Surveys for Farm Structure, Agricultural Accounts and Total Income of Agricultural Households

Berkeley Hill

Wye College, University of London, United Kingdom

ABSTRACT: The official European Union (EU) statistics on the economic situation of agriculture are outlined. They are based on three types of unit — the production unit, the household and the commodity. Economic statistics relating to agricultural production fall into two types, aggregate ones (based in national accounts) and survey-based results. Both use well-established EU-wide harmonised methodologies which are applied by national statistical authorities, though the two levels are not fully integrated. In response to an emerging information need which reflects the multi-functional nature of farm families, Eurostat has recently supplemented these by an account covering the complete income picture of the agricultural households sector in each Member State, with comparable figures for other socio-professional groups. Developing the methodology involved facing questions fundamental to policy, such as what constitutes an agricultural household, and results have been generated that challenge basic assumptions behind policy. However, this still leaves a large information gap on the distributional aspects of incomes in agriculture that only an improvement in the provision of microeconomic statistics can fill. Methodological developments in surveys are hampered by institutional and political factors, so progress is slow.

1. Introduction

This paper is concerned with the economic statistics on agriculture used to service the needs of the European Union's (EU's) Common Agricultural Policy (CAP) as it is reformed to meet the changing conditions (economic, technical, political and environmental) of the new millennium. The author's perspective is that of an analyst operating outside the official institutions concerned with the provision and use of statistics, and the balance of material presented here is consciously weighted towards recent methodological developments (in which there has been a personal involvement) and what appear to be future needs.

In addition to the obvious importance to the agricultural policy decision-makers in the EU institutions and the fifteen Member States, these economic statistics are of interest to other EU users (inside and outside the public sector, including farmer organisations) and to other countries, particularly to applicants for membership of the EU. In the past, the OECD has adopted EU conventions when assembling economic statistics on agriculture for the whole of its membership. Thus, the way in which the EU's statistical system is adapting, or should be encouraged to adapt, to requirements in the 21st century is of importance both inside and outside the EU.

EU-level economic statistics on agriculture share many of the normal problems of design in any statistical system. They must be accurate, pertinent and timely; they have to be capable of serving the needs of a wide range of potential users (though a dominant one will be the European Commission) with different priorities; statistical needs are not often well expressed by users or articulated at a time which allows planned provision, making consultation between and among providers and users an important component in the information system and suggesting that there may be a need for an independent design function; the dynamic environment of policy renders statistical systems subject to conceptual obsolescence and requires constant updating; and resource scarcity normally constrains the provision of statistics so that there are inevitable compromises. Many attempts to overcome such problems in agricultural statistics can be found [for example AAEA 1972, Loyns et al. 1983, Hill 1996a, Eurostat 1997a, OECD 1997].

However, EU-level statistics differ from those of a nation state in a number of ways which must be borne in mind when considering how the statistical system responds to evolving needs for information.

- The statistics provided are, in broad terms, the result of consultation at high level between Member States and the Statistical Office of the European Communities (Eurostat). The balance between different fields is not necessarily that which would be appropriate at the national level, the EU giving greater attention to topics on which there are common policies (such as agriculture).
- The harmonised methodologies on which they are based have to be agreed by national statistical authorities in Member States in cooperation with (principally) Eurostat, a process demanding of scarce resources of expertise, with national representatives meeting together in Working Parties.
- At present the supply of data for EU agricultural statistics is, in practice, almost entirely dependent on the national statistical systems of Member States, in that the EU does not itself operate any significant data-generating facility (though this may change, for example with the increasing use of remote sensing). There is sometimes a tension between national and EU-level requirements in terms of methodology, timing and priority.
- Only parts of the data system are underwritten by EU legislation — that is, where Member States are formally required to provide data as a condition of membership. In some important areas (notably the aggregate economic accounts for agricultural production), progress has been by "gentleman's agreement" between the national statistical authorities and Eurostat, a system that in practice has worked well (and quite rapidly) because the number of individuals concerned has been quite small, contact has been personal, and flexibility has been maintained to deal with problems as they arose. While a legal base does imply greater commitment to the national provision of resources for EU statistics, it can make change difficult to bring about, as new, often heavy, legislative procedures become involved.
- The EU institutions (principally Eurostat) play a role that coordinates, promotes harmonised methodologies, monitors quality and collates the activities of individual Member States, thereby enabling statistics to be generated that allow information to be compared across countries and to be aggregated into an EU picture. However, in view of the considerable flexibility given to Member States in terms of the sources and methods used to generate harmonised data, the EU statistical system can be seen as an example of the principle of "subsidiarity" working in practice.
- A high degree of harmonisation and complete country coverage are important factors in shaping the attitudes of users to statistics.

Progress in the EU statistical system is thus not only concerned with determining the evolving information needs of users in a timely way and going through the processes of the data system (conceptualisation, operationalisation, measurement, analysis) in a timely fashion. In addition, a highly important contributor to successful development is the management of the interactions between institutions (national statistical offices, national agricultural departments, Eurostat and other EU institutions, particularly the Commission's Directorate-General for Agriculture, DG VI).

2. Statistical Requirements and Forms of Economic Statistics

The dominant fundamental policy issue that requires the provision of economic statistics on EU agriculture is concerned with the incomes of producers. The CAP's objective of "ensuring a fair

standard of living for the agricultural community" appears in the 1957 Treaty of Rome and its continued relevance has been carried over into many later policy statements, including the major policy review started by the European Commission in 1997 under the *Agenda 2000* banner. Quite what the "agricultural community" consists of has never been made clear. While there is no longer any automatic and direct link between changes in income and subsequent support levels, it is clear to many commentators [summarised in Hill 1996b] from both Commission policy statements and actions that support to incomes has exerted a powerful influence on the direction EU agricultural policy and that political concern over the incomes of farmers has imposed a brake on policy reform; for example the proposals for support-price reductions made in 1992 were only found acceptable when accompanied by direct "compensatory payments".

In practice, when assessing the nature and extent of the income problem in agriculture, attention has focused almost entirely on the income derived from the production of agricultural commodities. Economic statistics on production are, of course, needed in order to assess agriculture's contribution to the national economy and to track changes in the industry that have policy importance, such as food supply, response to price signals and productivity change. However, commentators have long argued that, because of the support aims of the agricultural policy, statistics should also be available that take a broader view of the economic activity of farmers and their households [reviewed in Hill 1996b, and subsequently including Ahearn 1996, Blandford 1996, Davey 1996, OECD 1995]. Such information for the EU is necessary if policy action to support the "fair standard of living of the agricultural community" is to be adequately assessed and the performance of the policy satisfactorily monitored. The strength of this argument has increased with the greater emphasis given to the encouragement of diversification of farmers and their families into other forms of economic activity as part of the 1992 Reforms of the CAP, and given further impetus by the lines of policy development outlined in the European Commission's *Agenda 2000* that lay emphasis on achieving an internationally competitive agriculture coupled with promoting a multi-functional farming sector by encouraging diversification on and off the farm (including rewards for providing environmental services) and stimulating rural development. At least part of the poor performance of the EU's CAP, in terms of its transfer efficiency, can be blamed on the lack of reliable information on the overall income situation of agricultural households and the tendency for decision-makers to interpret statistics on the income from agricultural production as if they showed the incomes of agricultural households.

Currently, EU economic statistics are based on three types of agricultural unit — the producing unit, the household and the commodity. The first two are viewed at two levels — that of the whole industry (branch) or sector and that of the individual unit. The third is concerned primarily with prices of agricultural commodities, though this is being expanded to aspects such as costs of production and value added per unit. As will become clear, levels of statistical development are uneven among these approaches.

3. Economic Statistics Related to Agricultural Production

At both aggregate and microeconomic levels, there are EU statistical systems in place for measuring agricultural productive activity in economic terms. Both are mainly conventional in terms of what is found at the national level in many OECD countries.

3.1 Aggregate Economic Accounts for Agriculture (EAA), together with the Income Indicators Developed from them and the Models Based on them

Based on the system of national accounts, these are aggregate current accounts for agricultural productive activity in EU Member States and the EU as a whole. Published within the EU since 1964, from 1969 onwards the original six Member States adopted common definitions and procedures. The methodology of the EU's EAA is not identical to the treatment of agriculture within national accounts, since small modifications are made to represent what appears to be a more relevant approach when looking at this single industry (such as the inclusion of the production of Christmas trees and the exclusion of some services more closely associated with amenity park-keeping than with agricultural production). However, these deviations are relatively minor and can be fully reconciled by a "bridge" account between the EAA and national accounts.

A particular feature of the EU system is the suite of indicators of residual income based on the EAA. These are frequently cited at the highest level of official publications. Of these, Indicator 1 (Net Value Added per Annual Work Unit (NVA/AWU) expressed in deflated form and as an index) is the one that is the longest-established and considered the most reliable. However, Indicator 3 (Net income from agricultural activity of family labour input after payments for interest, rent and hired labour — perhaps better termed "entrepreneurial income" — per unit of family labour, again deflated and in index form) probably corresponds more closely to the idea of "profit" remaining to the farm family members as their reward for using their resources in agricultural production. Indicators for all fifteen current Member States are available calculated back to 1973, the exceptions being Austria, Finland, and Sweden (1979) and Portugal (1980).

The economic data for these accounts contributed by Member States are not, in the main, derived from surveys of farm businesses. Rather, estimates are formed from information on physical data (such as on areas of crops in agricultural censuses and on yields found by surveys) and multiplied by information on prices (as in market reports). This methodology permits the use of an updating system for the income indices, and their calculation need not wait for the completion of the economic accounts for agriculture. First estimates are available before the end of the calendar year to which they relate, and revised estimates are published in about March of the following year. Subsequently, revisions are made as the EAA become available. These published indices are the subject of much political and news attention. It is clear that they meet one of the crucial quality characteristics of statistics — timeliness.

In looking forward into the next century, a critical issue concerning the EAA is the way in which it is being adapted in the light of the revised methodology of national accounts agreed as the United Nations' *System of National Accounts 1993* [UN 1993], interpreted in a European context as the *European System of Accounts (ESA) 1995* [Eurostat 1996]. Eurostat, in cooperation with the statistical authorities of Member States, has recently published a revised manual of methodology for the EAA (known as EAA 97), including a revised suite of income indicators [Eurostat 1997b]. This is expected to be applied in 1999, initially for 1990 to 1997 but then running back to 1973, and countries who are candidates for EU membership will need to conform to this new target methodology. Fundamental changes are being made to some of the underlying concepts, such as the adoption of the Local Kind of Activity Unit (LKAU) to replace the Unit of Homogeneous Production, and the way in which output is measured (to include non-separable secondary activities and output which is used as intermediate consumption by other LKAUs). The EAA 97 has also adopted some conventions, such as the exclusion of units below certain size thresholds that only produce for own-consumption (e.g. kitchen gardens) and the exclusion of depreciation on breeding livestock, that may be reasonable in the EU context but

which may not be suitable for other countries. Consequently, the OECD is currently considering whether some small modifications (probably in the form of additional information to be provided under certain circumstances) to what appears in the EAA 97 methodology should be incorporated in the revised basis on which it is to collect harmonised aggregate production accounts from OECD Member countries.

The income indicators developed as part of the EAA 97 have highlighted the conceptual problem of expressing residual income per unit of family labour (more correctly termed non-hired labour). This income indicator was developed for an agricultural structure that consisted almost entirely of family farms; though farms that were incorporated businesses posed a problem, they were not numerous. The expansion of the EU in 1990 to include the former GDR, where the dominant farm structure meant that there could be little or no non-hired labour, prompted consideration of this issue, but it will be of much greater significance when the next round of EU enlargement takes place. Consequently, attention may shift back to income measures based on Net Value Added per Annual Work Unit, which is not close conceptually to the income that policy-makers are believed to have in mind when making decisions, or to aggregate entrepreneurial income (in absolute or index forms).

Allied to these aggregate accounts and related indicators is the "Sectoral Production and Income Model of Agriculture" (SPEL). This divides the agricultural sector into production activities based on those of the EAA with the aim *inter alia* of making forecasts and policy simulations of the effects of alternative agricultural policies in the short and medium terms. Agricultural Labour input statistics have been important in their role as establishing the number of units of labour input (expressed as Annual Work Units of full-time labour equivalents) over which income is divided in the construction of income indicators from the EAA. Instances regularly appear in which a fall in aggregate income is turned into a rise in income per AWU by a more rapid drop in the volume of labour. Given that attention is paid in the policy context to income indicators expressed per Annual Work Unit, it is important that labour input figures are harmonised and reliable. Eurostat has recently published an agreed methodology by which this is to be done [Eurostat 1997c]. Agricultural Price statistics on agricultural commodities and items of intermediate consumption have uses in a policy context that are independent of the EAA, but it is clear that the revised EAA 97 has implications for the way in which indices are constructed. It should also be noted that the Commission's agricultural Directorate-General has its own sources of data on market prices to help in the management of commodity markets.

3.2 Farm-level Statistics — the Farm Accountancy Data Network (FADN/RICA)

Microeconomic statistics on agricultural production come from the FADN, an annual survey of some 62,000 farm businesses throughout the EU, set up in 1965 "with the specific objective of obtaining data enabling income changes in the various classes of agricultural holding to be properly monitored." [Commission 1982] Despite methodological limitations, mentioned below, it represents a rich and flexible resource capable of being reanalysed as the problems facing agriculture evolve. In the past, FADN has been regarded more as a tool to inform policy-making rather than as part of publicly available statistics. Reports containing standard results are not published on a regular annual basis (unlike established Eurostat statistics).

The emphasis is on data used to build the single-year current account, leading to two main measures of income (Farm Net Value Added and, after the deduction of payments for rent, interest and hired labour, Family Farm Income), but the Farm Return also collects physical and structural data and capital account items. Though now considered as conceptually part of the EU statistical system, the responsibility for methodological development, coordination between Member States and the processing

and publicising of results lies not with Eurostat based in Luxembourg but with the agricultural Directorate-General of the European Commission (DG VI) based in Brussels. This division of responsibility, both institutionally and geographically, is more a matter of history than one of deliberate design. It has hampered the integration of methodologies and the facility with which these microeconomic statistics can be used to complement the equivalent aggregate statistics coming from Eurostat. Nevertheless, it is clear that many of the current policy issues require distributional information, and FADN has an important role to play here (breakdowns by size and type of farm, zone, indebtedness, land use intensity etc.)

The unit of survey is the agricultural holding. Weighting coefficients (by economic size, type and region) used to reach national estimates per farm are derived from the (normally biennial) EU Farm Structure Survey (FSS) which has as its universe all agricultural holdings of at least 1 hectare (or other size thresholds if they meet certain output-related criteria, which vary between Member States). The FSS, which for many countries is integrated with national surveys or censuses and provides an essential framework for many other statistics, collects a wide range of physical information on characteristics of the farm and its operators, but no financial data. Proposals to move in this direction are opposed by some Member States. In selecting the FADN sample, a minimum size threshold is applied, which varies between Member States to reflect the structure of farming there. The outcome is that, while the great majority of agricultural activity falls within the FADN field of observation (82% in 1993), only 50% of holdings (and therefore of heads of holdings) that appeared in the Farm Structure Survey are covered. This constrains analyses that focus on the operators and makes interpretation of EU-level FADN results for the smallest sizes of farm difficult. The method of data collection for supply to FADN varies widely between countries, depending on what existed when the system was set up. In many, the EU requirements were grafted on to pre-existing data systems [Commission 1989].

As with all surveys, there is an inevitable problem with timeliness of FADN results, exacerbated when EU-level results are dependent on the speed of the slowest country, though a forecasting model has eased this difficulty for internal analysis. Some other characteristics of FADN are worth noting. The data gathered, and hence the statistics from this source, only relate to the agricultural activity of the farm business (though somewhat less strictly than the current EAA approach), even though other incomes (from non-agricultural self-employment, wages, property income and social transfers, etc.) may be significant in an explanation of the way in which the agricultural business is carried out (such as land use, and investment behaviour), especially in countries dominated by small farms and pluriactivity and also in those where production takes place mainly within large integrated units. Attempts to extend FADN coverage to non-farming income have met strong opposition from some Member States [Robson 1996]. Furthermore the survey, which is not strictly random, does not use an identical sample, even in adjacent years, so some of the observed income movements could simply be the outcome of sample changes. Attempts at longitudinal analysis have faced technical difficulties, so there has been relatively little exploration of the issues of income instability or the distinction between the core of cases where low incomes are a persistent problem and those where low incomes are transitory.

4. Statistics on the Economic Situation of the Agricultural Households Sector

Until recently, no systematic and EU-wide economic statistics based on agricultural households were available. To meet a perceived need, in 1985 Eurostat initiated aggregate statistics on the overall income situation of the agricultural households sector in Member States. The development of their methodology threw up some awkward questions on the nature of the target group for agricultural support and required statisticians working in agriculture to investigate data sources and processes that

were outside their normal experience. Results have been published in 1992, 1995 and from 1996 annually, though Member States vary widely in the run of years for which estimates are available and the detail with which they are given.

It should be emphasised that, currently within Eurostat and among European Commission users, a far greater importance is attached to statistics based on the production account of agriculture (the EAA) than to these less fully-developed household sector statistics. Nevertheless, what emerges from them, even in their present form, offers challenges to the perception of the income problem in agriculture, even questioning whether there is an income problem at all for farm households as a group. As will be made evident, microeconomic survey-based results for farm households lag far behind their aggregate equivalents, with no system of EU-level provision at present.

4.1 Income of the Agricultural Household Sector (IAHS) Statistics (formerly the Total Income of Agricultural Households Statistics) — Methodology

Sector-level statistics on the income situation of agricultural households in the EU are, like the aggregate production accounts, based in the system of national accounts, being in essence a disaggregation of the Distribution of Income Account for the households sector of national accounts into sub-accounts for a range of socio-professional groups, of which agricultural households form one. A feature of this account is that it covers all the income of households (from farming, from other entrepreneurial activities, from dependent activity, from property, welfare transfers, etc.) and, by deducting taxation and social contributions, allows the calculation of net disposable income, a concept that is often taken as a major indicator for standard of living.

For the purpose of measuring net disposable income, the most appropriate institutional unit is the household. The logic for preferring the household rather than the individual is that members of households, and especially married couples and their dependent children, usually pool their incomes and spend on behalf of the members jointly. At present in the IAHS methodology, households are defined as in national Family Budget Surveys. These typically include all members who live under the same roof and share meals, though in the future this may be modified to a "core" group comprising a couple and dependents. In order that households of different sizes and compositions can be brought together for income analysis purposes, it is convenient to express incomes per household member and per consumer unit, the latter using national coefficients (in the form of an equivalence scale) to express children and additional adults in terms of consumer units.

The most significant part of the IAHS methodology, and one which can have a substantial effect on the results, is the system used for classifying households as agricultural or belonging to some other socio-professional group. Many alternative bases of classification have been proposed [reviewed in Hill 1990], and national accounts methodologies contain preferences based on the income structure of the entire household [UN 1993, Eurostat 1996]. Unfortunately, no official EU statement exists about the composition of "the agricultural community" which could be used as guidance to defining an agricultural household. Reflecting largely practical considerations, and bearing in mind that comparisons between the income situation of agricultural households and that of other groups is desired, for the purpose of classification in IAHS statistics, households are allocated to socio-professional groups on the basis of the main source of income of the reference person (typically the head of household or the largest contributor to the household budget). This system allows for a complete and consistent allocation of households to occupation groups. Thus, an agricultural household is one in which the main source of income of the reference person is from independent activity in agriculture. Some Member States that cannot at present use an income criterion substitute the main

declared occupation of the reference person. This definition of an agricultural household is sometimes labeled "narrow" since it excludes those households which operate a holding but where farming is not the main income of the reference person (or the person's main occupation). Of course, when measuring household income, the incomes of all members are summed, but these additional incomes are not considered at the classification stage.

Though the main focus of attention of IAHS statistics remains this "narrow" definition, there is some demand from policymakers for additional income estimates, made occasionally, using a "broad" approach, covering all households that operate an agricultural holding. In the IAHS methodology, under the "broad" definition, an agricultural household is one in which any person derives some income from independent activity in agriculture (other than income solely in kind). By deduction, it is possible to obtain information on the income situation of those "marginal" households that operate an agricultural household but where farming is not the main income source of the reference person.

The diversity of data sources found in Member States has meant that, though target definitions are harmonized, the way in which estimates are actually created must be allowed to vary from country to country. Three broad approaches ("models") to making estimates are encountered, representing points on a spectrum between macroeconomic and microeconomic methodology.

- *Subdivision of the household sector Distribution of Income account (macroeconomic approach):* Economic aggregates (such as global interest payment received by households) in the country's all-households sector account are broken down between types of recipient household to form separate sub-accounts for agricultural households and for other socio-professional groups. Often this is done by means of a distribution agent taken from a microeconomic data source (such as surveys of tax declarations or family budgets) where absolute figures may not be consistent with national accounts but where relativities have acceptable validity.
- *Grossing-up microeconomic data:* Accounts leading to disposable income for the agricultural household subsector and other socio-professional groups can be obtained by grossing-up data collected in household budget surveys, taxation records (total or samples), administrative registers, farm accounts surveys, etc. A drawback is that this approach may not produce estimates consistent with national accounts in terms of values or a detailed list of items covered in reaching disposable income.
- *Hybrid:* This combines a macroeconomic approach for deriving the income from agricultural activity of agricultural households with a microeconomic approach towards the other components in the target list leading to disposable income. It recognises the difficulty in collecting reliable details on the income from independent activity in agriculture through surveys of agricultural households by substituting an estimate derived from the accounts of the branch agriculture.

4.2 Summary of General IAHS Findings

The main IAHS findings are of obvious relevance to the way in which the problems to be addressed by agricultural policy are perceived and of the way that policy is formulated [Eurostat 1997].

(a) The number of agricultural households where the main income of the reference person comes from farming is substantially smaller than the number of households where there is some income from farming, and generally smaller than the number of agricultural holdings. Where data exist over time, absolute numbers of agricultural households have been falling, in some

instances very rapidly. The fact that results do not relate to a constant set of households must be borne in mind when interpreting changes in incomes per household over time.

(b) Agricultural households (defined in the "narrow" sense) in all EU Member States countries are recipients of substantial amounts of income from outside agriculture. Though typically about a half to two thirds of the total comes from farming, there are large differences between Member States and some between years.

(c) The total income of agricultural households is more stable than their income from farming alone. Non-agricultural income (taken together) is less variable from year to year than is farming income. Disposable income seems to be less stable than total income, but the relationship between the two depends on a variety of factors, including the way that taxation is levied.

(d) Countries differ in the share of income taken from agricultural households in taxation and other deductions, so the same average total income figure can imply different levels of disposable income in different Member States.

(e) Agricultural households have average disposable incomes per household that are typically similar to or higher than the all-household average, although the relative position is eroded or reversed when income per household member or per consumer unit is examined. However, there is substantial variation from year to year.

(f) On average, in countries where data are available, households with an agricultural holding but where farming is not the main income source of the reference person appear to derive little income from farming. This implies that changes in the prosperity of farming, including those resulting from changing the level of policy-related support, are of little importance to their disposable incomes. Their average disposable income can be greater or smaller than that of agricultural households, depending on the country in question.

4.3 Microeconomic Data Based on the Agricultural Household Unit

There is no source of EU-wide microeconomic harmonised information about the overall (total) income situation of agricultural households. This represents a major gap in the information system, a finding of many commentators including the OECD [OECD 1995, Blandford 1996], as many policy issues have distributional connotations. The spread of household incomes is thought to be particularly wide in agriculture, and hence a satisfactory group average may hide a disproportionately large number of low-income cases. Income problems may be concentrated on farms of particular sizes, types, locations or other socioeconomic characteristics. Studies (rather than statistics) have to rely on analyses of situations where data can be found, and the findings may not be applicable elsewhere [Hill 1996b].

Even basic data is patchy, sometimes of dubious quality and, in many countries, simply lacking. As noted above, the EU farm accountancy survey questionnaire does not cover other sources of income, though national surveys of farm businesses in some countries do so. In most southern Member States, taxation of farmers is not on an actual income basis, and in some others, tax records are unsuitable for technical reasons as a basis for statistics. Household budget surveys have few cases in northern Member States; in southern ones, where they are more numerous, income data are of low quality. The overall picture is that, while a few countries have good basic data (Denmark, Germany, Ireland, Netherlands, Sweden, Finland) and often several sources, the others lack even one satisfactory source. The OECD has observed that information of this sort is generally far better in OECD countries outside the EU [OECD 1995, Blandford 1996].

5. Looking Ahead

Harmonised EU economic statistics on agricultural production are well established at both industry and farm levels. Users have become familiar with and have confidence in them, though there is evidence that their interpretation is less than satisfactory. Economic statistics on agriculture as a productive activity in the EU will continue to be demanded. Eurostat attaches a high priority to them, and existing Member States are committed to adopting the recently revised methodology for the aggregate EAA (EAA 97). A question for the medium-term is how readily candidates for EU membership can apply this new system. Many Central and Eastern European Countries (CEECs) already have EAA-type accounts, though not necessarily to the exact specification of the EU's EAA [Eurostat 1998]. The OECD has to reach a conclusion on whether it can follow precedent and simply adopt the EU's EAA 97 methodology as the basis on which it gathers and publishes results on the agricultural industries of all its Member countries, an option carrying obvious administrative convenience, or what additional information might be required. Within microeconomic statistics, it would be desirable to increase methodological flexibility of the FADN, so that moves could be made both towards enhanced complementarity with the EAA and allow a broader view of business activities to be taken, particularly where these involve activities up- and down-stream in the food chain and other uses of farm resources (agro-tourism, farm forestry etc.). However, there are also advances of a technical nature (such as longitudinal analysis) and improvements to access that could release more of the potential of this valuable database.

EU statistics based on agricultural households are far more recent and conceptualisation is not a finished process, yet the need for harmonised and up-to-date information will increase as the proposals of *Agenda 2000* are implemented. While there is a temptation to further enhance the basic methodology (such as experimenting with alternative concepts of the household unit), for the foreseeable future, the emphasis is likely to be on consolidation, so that the statistics cover all Member States and are recent, thereby their improving their utility. At the microeconomic level, the situation is most unsatisfactory, but the best way to make progress is not clear. Extending the FADN questions to cover other sources of income (currently under consideration), assuming institutional concerns about the impact on response rates and political objections could be circumvented, would be a major step in providing more comprehensive income data about the farm families found on the sample holdings. However, there are problems of representation as the sample is biased towards the larger farms. Many below the current FADN thresholds might qualify as "agricultural households" as defined in the IAHS statistics; conversely, some operators currently in the sample would be excluded if they have larger incomes from other sources. As for alternative data sources, the problems of low numbers of agricultural cases and poor income data quality are endemic in general surveys that cover all households (such as the EU network of Family Budget Surveys and the related European Community Household Panel). Taxation records are unlikely to be of much use in many countries. Nevertheless, there is some virtue in developing the basic methodology of a harmonised microeconomic system (definitions of income and so on, bearing in mind the desirability of maintaining complementarity with Eurostat's IAHS statistics where possible) so that there are targets which individual countries may move towards, utilising whatever data sources are at hand and can be developed.

But perhaps the greatest potential for advance may come through explaining more effectively to EU users the nature and content of the statistics that are already available, and in particular by focusing their attention on the profound differences between statistics that take the agricultural production unit as their basis and those that are founded on the household. In reality, there is a large and probably increasing dichotomy between the two approaches. Explanation and interpretation are legitimate activities for the statistician in the process of providing information. This role may also, by improving

the consideration of central issues in policy, such as what constitutes the agricultural community, both ease the task of the agricultural statistician in providing statistics that meet better articulated user needs and, ultimately, improve the effectiveness of agricultural support.

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