment. (For those economies with a share in agricultural employment larger than 40 per cent) (ILO, 2004a).

The diversity in development experiences seen for OECD countries can also be found amongst the developing countries. African countries have shown that they can produce at a global level and compete on world markets. Mauritius, for instance, has successfully been exporting shrimps; Kenyan flowers are sold on London markets while Senegalese vegetables are offered in the Parisian grocery stores. Fifteen countries, including Uganda, Ethiopia, and Burkina Faso, have been growing on average more than 5% per year since the mid-1990s. Previous growth spurs were sporadic and didn't trickle down to all aspects of society. Although a third of Africa has been growing at 5%, this growth is just enough to keep the countries afloat and

⁴ Organization of the Petroleum Exporting Countries (OPEC); The NICs is a group of fast developing countries known as 'Newly Industrialised Countries';

The World Bank classification is:

- 1) high-income economies – per capita GNP \$9,656 or more
- 2) upper-middle income economies – per capita GNP \$3,126 - \$9,655
- 3) lower-middle income economies – per capita GNP \$786 - \$3,125
- 4) low-income economies – per capita GNP \$785 or less.

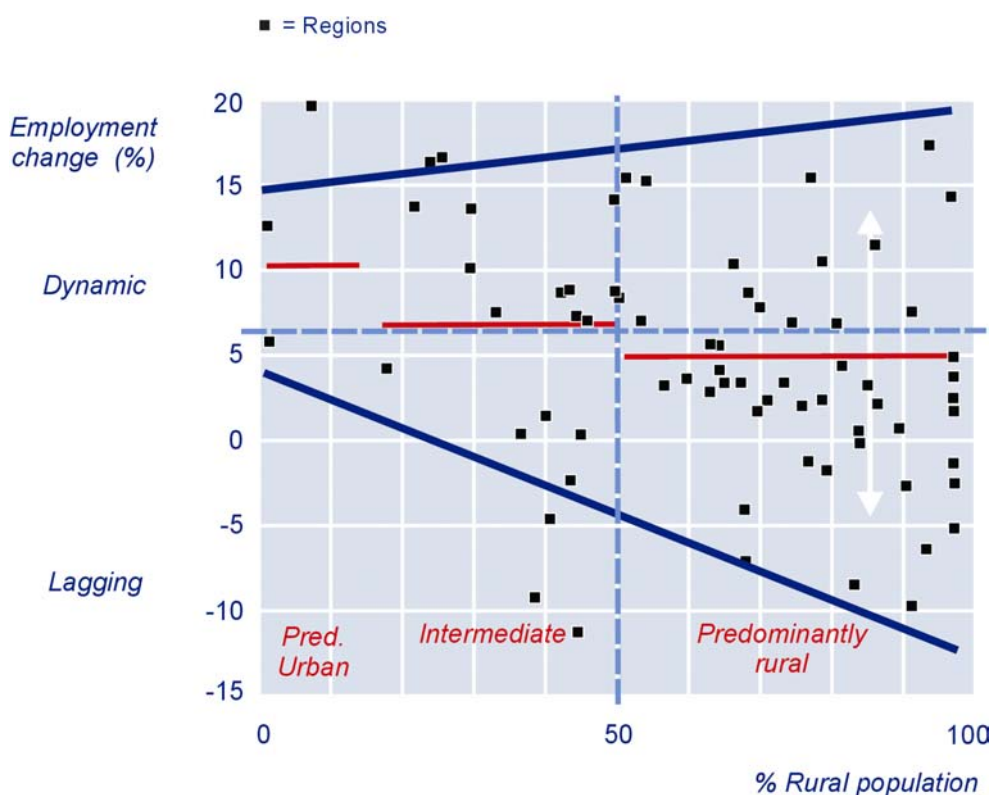
⁵ There is a correlation between the availability of data and GDP per capita; the poorer an economy is, the less likely it is to report data. Given this fact, it is also likely that the share of agriculture-dominated economies would be much higher if data were available for all developing economies.

the number of poor people from rising. The growth should increase to some 7% to help lift the region out of poverty (World Bank, 2005).

Box I.1 Variation between regions in the OECD

The OECD (1994b) has found that urban areas generally showed higher employment growth than intermediate regions, which in turn had higher average growth than predominantly rural areas. There are, however, predominately rural regions, which grew faster and urban regions that grew slower than the national average. Having said this, it should be noted that the spread in growth was much higher in predominately rural regions than in the other two types of regions.

Figure I.1
Illustration of the spread in the performance of employment change for different types of regions



Source: OECD (1994) Creating Rural Indicators for Shaping Territorial Policy.

I.3 Rural development - policy objectives

Policies are normally targeted to solve identified problems or, if a proactive approach is chosen, to avoid certain problems developing. Looking at the “typical” problems of rural areas in the past decades rural development policies normally aim at making rural places economically, socially, culturally and environmentally healthy. A successful rural development policy should allow rural areas to:

- ◆ Be able to at least maintain their population and within it a viable population age structure.
- ◆ Diversify their economic base beyond the primary sector, maintaining or even increasing employment rates to absorb the loss of jobs in the primary sector.
- ◆ Be able to keep poverty rates and unemployment rates on a level not worse than those in urban areas. They should also aim at offering job opportunities for women and young people.⁶
- ◆ Be as easily accessible as possible and provide a minimum set of services. This means they should be well connected with neighbouring areas, which is the basis to tourism/recreation related industries. To keep a minimum of attractiveness and equity for their own population easy access to education, health care etc. has to be provided as well.
- ◆ Keep property ownership as wide spread as possible. The rate of locally financed and initiated new small enterprise start-ups should be relatively high.
- ◆ Keep the physical and mental health of the rural population as good as it is elsewhere.
- ◆ Make their key players work together towards common goals with an agreed value basis. The goals and values are set using a bottom-up approach. The local government is active with reasonable fiscal and decision-making autonomy.
- ◆ Be responsible for their own development and not having it done by others.

⁶ The term “youth” apply to persons between 15 and 24 years old (ILO, 2004b). The ILO(2004b) report focuses on policy making, the overview of the position of youth in the labour market as well as the discussion of the causes of the problems and disadvantages they face. For more extensive analysis of these issues, see O’Higgins, N. (2001) and Blanchflower (1999).

<http://www.ilo.org/public/english/employment/strat/yen/download/guidelines.pdf>

For more information about the central features of the Secretary-General’s “Youth Employment Network,” created following the Millennium Summit, and which is a partnership between the UN, the World Bank and the ILO, see <http://www.ilo.org/public/english/employment/strat/yen/>.

Finally, see article 2 of the ILO Convention No.182 on “Worst Forms of Child Labour Convention:” “For the purposes of this Convention, the term “child” shall apply to all persons under the age of 18.”

Source: http://home.iprolink.ch/fitbb/TRADE_UNION_RIGHTS/ILO_Convention_182.html

The first part of this handbook (Chapters II to VII) is devoted to issues in the generation of statistics appropriate for use in the context of rural development. The second part deals with the more specific measurement of the incomes and wealth of agricultural households. Some explanation of this is needed at this stage.

I.4 Why a particular focus on agriculture household income and wealth?

Agricultural households demand special attention to information on rural areas for at least the following reasons:

1. Agriculture is an activity that accounts for a substantial share of the land use in many countries, so that their role in rural development is likely to carry major implications for environmental and landscape characteristics. However, in countries such as Canada, Finland, Russian Federation and Sweden it is forestry, which is the major land user. Agriculture in Canada, for instance, only accounts for 7% of land use.
2. The contribution of agriculture to economic activity is concentrated in rural areas. Indeed, the presence of agriculture (together with forestry) is a key element in the characteristic of rurality.⁷
3. Historically agriculture has been a major activity of the people that live in rural areas. While the proportion of rural residents working primarily in agriculture has declined to low levels in many of the richer industrialised countries (often less than 10 per cent), the share is still substantial in others. Similarly, the share of total income accruing to rural residents from agriculture is typically small in industrialised countries but may still be important in others.
4. Agricultural households are a major source of the factors of production whose reallocation is an integral part of rural development. These households are often a source of labour to assist the growth of other industries, so the factors that lead to ex-migration of labour from agriculture, such as comparatively lower incomes, need monitoring. As major agents of change, particular attention has to be given to the present characteristics of agricultural households, including the composition of their income which will reflect the extent to which they are already diversified into non-agricultural activities, both those found on the farm and off the farm, and the way that these characteristics are changing.
5. Of special significance is the level of income that farm households receive in relation to that of other socio-professional groups. This is because the relative earnings will be a major factor in determining the rate at which households leave agriculture and which resources are transferred to other operators. In many developing countries but also European countries such as Poland there is

⁷ This is not necessarily the case in all countries. In Canada, for instance, 20% of all “census” farm operators live within commuting zone of larger urban centres.

a significant portion of agriculture population that can be characterized as hidden unemployment in the sense that the contribution is rather marginally to the agriculture output. In the absence of other employment activities they probably rightly prefer to stay at their own or at the farm of someone else. In Poland, for instance, the number of persons working on private farms and considered redundant amounted to about 420,000 persons, which is equivalent to almost 21% of the rural populations employed in agriculture (Wikowski, 2004). Hidden unemployment primarily exists in small farms with less than 5 hectares (about 60% of all farms in Poland) and among persons aged 45 and above.

6. Policy for rural development has often grown out of policy for agriculture. Spending on agriculture is still a dominant strand in policy intervention in rural areas. Even recent initiatives to promote rural development (such as the EU's Rural Development Regulation 1257/1999) focus on farm households as the principle agent of stimulating economic, social and environmental development.
7. In many countries a main aim of agricultural policy is to support the income of farmers and their families. When the objective is to provide a "fair standards of living for the agricultural community", as is the case with the EU's Common Agricultural Policy, the comparability of the incomes of farm households with those of households belonging to other socio-professional groups is seen as important (Hill, 2000). Where the aim is the alleviation of poverty, again the overall income of the household is an important indicator.
8. The wealth of agricultural households is important because changes in the real value of that wealth is a form of personal income (especially when viewed retrospectively over a lifetime), and is one that is typically less heavily taxed. In agriculture the ratio between wealth and current income is often large, implying that capital gains and losses may be disproportionately significant for farmers. The level of wealth is also a source of economic status, the potential ability to consume putting owners into a position different from people without wealth.
9. Support to agriculture provided by government interventions is typically reflected in the value of land, the factor of production least elastic in supply. Consequently, the beneficiaries may be the owners of land rather than the operators of the farms. Where the farmer is also the land owner, this may not really matter (though there may be implications for the amounts of tax paid). However, where land is owned separately, the main beneficiary may be the landlord even though policy is in place mainly to benefit the farm operator.

I.5 Agriculture households, their incomes and policy objectives

Agricultural households are important within policies affecting rural areas in two ways. First, they often form a direct target group of agricultural and rural development policies. In particular, concern with the living standards of the

agricultural community (which comprises agricultural households), or the incomes that give rise to those living standards, is often a central objective (see review in Hill, 2000) and plays a major role in the discussion of the reform of policy (see for instance the Special Report No.14/003 by the European Court of Auditors, 2003). Examples can be found in which clear objectives are set for agricultural policy in terms of the relative income of farmers compared with other groups in society, of less detailed expressions that imply comparisons or at least the avoidance of poverty among farm families, and where the aim is to create the conditions in which satisfactory incomes can be generated by competitive producers and unacceptable instability prevented. Recently agricultural policy has widened in many countries to include the diversification of income sources available to farmers, either on the farm or elsewhere. Many farm households are already diversified in this way, but there is seen to be room to develop such income further by vocational training, grants for investment, the provision of advice and so on. The purpose is so that, when combined with what can be earned from agriculture, the overall income position of farm families can be enhanced.

This centrality of the “income objective” of agricultural policy alone would justify the development of statistics on the household incomes of farmers and their households to service that policy.

Second, agricultural households play a major part in achieving the other aims of agricultural and rural development policies because they control production and the use of resources. Their response to policy signals is what determines the overall outcome of the intervention. Understanding the economic situation of agricultural households is now recognised as a key element in designing and applying policy for agriculture and rural areas (Offutt 2002; OECD, 2002). Though, as will become evident, statistics for agricultural households are not fully developed, sufficient evidence exists to demonstrate the great policy relevance of this information.

The structure of the agricultural industry of most countries at all levels of economic development is dominated, in terms of numbers, by firms owned and operated by households (household-firms)⁸. These combine the economic functions of production and consumption and are, at the same time, social units. In many industrialised countries their numbers have been in long-term decline as the treadmill of technology lowers the real prices of agricultural commodities and makes the smaller farms unviable, in the sense that they are no longer capable of being the sole source of livelihood for their operator’s household (Eurostat, 2002). In some countries that have experienced histories of socialised or collectivised agriculture the role played by other forms of institutional unit (taking a variety of legal forms but characteristically large-scale in operation) is greater, but even there production by households often accounts for significant amounts of national output of certain commodities that can be produced on household plots.

⁸ According to the EU Survey of the Structure of Agricultural Holdings (Farm Structure Survey) “Natural persons” accounted for the operation of 96% of EUR15 holdings in 2000. Only one country was below 90% - the France (83%). Eurostat (various years)

However, a simplistic view of agricultural household-firms is both incorrect and harmful to the design of successful policy. They are highly diverse in many different dimensions. Attention is often focussed on the variety in size of their agricultural activities (land holdings, outputs, input uses etc.), farming types, performances, degrees of indebtedness etc. - all factors that will be reflected in the income levels from farming. But many households are also engaged in economic activities that are non-agricultural, either as waged employees (dependent activity) or as self-employed entrepreneurs (independent activity). While some non-agricultural activity may be sited on the farm, mostly this is off-farm. Households (and their members) also often receive income from property (rents from land and interest and dividends from financial assets), social transfers (pension etc.) and other sources, though again the incidences of these income forms are far from uniform.

As a consequence, there is wide variation in the dependency of household-firms on agricultural activity, from 100% (with no non-agricultural income) to where farming represents only a minor income source, and in some cases a negative one (a loss). For farm-dependent households the policies directed at agriculture are of obvious importance, but for those toward the other end of the dependency spectrum agricultural policy may have little relevance in terms of their incomes or activities; they will be more influenced by what is happening to non-agricultural parts of the economy, and regional and rural development and policies.

The wide variety of circumstances among farm households implies that a satisfactory consideration of their household income must go beyond the sector level, or group average, to include distributional information that reflects their diverse nature (Hill, 2000). It also implies that the analysis of the performance of policy need not always cover all the households that engage, to some extent, in the production of agricultural commodities. For some purposes it may be adequate to concentrate only on those for whom agriculture is the main activity or source of income, or those whose farms are above given size thresholds. Such issues are important when considering the definitions of an agricultural household and when drawing up statistics.

Some idea of the (then) perceived need for agricultural household statistics among European policy-makers is given by the aims that were cited when Eurostat set up its project to improve the situation in the mid-1980s by creating sector-level statistics. The objectives were to:

1. Monitor the year-to-year changes in the total income of agricultural households at aggregate level in Member States.
2. Monitor the changing composition of income, especially income from the agricultural holding, from other gainful activities, from property and from welfare transfers.
3. Enable comparisons to be made in the development of total incomes of agricultural households per unit (household, household member, consumer unit) with those of other socio-professional groups.
4. Enable comparisons to be made between the absolute incomes of farmers and other socio-professional groups, on a per unit basis. (Methodology from the IAHS Manual of Methodology repeated as part of Eurostat (2002)).

However, sector-level statistics only provide part of the picture. To look at the distribution of income or the incidence of low income among farm households compared to other households, at the change in income over time, and at the impact of agricultural, social and taxation policies, microeconomic data are necessary. These receive the attention of the second part of this handbook.

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