

The feasibility of a new farm return for the FADN

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SIGN: L34-99.01
EX. NO: 17
MLV: 1999230512

March 1999

Report 99.01

Agricultural Economics Research Institute (LEI), The Hague

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The Hague, Agricultural Economics Research Institute (LEI), 1999

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This report presents proposals for a new farm return of the Farm Accountancy Data Network of the EU, which has existed more than 25 years. It focuses on the data content that is required in relation to the development of the Common Agriculture Policy and the functions of agriculture. Besides that the report provides suggestions to improve the organization of the data management, to make efficient use of up-to-date information and communication technology. A proposal for implementation is provided. The report is based on the information and views of experts and interested persons of all 15 member states of the EU and within the European Commission. The project is financed by DG VI of the European Commission, and carried out by four institutes in co-operation with a number of experts.

Disclaimer

The present report is the result of a study carried out for the Directorate-General of Agriculture of the European Commission by a group of experts from different countries of the European Union. The report is made available with the authorization of the European Commission as a contribution to the ongoing debate on the role of the FADN and its farm return in relation to the agricultural policy. It does not necessarily reflect the opinion of the European Commission services and in no way prejudices the Commission's official position in this matter.

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Contents

	Page
Preface	7
Management summary	9
1. Problem statement	13
2. Method	15
3. The current situation of the farm return and its coverage	16
3.1 General observations	16
3.2 The meaning of the expression 'farm return'	17
3.3 Data coverage	18
3.4 Complexity of data collection	19
3.5 Guidance to member states	19
3.6 Organization	20
3.7 Some conclusions	20
4. Requirements for the future farm return	22
4.1 Needs	22
4.2 Towards solution; a synthesis	27
4.3 Feasibility of these needs	39
4.3.1 Feasibility of data content	39
4.3.2 Technical feasibility	44
4.3.3 Organizational feasibility	44
4.3.4 Financial feasibility	45
4.3.5 Legal feasibility	46
4.3.6 Major risks	47
4.3.7 Conclusion on feasibility DG6's needs	47
5. Proposal for the content of a new farm return	50
5.1 Definition the farm return	50
5.2 The position of the EU farm return compared to national/regional returns	51
5.3 Basic structure	51
5.4 Voluntary data	52
5.5 Costs of production	53

	Page
5.6 Other areas for voluntary data exchange	54
5.7 Organization	54
6. Managing a new farm return and changes relative to the current organization	56
6.1 Need for IT support	56
6.2 Role of the conversion and control program	61
6.3 Changes in working methods	62
6.4 Change management	63
7. Plan for realization	65
7.1 Introduction	65
7.2 Tasks	65
7.3 Timetable and project management	67
7.4 Relation with RICA 1, 2, 3 and 4	69
Appendices	
1. Survey to FADN managers	73
2. Questionnaire FADN stakeholders	89
3. Stakeholders interviewed	93
4. Working documents	96
5. Detailed remarks for new statements	97
6. Results interviews European Commission stakeholders	105

Preface

Since more than 25 years the Farm Accountancy Data Network (FADN or RICA) is the primary source of micro-economic analysis in agriculture in the European Union. The data are collected from more than 60,000 farms in all 15 member states. The conversion and transmission of data to the European Commission is in line with the definitions and structure of the EU farm return (or fiche).

During the last 25 years many things have changed, for instance the Common Agriculture Policy, the function of agriculture, the needs of users of data and the information technology. These changes are the main reasons for the European Commission for a feasibility study to investigate the opportunities of a new farm return.

Given the complexity of FADN, which is a co-operation between the European Commission and Ministries, Economic Research Institutes, Universities and (private) accountants in the member states, and the different interests of all the partners, it is clear that the development of a new farm return requires more than a desk study. To reach a balanced result around 60 persons involved in FADN or interested in the FADN results have participated in a process of providing their views, wishes and requirements.

The feasibility study makes clear the future form and the content of the data-provision by the member states to the EU FADN based on the (renewed) objectives of the EU FADN. The objectives are based on the needs of current and potential users. The study includes an exhaustive review of data collection and data use in national/regional FADNs. Besides the needs and objectives the efficiency and quality of the system are analysed.

The study has been carried out by four institutes from different member states. They were supported by a number of experts from the PACIOLI group, who carried out interviews with stakeholders in the member states, the national FADN managers and the DG VI A.3 unit. The interviewed persons supplied very useful information.

We are very grateful to all these persons for their kind co-operation. We thank the staff of DG VI A.3, and especially Mr. Bernard Brookes and Mr. Keyo Hyvönen, for their guidance. Mrs. Brigitte van Oord has to be thanked for her outstanding secretarial support.

LEI managing director,

Prof. dr. L.C. Zachariasse

Management summary

This report presents proposals for a new farm return of the FADN. The proposed content of the farm return and suggestions on the methods of working with it are based on the information collected during the year 1998 in all member states as well as the European Commission. A lot of persons directly involved or with close connections to the FADN discussed the matter and gave their views on what could be done to make FADN more appropriate for the future.

It can be concluded from these views that there is a need for an adjustment and modernization of FADN and its farm return. This is necessary to maintain the FADN in the next century. This is worthwhile because it is underlined that FADN is the only representative micro-economic data source for agriculture in the EU and is used as an important tool to develop, monitor and evaluate the Common Agriculture Policy (CAP).

The main shortcomings of the actual FADN are a too late provision of results, insufficient access to FADN data, a lack of transparency between national and European data, too little flexibility in the data content given the actual needs of the CAP as well as shortcomings in the organization and communication between member states and the EU.

This report describes what can be done to overcome these shortcomings, however not in all aspects. It mainly concentrates on the content of the farm return and questions around it such as improving the quality of data, the timeliness of presentation and the comparability of results of the EU FADN and national FADN's. Although the farm return is not the major bottleneck for the lack of performance of the current system, the introduction of a new farm return (being the major element of the FADN (system)) helps to remove bottlenecks and is a way to introduce new working methods (see figure 1).

There are 15 member states with different views on the desired content of the farm return in future. While on the one hand some want to maintain the actual data content, on the other hand there is wide variety of suggestions to enlarge it with new items. Differences are mainly related to the possibilities in several member states to collect additional data and or the political interest in it. Given this situation it is proposed to make a distinction in the new farm return (FR2000+) between a hard core of obligatory items and a set of voluntary items. The voluntary topics include gross margins and production costs, while these items have special interest of the European Commission. Other voluntary items mentioned are non-farm income, mineral balances, forestry, landscape management and organic farming. Voluntary data, which can be based on sub-samples, can be exchanged between the participating member states. These data can be used for policy research on items where policies are in a process of development. Obligatory data are needed for RICA objective 1: monitoring income and policy analysis on income. In fact the so-called hard core of obligatory data is comparable with the existing data set of FADN; however it is simplified by deleting details which are not used or difficult to collect.

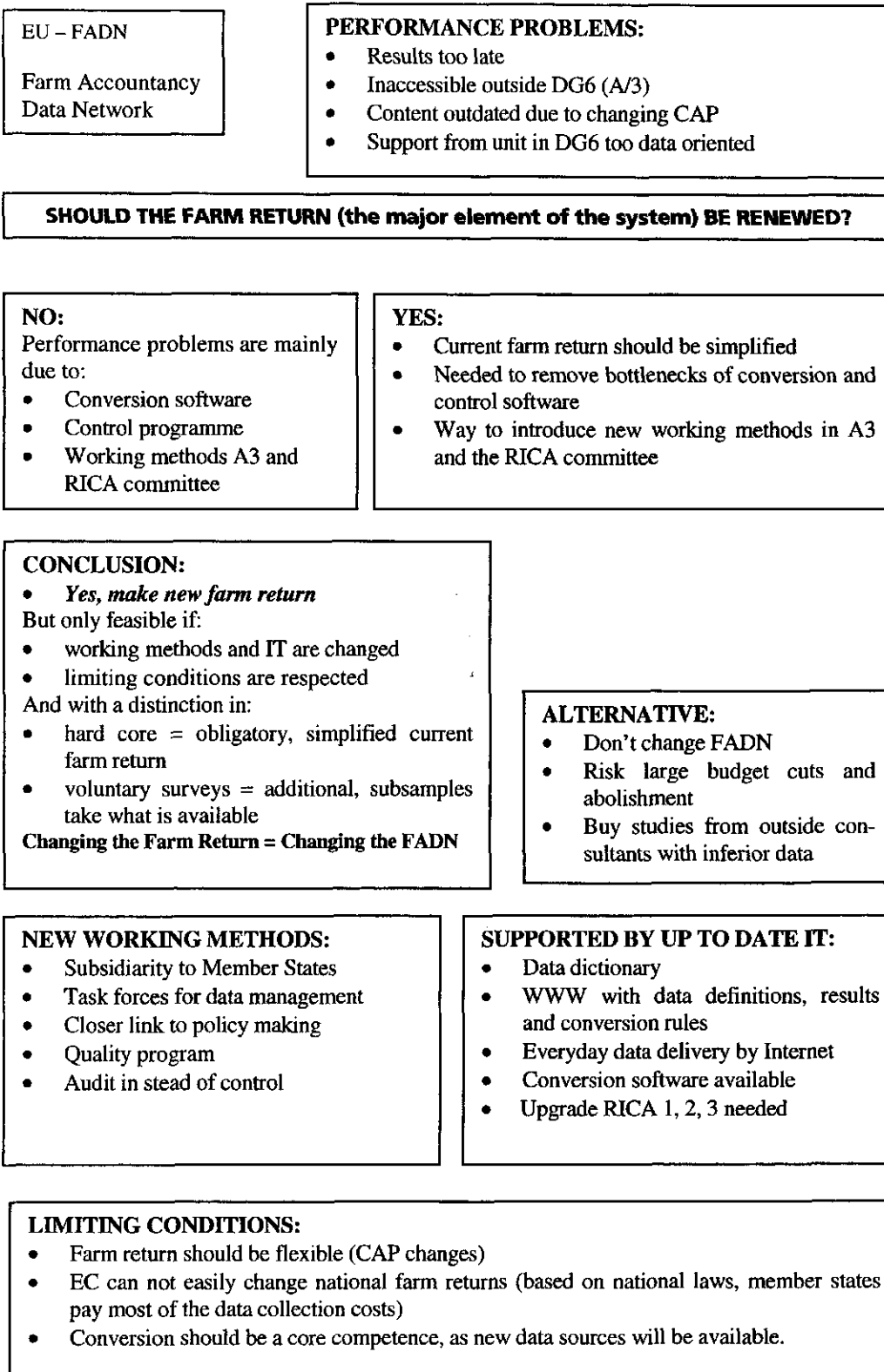


Figure 1 A bird's-eye view of the results

A new flexible farm return requires another method of working, being more network oriented with more communication in different directions. Because the environment of the FADN, mainly the CAP, becomes more dynamic, the current way of working does not fit anymore. In the network the role of the partners should be made clearer. Subsidiarity, giving responsibilities to the member states where possible, can improve the situation. Control of data can be replaced by audits and other elements of a quality program. Conversion of the data from national farm returns will also in the future be necessary, but can be improved by storing the conversion formula in a database. All these developments require an interactive network management. This provides a situation that some of the work can be done most efficient in the member states. This division of work creates also an incentive to harmonize and has to be supported by visits, a help desk, and workshops to assist the member states. A new farm return should be modelled in such a way that it supports conversion and makes new definitions over time possible. A new farm return is only feasible if the development and maintenance is organized as *an ongoing process*, to be carried out mainly in task forces. This process includes the development of new indicators and statements; besides that some voluntary issues, like gross margins, can become obligatory in the years ahead. So a new farm return is flexible and adaptable during the coming years.

A new Farm Return requires a number of technical provisions. The main tools are a central data-dictionary, a central database, software to convert formulas from the member states, applications to send data to the central database and a tool to make the data in the central database and -dictionary available for users. For an optimal access for users it is desired to develop Internet and CD-ROM applications. Important for the technical feasibility is to work with pilot projects and prototypes. To guarantee quality of data during the years it seems necessary to develop and implement a quality program. Audit procedures can replace end-of-pipe checking. For operating the new system it is desired to clearly identify some tasks at EU level on database management (for technical assistance and making data accessible for users), on data management (for the definitions in the data dictionary) and on network management (to co-ordinate activities with the member states). Besides these activities work has to be done to develop the desired IT infrastructure and software as well as to develop a quality program and a www site.

The financial feasibility of a new farm return depends mainly on the interest of member states in the availability of data at EU level. For new, at least in first instance voluntary data, it is important that the process of development of the data definitions and descriptions is supported by the Commission. If necessary and possible the Commission can try to link these data to EU regulations and make them obligatory. Eventually it is possible to pay less money (a lower fee) for obligatory data. The legal feasibility is high, as the basic regulation on which the FADN is based provides clear possibilities to develop and implement special farm returns (the voluntary data).

The work load in DG6 A.3 and the development of skills for network management in this unit are some of the major risks of the project. Related to the risk of the current reputation of the EU FADN is the need to develop an active Public Relations policy around the FR2000+ project to introduce a new farm return. A quick access to aggregated data on the Internet by the public is necessary to gain broad support in the member states.

For the implementation of a new farm return the report presents a proposal in headlines, with a timetable. Several main activities are mentioned, which have to be worked out in the

years ahead. To carry out the different tasks, a time period of 18 months will be needed before member states can apply the new farm return. It is made clear that for the different activities expertise is needed inside A.3 as well as from FADN managers as well as from outside. Besides that the implementation is discussed in relation to the actual RICA 1, 2, 3 and 4 activities of DG6 A.3 to keep the actual system and software running; in general it is concluded that a new farm return is supported by these activities.

1. Problem statement

The EU FADN is the primary instrument of micro economic analysis in the agricultural sector in the European Union. The data are collected from farm accounts by member states in national accounts networks, of which data are converted and transmitted to the European Commission according to the data definitions and structure of the EU farm return. This farm return has been defined more than 25 years ago. Since then the needs of users like policy analysts and researchers have changed, in line with changes in the Common Agricultural Policy and the enlargement of the EU. At the same time the developments in information technology have made available improved tools and methods for data management.

Data collected with the EU FADN and information based on these data are used by various units within the Commission to monitor The Common Agriculture Policy and to evaluate policy proposals. The use for EU policy analysis has been perceived to be important enough to legitimate the existence, efforts and costs to run a FADN at the EU level. As the CAP has been changing the content, objectives and concepts of policy supporting analysis has been changing accordingly. Moreover, also more technology driven changes in the work of policy makers have been effecting the tools, methods but also the speed and various other aspects of quality of the analysts work. In this respect the requirements of the users of EU FADN data has been changing quite a bit; which in the last years resulted towards the EU FADN in a growing sound of dissatisfaction. Complaints heard are 'Less than half of the Commission question can be answered with the current return', and 'Information is out of date'. From the perspective of the A3 unit there are difficulties in the high error rate in the data received from some countries, but moreover it is very difficult to add new questions in the dataset.

For these reasons a revision of the EU FADN farm return is appropriate. In addition the data handling environment of the Commission is being renewed and several member states are in the process of modernizing their micro-economic information management. In line with this, several contributors to the EU FADN have carried out a concerted action PACIOLI (AIR3-CT94-2456) to exchange ideas and foster innovation in this field. This concerted action also called for a renewal of the farm return. Changing the farm return implies a large, complicated project or set of projects; because of the size of the systems and the large number of data suppliers involved (15 member states). There are also various IT choices to be made and a high level of uncertainties that have to be made clear before deciding on if and how to develop a new farm return. This is why the Commission has asked for a feasibility study on a new farm return.

The renewal of the farm return is a major reform of the EU FADN. A proposal to implement a new farm return will therefore lead to discussions and debates within and between member states. The future content as well as the form of the farm return have to be reformulated. On some topics regarding the scope of the farm return, like the inclusion of data on costs of production, non-agricultural income and environmental indicators, these discussions are connected to the objectives of the EU FADN and the national FADNs. This also

concerns the identification of the users that the FADN tries to serve. It is not clear which changes in the farm return have the support of the users, the data collectors and the (national) financers of the FADNs. Interaction with these stakeholders could also reveal demands on other aspects of the performance of the EU FADN, like more rapid results, the use of alternative data sources, the timeliness (rapidness) of the results and the frequency of the results.

For these reasons a feasibility study for a major reform of the farm return is seen as a necessary step before a new farm return is developed and implemented. This feasibility study should make clear *the future form and content of the data-provision by the member states to the EU FADN based on the (renewed) objectives of the EU FADN and should provide a plan (in the form of a draft call for tender) for the implementation of this data-provision*. A recommendation to keep the current farm return unchanged is not ruled out in advance. Though the feasibility study is focused on the content of the farm return, the feasibility aspect requires that also aspects of technology, organization and finance play a significant role in the study.

2. Method

In order to obtain a good perception of the feasibility it is important to know what the feelings in the member states are on the idea of a new farm return. Decision making in the FADN environment is not a very transparent process, because it concerns the work in 15 member states (private accountants, economic research institutes, regional authorities, national ministries) and the communications with the Commission.

Therefore it is not enough to know the opinion of the people directly involved in the activities for running a FADN. Also the voice of people 'around' FADNs, who have a certain influence in running and managing a FADN (stakeholders like financiers, users, data suppliers) have to be included in the feasibility study. The feasibility study is build up around the following activities:

1. *survey among FADN managers*

A comprehensive review of micro-economic information management and use of micro-economic information in all 15 member states administrations as well as DG6). For this the FADN managers have been asked to complete a form with questions included on what is available, what could be made available, what is unclear, what are bottlenecks, what is needed, what is used, etc. The questionnaire used is included in appendix 1;

2. *questionnaire among FADN stakeholders*

Interviews with various types of stakeholders have been held in all member states (and DG6) in- and outside the FADN administrations. In the open interviews the questions (see appendix 2) were aimed at discussing the awareness and requirements of micro-economic information in member states and to give as wide as possible coverage of stakeholder types. Interviews were held by FADN managers or PACIOLI participants in member states not being their own. This had the advantage that expert, but independent interviewers were available, and that customer-awareness of FADN managers, and support for a new farm return were improved as a by-product. See appendix 3 for the list of persons interviewed;

3. *workshop EU customer requirements*

In a 1 day workshop with the stakeholders within DG6 the customer requirements have been discussed;

4. *workshop with FADN managers*

In a 1 day workshop with the FADN managers from all member states the results of the surveys and their effect on FADN working methods have been discussed. The objectives of the workshop were on convergence of customer requirements and sharing experiences with renewal FADN;

5. *analysis and feed-back*

The analysis of the information collected has been communicated with the unit DG6A3 at various stages in the process. A serie of documents has been delivered in the form of working papers on specific activities, issues and a synthesis working document on the implications of a new farm return on a renewed FADN (see appendix 4).

3. The current situation of the farm return and its coverage

With the surveys, interviews, and the workshops a lot of very interesting material has become available. For practical reasons (anonymity, and amount of paper) the 'raw' material cannot be distributed, but for a lot of people in the FADN community it contains a bundle of interesting facts, opinions and experiences. The more general remarks made in this section are based on the detailed information in the working documents (appendix 4) and the detailed information on the farm return from the survey given in appendix 5.

3.1 General observations

The general impression of FADN managers and many stakeholders on the current situation of FADN is that the performance is not optimal; the different lacks and shortcomings, but also the strong points are mentioned in brief in the next sections. At the same time there is a need and willingness to adapt and improve the FADN. It is also recognized that many obstacles have to be overcome in this process.

In general there is much interest in FADN; it is mentioned as an important (micro-economic) source of information by which the farm sector is well documented in relation with other sectors of the economy. It is also observed that the importance of FADN is increased because of the changes and the reform of the CAP.

The stakeholders interviewed can be divided according to two different positions and interests:

- stakeholders not directly involved in the data collection and processing are mainly interested in the results of FADN as they are published and made available, while
- FADN managers, including unit DG VI.A.3, have also an interest in the quality of the process of data handling and the optimization of their management of the system.

On the one hand there is the opinion of some stakeholders that the current FADN and farm return has to be maintained, they see only reasons for minor adjustments and improvements in the farm.

Most of the interviewed persons as well as the FADN managers are however in favour of a major change of the system. They have several reasons for that opinion, not only that the actual system is founded more than 25 years ago. The main reasons for renewing and restructuring are coming from the development and changes of the objectives of FADN; these are mainly related to the evolution of the CAP (and the functions of agriculture), as well as the (insufficient) quality of the actual FADN system and its results and the new (technological) opportunities to manage and publish data.

It has been made clear that there are differences between the national and EU farm returns. Important is that member state FADNs have their own 'dynamics', which differ between the member states because of the institutional context in which the FADN operates. The

FADN that operate in more or less market oriented research institutes (e.g. Italy, Netherlands) versus the task-oriented organization (e.g. statistical office, university) versus FADNs that buy accounts from external accounting bureaus, sometimes in a federal structure (e.g. Spain).

In this respect the EU FADN is also somewhat different than the member state FADNs. From member state perspective the EU data are derived from the data available in the national FADN. In fact the current situation is that the EU FADN gets information that happens to be available in the member states. In case data requirements are changing, the primary decisions are made in the member states.

Only a few member states provide data in time (table 3.1). There are several reasons for being too late in providing national results to the EU. End 1998, the final results 1995 were still not available. It is however also clear that the farm return as such is not only to blame.

3.2 The meaning of the expression 'farm return'

Farm return (fiche in French) is a word that can raise confusion, not only in translation. Users of the FADN are most interested in the data coverage (and the population coverage as expressed in the field of survey and its minimum size). They are not interested in the forms used to transfer data from the farm to the DG6 database. Historically this has mainly been done with magnetic tape (of which the characteristics are described in the current farm return description) and the data has been described in table forms with instructions, the so called farm return.

The tables for the current farm return however do not include information for the RICA Forecasting System or on the farm selection/weighting. The farm return describes the coverage of all data gathered on (!) an individual farm. Some FADN managers tend to see the farm return as the description of the data that are gathered at the farm (that is to say: the data that are collected with the farmer), and exclude e.g. subsidy-data that are gathered from e.g. the IACS (the Integrated Agricultural Control System) regarding the same farm.

The data described in the farm return are often called 'data items'. Some of them have a direct meaning to the users of the FADN (e.g. total agricultural area), others are basic facts (e.g. stocks of potatoes) to calculate indicators in a harmonized way. Also these basic facts are, or can be an aggregate of several transactions in the accounts; stocks can be different stocks (of which a volume is multiplied by a price). The data items (or variables) are used to calculate new data, often labelled as indicators. Some of them are published (in so called level I, and level II lists of indicators), others are not.

Indicators are not published on individual farms but on weighted group averages, to which the expression 'results' refers. This is the ultimate aggregation. This report argues that the farm return deals with variables (data-items) and indicators (and not with results), but that the difference between them is artificial: both are aggregates and it only makes sense to exchange useful data (often indicators).

3.3 Data coverage

The data coverage of the current farm return is not without problems. There are problems with the current data and data on certain items are lacking. FADN managers have brought forward a long list of issues concerning the current data set (see appendix 5). Topics with major problems in data gathering or harmonization include the definition of a farm (also in relation to rural activities and forestry), the measurement of labour in AWU (not a minor thing as this

Table 3.1 *Reasons for being late, according to FADN managers*

According to you, why are data from your country not available error free at the European level at the required 9 months after the closing of the accounting year (what are the bottlenecks, more than one answer possible)?		
Topics	Countries	Total
Data are always available error free within 9 months.	<i>n-Ire, Dk, B</i>	3
Control program detects too many errors.	<i>De, Sc, n-Ire, L, Au, Fr, Gr</i>	7
Correction of data costs too much time.	<i>De, Sc, L, P, Fr, Gr</i>	6
National FADN unit not large enough.	<i>De, Ire, Sc, L, Fr, Gr</i>	6
Changes in national farm return do not automatically lead to changes in conversion software.	<i>De, n-Ire, N, L, Fr, It</i>	6
Farm return fiche too difficult.	<i>De, Sc, N, Au, Fr, It</i>	6
Not enough money to increase capacity.	<i>De, B, Fr, Gr, It</i>	5
Too much time needed in the member states.	<i>Sc, N, Fr, It</i>	4
RICA unit has not enough know-how on national issues.	<i>Sc, Au, Fr, It</i>	4
Other priorities in the FADN unit more important.	<i>De, Sc, L</i>	3
EU control program not available at the level of data entry.	<i>N, P, It</i>	3
Too much differences between National and EU definitions.	<i>De, Sc, Fr</i>	3
EU control program not available at the national level.	<i>De, Sc</i>	2
RICA unit in Brussels not large enough.	<i>n-Ire, Fr</i>	2
Control program does not detect errors quick enough.		0
Other reason:	<p><i>Fn., Sw.: members of EU since 1995, they have had a few problems in implementing the EU FR to their systems</i></p> <p><i>P.: frequent changes in the organization of the Ministry services, with regional coordinators often coming and going. This creates difficulties in absorbing the technical level and works rules. Additional difficulties arise in the gathering of data namely within the private structures who cooperate with the FADN</i></p> <p><i>Au.: national data are difficult to convert to RICA fiche</i></p> <p><i>Gr.: regional FADN unit not large enough</i></p> <p><i>It.: national logistic model too complex and too rigid/not obligatory aspect of the survey</i></p>	<p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>

indicator is used directly in income-indicators), allocated costs, interest and loans and subsidies. To provide a 'true and fair view' several data items should be added or better harmonized.

Several member states gather data on topics that are relevant to the CAP and for which stakeholders declare an interest. Although FADN managers show a willingness to exchange such data on a voluntary basis, the current farm return makes this impossible. These topics include gross margins, production costs, mineral balances, non farm income, forestry data, landscape management and organic farming.

The current farm return has a lack of transparency between the data-items that are exchanged between the member states and the Commission and the indicators used by the Commission in its publications.

That not only makes it hard for member states to check the published data, but it also does not make them responsible for the data published with EU FADN methodology on their own country. It also provides no incentives to replace traditional national indicators by EU-indicators and is therefore not very supportive towards harmonization.

3.4 Complexity of data collection

It is clear that the organization of the FADN is different per member country; in some countries the collection of data is done by one institute or the Ministry of Agriculture, in some by different regional private accountancy offices, institutes or universities. In some countries the network is very much regionalized (e.g. Spain, UK). This implies that the position of the national FADN managers varies. At the same time there is a (wide) variety - sometimes even inside a country - in the use of technology (IT), working methods, the process of data control, the availability of (micro-)data and the speed of delivering data to Brussels and the presentation of national publications. It is also striking that the enlargement of the EEC of six to the EU of fifteen nor changes in IT has not much effected the organization and data collection methods.

3.5 Guidance to member states

In general stakeholders have the opinion that the contacts with the national FADN managers in their own country and their services are good and constructive. This does not mean however that there are no remarks and desires on the provision of data and results; time of presentation and data on specific regions and types of production have to be improved.

Stakeholders (except the FADN managers) on the other hand have very little contact with DG VLA.3 in Brussels. There are several reasons for this, mainly the lack of actual data and the insufficient access to FADN data. It is also observed that many (national) stakeholders having a need for data of other member countries present their questions to the national FADN managers.

FADN managers as well as some other stakeholders see several shortcomings in the organization at EU level and in the communication in both directions. They have a lot of suggestions for improvements in this field; the suggestions are dealing with the decision-

making process, the provision of information (lack of accessibility of data outside A/3) and the communication with Brussels, the documentation etc.

3.6 Organization

On the level of the EU there is a need to improve the decision making process regarding changes in definitions and content of the farm return. Several managers indicate that this process must be more clear and open; changes can be prepared in working parties (or 'task force-groups') of the RICA Committee with representatives (interested experts on the specialized fields) of the member states.

Some remarks and suggestions are also made on the work of the unit VI.A.3, be it sometimes contradictory; some FADN managers underline that the unit has to give more priority on data management and data handling. Others underline the importance of policy-analysis and think more could be done in presenting analyses on the development of results of the farms.

Other suggestions are connected to the communication and feedback with VI.A.3 in Brussels; it should give more assistance to the member states (help desk) to improve and fasten the data flow. It is also suggested that there should be more know-how in Brussels on the local conditions for farming in Europe.

Related to this is the remark to promote more two-way communication with unit VI.A.3 in Brussels and to learn more from each others experience. Besides that there is, at least in some member states, a need for training of employees on different skills (management and organization, data processing etc.). At least in new member states this need is clear.

More general, there is a need for a clear allocation of responsibilities, tasks and work between the unit VI.A.3, the RICA Committee, the national and local offices. This regards mainly the maintenance of the farm return, the control of data and results, the conversion of national data to EU data and the publication of them. In some cases it is concluded that there is a shared responsibility of DG VI A.3 and the national offices (liaison agencies); e.g. for the function of helpdesk for data collectors, conversion data from national to EU farm return and for analysis.

On the use of IT there is the feeling that it would be optimal to have a more or less common system in all member countries, but the reality is there are clearly different IT platforms. Linked to the differences in the administrative structure in the member countries, it is expected that there will also be a variation in the use of IT in future. Consequently it is hard to obtain a common EU approach on software use. However incorporation of the new farm return in the national software would help data control and improve data quality.

3.7 Some conclusions

Considering the current situation of the farm return, it can be concluded that the coverage of the data is an important issue. For this a lot of wishes are brought up by the stakeholders, and the FADN managers (see appendix 5). On the other hand it is clear that implementing the new data topics is quite a difficult and complex task in the current system. The current FADN has

clear performance problems in the eyes of stakeholders and FADN managers: conversion takes too much time, data are too late and unaccessible. One could say that the current farm return is not feasible any more and that a situation of no change would sooner or later lead to the end of the FADN. However the FADN itself is not questioned by stakeholders and is seen as a unique, and increasingly needed, micro-economic tool to support the CAP. As the CAP is the next years to stay, although perhaps in changing clothes ¹, it therefore can be concluded that the FADN should not be abandoned but improved and its farm return should be flexible enough to support the changing CAP, in current EU and Central and East European Countries. The current farm return cannot play this role and has become obsolete, in terms of IT as well as in relation to the current CAP and the needed flexibility.

It can also be concluded that this improvement of the FADN will be an *ongoing process*. The changing CAP is a moving target, so a new farm return should be flexible. Due to the differences in the organization of the FADNs in the member states and the differences in IT and the need for modernization, a new farm return cannot be implemented with a 'big bang' in all aspects. A flexible approach in the farm return and the process of introduction will be needed, in which member states learn from each other.

¹ See e.g. A. Buckwell et al.; Towards a common agricultural and rural policy for Europe; European Economy, 1997-5.

4. Requirements for the future farm return

4.1 Needs

In general the priorities of DG VI on the new farm return do not differ significantly from those of the stakeholders in the member states. DGVI stressed especially the importance of:

- alignment of the data set to the evolution of the CAP;
- gross margin and cost of production data;
- having data in time, including rapid results;
- more flexibility, including a split in hard core and voluntary data;
- continuation of series of current indicators;
- improvement of interaction with policy makers in other units of DG VI to solve the problems of the complexity of the data.

Results from the interviews with key policy makers in the European Commission (DG6 and DG19) support this list, and are reproduced in appendix 6.

A new farm return (to be called 'FR2000+') is needed, but it is not enough to satisfy the stakeholders. Although a new farm return can support the conversion and speed up data exchange, a new farm return as such is not sufficient. Users should quickly get more data (better access) otherwise they will not support a period of change with even more performance problems due to the introduction of a new farm return. Good public relations will be essential. In addition FR2000+ should use information technology options to support a FADN that can innovate, otherwise the next 'farm return crisis' is in 2005. This makes the conclusion inevitable that changed working methods and a new culture in the FADN system has to be introduced. FR2000+ should in this respect be seen more as a mean than as a solution.

Figure 4.1 illustrates the need for new working methods, and especially network management (a need that is also stressed in the next section). The complexity of the environment of the European FADN is high (see previous chapter). In the seventies and eighties the dynamics were relatively low, but they increase with the changing CAP, and new information and communication technology. That means that a 'bureaucratic' approach (in the positive meaning of the term) does not fit anymore, and a move has to be made to a style of network management.

In such a network the role of the partners should be clear. The discussions in this study revealed that there is an interesting relation between subsidiarity (do things at the lowest level possible) and standardization (to do things in the same way or at least comparable). The current farm return is based on the idea that national FADNs are autonomous and difficult to harmonize; therefor detailed data are made available to A.3 so that at a central point (A.3) new, harmonized, indicators can be calculated and published. This provides not much incentive for changing national systems, and it leads to the strange situation that A.3 is responsible for publishing the (harmonized) income data of a national member state. In a time where Europe integrates to an extent that national member states abolish their currencies for the

Euro, and member states have more interest in data from neighbouring countries, it makes sense to improve harmonization by subsidiarity: the national member states should be made responsible for publishing representative data on their national farm sector by using harmonized definitions. They are the 'owner' of the data and cannot refer users to A.3 for explanations on definitions or quality. Of course the national FADNs can in addition also publish their national indicators. Reality will learn that this extra national work is the first to be in danger with budget cuts.

		Dynamics environment	
		Low	High
Complexity environment	High	Bureaucracy	Network
	Low		Entrepreneurs

Figure 4.1 Network management: why?
Based on Norton et al., 1988.

Objectives

The basic regulation of the FADN, as formulated in 1965, states two objectives of the FADN: monitoring farm income and business analysis. Table 4.1 shows the first objective is still the most quoted on. However micro-economic policy analysis (as business analysis would be called nowadays) has gained enormously in importance over the last 15 years, also due to improvements in information technology. More than 90% of today's use in DG6 has to do with policy analysis, often for other topics than income. This asks for detailed data. Also because outsiders are not often confronted with this work, it would be beneficial to update the official objectives – to make clear to the member states why individual data are needed in addition to statistics. In table 4.1 the requirements as generated in the interviews with stakeholders are given.

Appendix 5 provides information on current availability and attitude in the member states towards providing the data. There seem to be opportunities for gathering data on gross margins, production costs, environment, rural diversification, forestry, non-agricultural activities/income and organic farming. Concerning obsolete data appendix 5 provides detailed information from the member states which data could be indicated as obsolete. It can be concluded from this list that most obsolete data can be described as 'accounting details' used to calculate EU indicators from national basic data. There are no indicators (more aggregated) depicted as being obsolete. The 'accounting details' can be left out from the perspective of data-requirement from the user perspective. Though it must be said that in the current system these details are required for checking purposes in the data gathering e.g. in the control programs. In the workshop with the member state FADN managers it was explicitly suggested that member states should supply indicators to the EU FADN and do the control process themselves; in this concept the details will become completely obsolete at the EU level.

Table 4.1 Current and future FADN objectives, according to stakeholders

Objectives:	Number of times mentioned:
Know and monitor farmers incomes	14
Decide of European agricultural policy	9
Evaluate European agricultural policy	8
Describe the situation of European agriculture (structure, finance)	7
Compare member state results	7
Compare the results of the same type of farm through Europe	4
Measure the variations of farmers incomes	4
Simulate and measure the impact of policy changes on agricultural structures and farmers incomes	4
Know about the efficiency of agricultural sector	3
Describe the evolution of European agriculture	2
Provide useful data for negotiations (negotiate the budget for subsidies)	2
Identify and analyse European production systems	2
Advise farmers	2
Describe the situation of national agriculture	2
Describe the situation of regional agriculture	1
Measure the competitiveness of different type of production systems in Europe	1
Compare farmers incomes with incomes in other sectors	1
Make environmental analyses	1
Monitoring income from agriculture, forestry and other activities	1

Table 4.2 Stakeholders' needs

Do you find it is desired to expand the data content of FADN on (one or more) of the following items:	YES a)	NO a)
Nature of a farm (type, location, regional conditions ...)	8	1
Labour on the farm (full time, part time, level of education ...)	14	4
Costs of production and Gross margins	19	1
Way of production	14	4
Of which: organic production	10	
Marketing of products	10	2
Processing of products on the farm	11	3
Environmental issues	25	3
Other concerns (veterinary/fyosanitary, labour conditions ...)	5	5
Forestry	14	3
Other activities on the farm	17	1
Of which maintenance of landscape	3	
Of which agri-tourism	9	
Activities outside the farm	14	6
Income outside the farm	16	6
Total income of the farm household	8	1
Use of income (consumption, investments, taxes, savings ...)	8	3
Financial position of the farmer and family	8	4
Subsidised and levies on products	12	2

a) Number of persons who explicitly mentioned the topic as desired or undesired. Total number of interviewed persons: 53.

Comparability

The issue of comparability was discussed extensively in the workshops. National farm returns differ largely between member states and it is not feasible to oblige member states to harmonize them on the short-term: national farm returns are based on national charts of accounts, which are sometimes written in law. There is no European tradition in (farm) accounting: each country has its own methods and indicators; until now the implementation of e.g. IASC¹ methodology is low and national tax systems influence the methodologies greatly. In some countries the national government buys the data from accounting offices and cannot change the working methods of accountants without facing very huge bills and creating biases in the sample. The European Commission is not in a position to influence this easily, as it pays only a fraction of the total costs of the RICA network. This lack of harmonization in data collection means that the conversion process can not be eliminated.

Also for other reasons than this lack of harmonization it should not be tried to eliminate this process. In future there will be more data sources than now (due to the need for new types of data, and due to information technology developments creating databanks) and conversions from these data sources (e.g. from IACS – the integrated agricultural control system) can be more attractive than data collection at the farm.

To put it all in a less defensive manner: the core of the FADN business is conversion. Conversion is data-enrichment by carrying out data management. The FADN network could better learn to do conversions as perfect as possible than to try to abandon it and learn to master the tools that are available or can be made to become an expert in conversion.

Nevertheless the EC should support the adoption of common farm accounting methods, e.g. by supporting IASC statements, concerted actions and using a consistent set of indicators in its own policy documents and published data for (policy) research. It is most likely that (future) member states with not much tradition in farm accounting and not much interference with tax accounting will adopt such common methodology quicker and swing the balance in favour of using common methods. However, this is a long-term investment. The common farm typology is an example: now available from the EC and Eurostat for twenty years and at least one of the old 12 member states is still using its national typology in national publications, and some others use variants of the common one.

Conversion can be carried out at several places. Carrying out the conversion process totally by the Commission (or a central organization contracted by the Commission) is not realistic. This would mean that DG6 A/3 would get data or (access to databases) in 15 (and after enlargement even more) member states, with different code systems, definitions and sometimes a lack of documentation. This would require an amount of know-how on national farm returns (in national languages) and the regular updates in these returns that is not manageable. In a number of cases the data cannot be harmonized at the end of the pipeline by recalculating national data into a common denominator. In such cases national farm returns have to be adapted to provide harmonized data. Conversion in Brussels would then not create any incentive for member states to adapt their national farm return to RICA demands. The current attitude of looking first to national needs and then 'throw the data over the wall' to Brussels would be supported instead of penalized. Current performance problems would increase. It

¹ The International Accounting Standards Committee (IASC) puts forward proposals for harmonization of published accounts. An exposure draft on agriculture has recently been issued, to be introduced in 2000.

can be concluded that conversion and the control process should be carried out in the member state. Although at first sight a licence to keep national farm returns in place, this division of work creates an incentive to harmonize.

In conclusion: data management and conversion are a joint interest, with a need for an interactive network management. FR2000+ should be introduced with a business-like approach of exchanging data between member states and with the EC and a quality program that measures the performance of member states and A/3.

FR2000+ should support the conversion process better than in the old farm return. The check of the conversion should be taken off as much as possible from the critical path in the time-management and should not be the main purpose of the control software (which it currently is). It should be replaced as much as possible by providing clear definitions, a help desk, compliance audits in member states, test data, software certification etc.

Also this approach requires much more a network-management work management (visits, help desk, workshops, organizing pressure on liaison agencies) than in the current situation. This job can partly be sourced out (creating more time for policy analysis in A/3). For the part it is carried out in A/3 it demands new skills (to be the change agent towards such a new culture).

Simplification

In the survey the need for simplification was stressed by many respondents. This is due to the complexity of the current data structure (not: the data itself) in the current farm return. In the workshops a direction for dealing with this issue has been discussed. The farm return should be based on the accounting statements (balance sheet, profit and loss account, enterprise margins etc.) which are familiar to accountants. This is also the form in which the data are published, but the collected data should be at a bit more detailed level than published at the moment (the so called level I and II). It implies that unnecessary accounting details can be skipped. The gathering of the data at farm level should of course still be based on the basic data.

The first advantage of this approach is that data-items that are only gathered for calculations of indicators (e.g. stocks of individual crops in table K) can be dropped: simplification and less errors. More important is that the member states become familiar (subsidiarity) with the calculation rules used for FADN indicators (e.g. output beef, livestock units), which has a number of important advantages. First of all it provides an incentive to use harmonized indicators in their own publications. Secondly, the member states and regional accountancy offices can calculate these indicators and publish them directly when they finish their own accounting year (or when they calculate pre-eliminary results) and data plus publications can be sent to A/3. This speeds up the availability and national member states can answer questions why indicators on the WWW site of A/3 are different from national WWW sites (which is another incentive to change national habits) and websites can be linked. It should be noted however, that the unit A/3 can have the feeling that it loses some freedom to publish (not: to calculate internally) new indicators without consent in the RICA committee that an indicator has to be added. It is less an 'owner' of the data. This is the direct effect of network management.

The bottom line in this way of looking at the farm return is that data-exchange from member states to EU FADN is simplified to the exchange of well-defined 'data items' or 'indi-

cators' and not the complete set of data required to calculate the indicators centrally. In this way the data-flow itself is simplified and the organization for datahandling can be simplified accordingly. The complexity however is 'moved' to the process that makes indicators will be 'well-defined'; data-management that generates clear definitions in which member state and EU definitions are linked. To organize this in a proper way will be quite complex and has to be developed by a 'learning by doing' process with task forces and project organizations in the initial phase. The explicit separation of data-handling from data-management has to result in clear data definitions and by working with these definitions the data from various member states and regions will be comparable; which is an important performance criteria of the FADN network. It also facilitates the requirement that national reports can also be reproduced from EU data.

Continuity of data

The farm return is a longitudinal dataset and therefore it is important that, certainly in these times of significant changes, at least the data will stay comparable over the years. Therefore in the activities to develop a new farm return, a good process for migration from the old towards the new system is essential. Indicators published at the moment should only be revised if they are unreliable.

4.2 Towards solution; a synthesis

This section provides suggestions for the structure and content of a new farm return, based on the ideas generated from the surveys, questionnaires, workshops, the creation of data models and the outline of the quality program. The section is in the form of a number of statements and decisions to be taken.

1. Is a new farm return ('FR2000+') needed and feasible?

Considerations:

- the CAP will stay in the coming years, although in changing clothes;
- RICA is a unique micro-economic tool to support the CAP;
- as such it is not questioned by stakeholders;
- but the current RICA has clear performance problems in the eyes of stakeholders and FADN managers.

Therefore it can be concluded that:

- RICA should not be abandoned but improved;
- the current farm return has become obsolete, not only in terms of IT but also in relation to the current reformed CAP;
- the improved RICA and its FR2000+ need to be flexible enough to support the changing CAP (CAP is a moving target).

So, it can be concluded that a FR2000+ is needed, but only if:

- it is more flexible, seen differences in countries;
- it supports a RICA that can innovate, otherwise the next 'farm return crisis' is in e.g. 2005;
- users get quickly more data (better access) otherwise they will not support a period of change with performance problems (incl. more public relations);
- it makes good use of current IT;
- and therefor: only if working methods are changed and a new culture within the RICA system is adopted.

2. *A new farm return should be based on an information model¹ approach that describes the FR2000+*

Advantages:

- makes it possible to publish the FR2000+ (also) in electronic form (CD-ROM, Internet);
- good practice for IT persons;
- makes methods and definitions explicit;
- maintenance more easy;
- parts of FR2000+ can be included in software for accountants and users.

Disadvantages:

- information models (especially data models) are not easy to understand by everybody (but: proto-type, possibility to transfer know-how on IT);
- not all countries/national delegations can make them (which is not needed, but some know-how of the function of data models should be explained).

3. *National farm returns differ largely between member states and it is not feasible to oblige member states to harmonize them on the short-term. Therefor the conversion process can not be eliminated, and it should not be tried to eliminate this process: In future there will be more data sources (due to the need for new types of data, IT developments creating databanks) and conversions from these data sources (e.g. from IACS). To put it less defensive: the core of the RICA business is conversion: this is data-enrichment by carrying out data management. The FADN network could better learn to do conversions as perfect as possible than to try to abandon it.*

Reasons:

- national farm returns are based on national charts of accounts, which are sometimes written in law;

¹ An information model is a description of all the activities (processes) and the data requirements (data model) in an organization. For more information see chapter 6 and the working paper 'RICASTINGS-the implications of a new farm return on a renewed FADN', that contains the basic information model for the EU-FADN.

- in some large countries the national government buys the data from accounting offices and cannot change the working methods of accountants without facing very huge bills and creating biases in the sample;
- the EC pays only a fraction of the total costs of the RICA network, and is therefore not in a position to influence this easily;
- there is no European tradition in (farm) accounting: each country has its own methods and indicators and until now the implementation of e.g. IASC methodology is low and national tax systems influence the methodologies greatly.

However:

- for the long run the EC should support the adoption of common farm accounting methods, e.g. by supporting IASC statements, concerted actions and using a consistent set of indicators in its own policy documents and published data for (policy) research;
 - it is most likely that (future) member states with not much tradition in farm accounting and not much interference with tax accounting will adopt such common methodology quicker and swing the balance in favour of using common methods;
 - tools are available or can be made to become a master in conversion.
4. *Carrying out the conversion process totally by the Commission (or a central organization contracted by the Commission) is not realistic and the FADN should not desire such a situation*

Reasons:

- this would mean that A/3 would get data or (access to databases) in 15 (and after enlargement even more) member states, with different code systems, definitions and sometimes a lack of documentation. This would require an amount of know-how on national farm returns (in national languages) and the regular updates in these returns that is not manageable;
- in a number of cases the data cannot be harmonized at the end of the pipeline by recalculating national data into a common denominator. In such cases national farm returns have to be adapted to provide harmonized data;
- this solution would not create any incentive for member states to adapt their national farm return to RICA demands.
- The current attitude of looking first to national needs and then 'throw the data over the wall' to Brussels would be supported instead of penalized. Current performance problems would increase.

Thus: data management and conversion are a joint interest with a need for an interactive network management.

5. *It follows from the previous two points that some conversion should take place from national farm returns to the FR2000+*

However:

- the FR2000+ should support this conversion process better than in the current situation;
 - member states should be more responsible for this conversion, in order to decrease the workload for A/3 and to give incentives to use the FR2000+ for national purposes;
 - FR2000+ should be introduced with a business-like approach of exchanging data between member states and with the EC and a quality program that measures the performance of member states and A/3;
 - the check of the conversion should be taken off as much as possible from the critical path in the time-management and should not be the main purpose of the control software but should be replaced as much as possible by providing clear definitions, a help desk, compliance audits in member states, test data, software certification etc.;
 - this requires much more a network-management approach (visits, help desk, workshops, organizing pressure on liaison agencies) than in the current situation. This job can partly be sourced out (creating more time for policy analysis in A/3). For the part it is carried out in A/3 it demands new skills (to be the change agent towards such a new culture).
6. *Individual accounting data are also in the future the basis, or at least the main basis, to get the data which are needed in A/3*

Because:

- the income situation stays to be a main policy objective, and income can not be easily measured by surveys. Accountancy data provide this information;
- in accounting automatically a quality system at the level of gathering the basic data is available;
- accounting data are historically efficiently available;
- individual data are needed to perform policy analysis. Aggregated statistics do not provide enough detail to be manipulated for such an analysis;
- accounting systems (FADNs, especially when the FADN liaison agency has control over the staff that gathers the data as in the Netherlands, UK, Belgium or Italy) have low marginal costs (and high fixed costs).

However:

- other data sources are becoming more and more available in databases (e.g. IACS): the use of administrative data becomes an important issue;
 - such data sources are sometimes faster than the slow, history-oriented accounting process.
7. *Accounting systems should not preferably be used to gather data on new topics (like the environment). The only reason to gather such data in the FADN is if the policy makers are interested in the relationships within the farm between e.g. policy measures (subsidi-*

dies, quota, intervention prices) on one hand and the effect on income and (e.g. environmental) performance/behaviour of the farm at the other hand

Reasons:

- if one is only (!) interested in environmental issues, and not in the relationship with income policy, farm management or the CAP measures, other methods of gathering data could be more efficient;
- gathering such additional data could burden the farmers as well as the collection system too much, with the effect that a severe risk of collapse for the whole system exists.

However:

- in a number of cases this information is needed for policy makers, as they need to understand the relationship between policy interventions, income and farm management;
- in a number of cases this information is available in member states, and/or the FADN in the cheapest way (low marginal costs) to collect the information.

Therefore:

- the available information should be exchanged internationally;
- these examples should be used to learn other countries to innovate in such domains, and to take away incorrect impressions of the possibilities to collect such data in an FADN;
- alternative methods to gather such data (e.g. from non-accounting sources) within the FADN network should not be ruled out in advance. Not the method of collection but the quality of the data should be the criterium in usefulness of the data.

8. *Data can be exchanged between the member state and the European Commission on 4 levels:*

- *basic data (e.g. Farmer X has paid EUR 150,- on April 5 2003 to buy 300 kg of fertilizer for his sugar beet crop);*
- *the level of the current farm return: aggregated basic data per type of transaction (e.g. value of opening stocks, production, sales, closing stock, farm consumption of wheat in table K);*
- *standard statements (like a profit and loss account etc.) with a detailed level of information (e.g. output of common wheat, received LFA subsidies, costs of pesticides);*
- *standard statements with a rather high level of information (e.g. crop output).*

The farm return should be based on the accounting statements (balance sheet, profit and loss account, enterprise margins etc.) which are familiar to accountants. This is also the form in which the data are published, but the collected data should be at a more detailed level than normally published at the so-called level I and II used in current publications. Thus for a number of reasons to set out below, it is proposed to use in FR2000+ the third instead of the second level.

Advantages:

- data-items that are only gathered for calculations of indicators (e.g. stocks of individual crops in table K) can be dropped: simplification and less errors;
- the member states become familiar (subsidiarity) with the calculation rules used for RICA indicators (e.g. output beef, livestock units), which means that:
 - a) there is an incentive to use harmonized indicators in their own publications;
 - b) they can calculate these indicators and publish them directly when they finish their own accounting year (or when they calculate pre-eliminary results) and data + publications can be sent to A/3;
 - c) national member states can answer questions why indicators on the WWW site of A/3 are different from national WWW sites (which is another incentive to change national habits);
- harmonization of data and methods can partly be based on external standards (e.g. IASC rulings);
- it provides incentives for the long-term to harmonize publications and hence national farm returns.

Disadvantages:

- some special statements (which are not in normal accounts) have to be created to satisfy special data needs for agricultural policy research, like 'Farm Structure Statement', 'Statement for specification of subsidies';
- A/3 can have the feeling that it loses some freedom to publish (not: to calculate internally) new indicators without consent in the RICA committee that an indicator has to be added;
the RICA network becomes (more) leading in accounting methodology, which can lead to extra questions or critics.

9. *Based on the information from the member states the structure of the new farm return should make it possible to exchange data on the following statements:*

HARD CORE (obligatory for all 60,000 farms on an annual basis):

Farm structure statement (\leftrightarrow more or less comparable to table A (general information) ESU, labour input, UAA, detail of UAA, total livestock, detail livestock) \leftrightarrow tables B (UAA) + C (labour) + D (number and value of livestock) + E (livestock purchases and sales);

Profit and loss account (output statement (total output, crop output, detail for each crop, animal output, detail for each category, other output) and inputs statement) \leftrightarrow tables E + K (production except livestock) + F (costs);

Statement of subsidies \leftrightarrow table J (grants, subsidies and compensation payments) + M (compensatory payments);

Flow of funds statement (depreciation, loans, investments, net-outflow of capital);

Balance sheet (total assets, fixed and current assets, liabilities and net worth) \leftrightarrow tables G (land and buildings, dead stock and circulating capital) + H (liabilities) + L (quotas and other rights).

VOLUNTARY (additional for sub-samples, sometimes only available in some years; proposal based on 5 member states who have already such data available for subgroups):

Mineral balances: data available in 6 member states: Austria, Luxembourg, Ireland, Netherlands, Finland and Sweden and. In total 11 member states suppose there is an interest in such data and 12 think it (technically) possible to collect them.

Costs of production (gross margins per enterprise/activity, allocated costs, physical data for costs calculation): Gross margins available in the eleven member states Austria, Belgium, Denmark, United Kingdom, France, Italy, Luxembourg, Netherlands, Ireland, Portugal and Sweden and in total 13 member states that suppose there is an interest and that think it technically possible to collect them. Costs of production data are available in 8 member states, and in total 12 member states suppose there is a technical possibility to collect them. For technical data to support the estimation of costs of production, the situation is equal to that of gross margins;

Diversification in the farm (organic production, processing on farm, agri-tourism, landscape maintenance) and forestry: data on organic production are available in the 9 member states Germany, Austria, Belgium, Denmark, Finland, Italy, Luxembourg, Netherlands and Sweden. In total 14 member states think it is possible to gather data on such farms. Data on farm processing and direct sales at the farm are available in the nine member states Austria, Belgium, Finland, France, Italy, Luxembourg, Netherlands, United Kingdom and Sweden. In total 13 countries think it is technically possible to gather such data. For agri-tourism data are available in the nine member states Austria, Belgium, Finland, France, Italy, Luxembourg, United Kingdom, Netherlands and Sweden, In total 13 countries think it is technically possible to gather such data. Data on landscape maintenance are available in the 5 member states Belgium, France, Luxembourg, Netherlands and Sweden. In total 10 countries think it technically possible to gather such data. Forestry data are available in the 7 member states Germany, Austria, Denmark, Spain, Finland, France, and Sweden. In total twelve countries think it is technically possible to gather such data;

Activities outside the farm and income and wealth outside the farm: data on activities outside the farm are available in 5 member states: Austria, Denmark, Finland, Netherlands and Sweden. In total 10 member states think it is possible to gather such data. Non-farm income data are available already in seven member states: Germany, Austria, Denmark, United Kingdom, Finland, Netherlands and Sweden. In total nine countries think that gathering such data could technically be possible.

Not be included in the FR2000+:

POTENTIAL (less than 4 member states who have the data available):

Other environmental data (pesticides indicators, energy consumption, water-balances, deforestation). It should be noted however that about 50% of the member states think there is an interest for such data, and that it is technically possible to gather such data;

Integrated production, precision farming. Also in this case about 50% of the member states think there is an interest in such data and that they can be gathered.

10. *The EC has not many possibilities to require data which are not yet gathered in member states*

Reasons:

- the EC pays only a small amount of the costs of keeping accounts;
- stakeholders in member states and EC however have made clear that no new money is available, also seen the current performance problems.

Possibilities are:

- current budget for fees. The current fee could be lowered and the budget could be used to pay for new data items. This would be an incentive at least in some member states, and should be done, but it will not provide enough money to pay for the full cost of collection of e.g. gross margins on all 60,000 farms (even if this would be technically feasible);
- nevertheless find new budget;
- lowering the number of farms and using the budget for new data: same argument as for current budget. Stakeholders have also made clear that this would lower representativity too much. In countries that have more data nationally than for the EC it could be tried to convince FADN managers to take this road;
- writing a regulation that obliges countries to collect the data: such a proposal will most likely not pass the vote in the RICA committee or CSA (remember the non-farm-income case). If it could be coupled by the EC to a proposal to monitor Agenda-2000 and the national envelope it makes more chance as a package deal, but it is risky to count on such a strategy.

In conclusion: the most likely strategy is to take in all which is available, and to try to convince member states to shift their own resources to gather the data that the EC and other member states would like to have. Methods for convincing are:

- by helping them to learn from other countries e.g. by organizing workshops in the network;
- by giving individual or more detailed data on new topics in other countries only if they also provide such data;
- by publishing and providing to policy makers data with blank columns for a number of countries who do not supply data, to build up pressure on member states to make resources for gathering data available;
- reallocation of budget (see above).

11. *Obligatory data should not contain more details as needed for RICA objective number 1: monitoring income [or other monitoring issues based on a regulation – see below in the next point] and performing policy analysis to sustain farm income. Voluntary data are additions to make the data more useful for RICA objective number 2: policy research on specific policy issues where policies are still being developed*

Advantages:

- obligatory data should be in as soon as possible and therefore they should not be too detailed. 60% should be in after 6 months, 100% after 9 months. More voluntary details for policy research can be sent in later (it is not clear if this helps in the member states, but it can set priorities in A/3);
- it is in line with the current legislation. The basic regulation of the EU FADN describes the current farm return as needed for monitoring income, where for business analyses additional farm returns can be developed;
- for voluntary data, there is less need to be 100% representative (which is impossible), but of course member states should endorse these data as the best available;
- for some countries this would provide an opportunity to base the voluntary data (which should then include also the obligatory data) on databases which are now outside the national FADN. Or the EC could even ask competing national organizations for such data;
- there is a mechanism to transfer know-how on accounting from one member state to another: regions can learn how to gather e.g. non-farm income data from those that do; innovation is supported.

Disadvantages:

- data management in A/3 becomes much more complicated (although in the past the current farm return also had some voluntary items);
- although the current legislation mentions both objectives and the second one is the most important nowadays, the surveys from the member states learn that several FADN managers see the FADN as the representative sample for monitoring income, and associate voluntary data on subsamples as 'outside the RICA', so terminology is important here;
- confusion with users of tables with data can occur.

12. *For a number of data-items, the link between policy making and data gathering can and should be strengthened. Once that a regulation is passed for instance to hand out subsidies (e.g. agri-environmental), to install quota's etc (e.g. Nitrate directive), the member states can (in the same package deal) also be obliged to provide obligatory data on these items through the FADN (by amending the FADN regulations, there should be one set of regulations for the FADN).*

Advantages:

- closer link between RICA and users (policy making and policy evaluation);
- method to oblige member states to invest in their RICA;
- decision making on improving RICA becomes easier because it is not the RICA committee that decides to gather new data (who will often reject due to budget problems not due to unwillingness) but other management committees (e.g. on sugar);
- in line with the life-cycle of policy making: it starts with policy research on new topics and after a regulation/policy measure there is the stage of monitoring the effects;

- it could be argued (as the UK and Germany often do) that we should not pay for obliged data used for monitoring; we could then use the budget for voluntary data needed for policy research on new topics;
 - in line with the life-cycle idea, the planning of data gathering could be improved by working with an agenda on future decision making (gather sugar beet data in 1998, as we have to do research in 1999 to prepare the sugar policy 2001).
13. *There is nearly no experience in the FADN with gathering data before the end of the year. Therefore it makes no sense to include in the FR2000+ possibilities to deliver quarterly cash flow data or harvest estimations*

However:

- the obligatory data, to be in after 9 months, should be of such a quality that an improved RFS can be applied. The data should be specified enough to make a joint preliminary/forecast report (RFS) in the second week of December;
 - a test can be done in one of the member states (NL is trying to do this) if quarterly data is possible and makes sense for policy making.
14. *If the structure of the FR2000+ is available, we should not try as a RICASTINGS team or A/3 to harmonize all the details. This will in the coming years also **be an ongoing process** and the new FR is only feasible if the development and maintenance is organised as an ongoing process. The feasibility study should provide a structure for such a process, to be carried out in task forces. The process should include the instalment of new indicators, and even new statements, or making statements (like gross margins) part of the hard core*
15. *The new farm return could be modelled in such away that it supports conversion and makes new definitions over time possible. This is done by giving all data-items (entity types) a time-stamp, so the farm return can have an instruction on the profit and loss account from 1975 – 2002 and one on the profit and loss account from 2002 onwards*

Advantages:

- conversion from current farm return is supported;
- documentation on differences of definitions in FR2000+ with current farm return stays available;
- more quality in the definition of the new farm return.

Disadvantage:

- a bit more work to make the new farm return.

16. *The new farm return could be modelled in such a way that new statements (see previous points) can be added without changing the software that contains the new farm return. This will make it possible to include in e.g. 2005 a special statement on landscape maintenance or PECO cooperatives without changing the software*

Advantages:

- easier to make the FR2000+ structure (datamodel);
- less maintenance costs and easier to build.

Disadvantage

- data management in FADN becomes a bit more difficult;
- the system becomes more abstract which can be a source of errors in data management.

17. *The new farm return could be modelled in such a way that it supports the use of several languages*

Advantages:

- support of the several languages in the EU;
- easier to make the data definitions in a RICA multi-language working group.

Disadvantage:

- perhaps impossible to send a system for translation to a translation desk.

Advise: logical to do

18. *The new farm return could be modelled in such a way that it supports the conversion process. This is done by providing a possibility (entity type) to note down for each RICA indicator also per member state the national codes used and the formula used for conversion.*

Advantages:

- documentation on conversion will be created (a large problem is that this is now not available);
- the conversion formulas can be checked (compliance audit) before data are transmitted;
- differences between national data definitions and FR2000+ can be written down and thus difference in methods are made explicit;
- we should be open to the fact that there are a lot of definitions (e.g. on Livestock Units !) and we should make clear that the RICA can not always harmonize them, nor in the EC nor in Europe;
- a joint software program can be build to create conversion software that reads the national code and the conversion formula from the FR2000+ database, reads the national database and creates a message with the farm data to A/3.

Disadvantages:

- more complex database;
- member states should be willing to use this structure (fill in the tables with national codes) and to document their conversion program. But it's the price they pay if they use national codes and want a good conversion.

Advise: logical to do.

19. *In addition to the data content of FR2000+, a number of other aspects of the data should also be harmonized better*

These include:

- the definition of a farm. Roughly the definition can stay the same, or it could be harmonized with the farm structure survey: 'a single unit both technically and economically, which has single management and which produces agricultural products.' As forestry data is voluntary, it makes no sense to enlarge the definition of the field of survey to include farms with forestry only. However aspects like holdings with different locations, rented out farms etc. should be better discussed (even if member states don't see this as an issue);
- the accounting year: at least a strong preference should be stated for a January-December (civil) accounting year. Farms with another accounting year should be replaced by January-December accounts, unless this creates a clear bias. A different accounting year should not be an excuse to deliver data later than 30 September. It should be noted however that a few countries (although some announced a change towards the civil year) will have a problem with such a harmonization;
- valuation: in some cases (e.g. land values and stocks) the need for more harmonization in valuation (not taking tax-data but fair value) should be discussed.

It does not include:

- Typology: a number of member states have made clear that they are uncomfortable with the current typology. The FADN database (also with the new FR) makes the calculation of a lot of alternative typologies for policy research possible. The lead for creating a new standard typology is with Eurostat and the FSS, or at least a special project and not part of a new farm return.

20. *The new farm return should include data items to exchange data on the weighting factor of the farm*

Advantages:

- the current method in which A/3 calculates weighting factors looks at first sight harmonized but has the problem that it does not take care of sample methods which member states are explicitly allowed to use (leading to large overestimation of variables like e.g. milk quota in some countries). This would be solved;
- it saves work in A/3;
- this would even be more the case as we will in future also have to calculate weights for voluntary data, on which member states themselves should make clear the representativity;
- it is in line with the idea that member states should [also] be responsible for publication of results on their own country with (audited) EU methodology (subsidiarity);
- it leads to fewer differences between national and EU published data.

Disadvantage:

- instead of calculating weighting factors centrally, we will have to check national methods (compliance audit).

21. *FR2000+ should be an Internet application that shows all the instructions and guidelines from current farm return (adapted to the new structure and with clarifications that are needed at some places) in a database format*

Advantages:

- always the most up to date version available;
- easier to use than paper form;
- can be used in software;
- can be used when data are published on WWW or CD-ROM.

Disadvantages:

- not everybody prefers electronic information over paper (but you can always print);
- software for this database has to be build, where a paper version can be made with MsWord and a copier.

4.3 Feasibility of these needs

The basic question to be answered in this paragraph is 'is it possible to fulfil the requirements for a new farm return in a realistic way?' Figure 4.2 gives an overview of the abundance of information we have presented so far; it might be helpful to find our way in looking at the feasibility for FR2000+ as we started to call it.

Very briefly summarized figure 4.2 tells us that a new farm return is needed and that a new farm return can only be successfully implemented when organization and working methods will be adjusted.

4.3.1 Feasibility of data content

There are different views on the data content of the farm return:

1. there is on the one hand a group of persons who are not in favour of including (many) new data in the farm return;
2. on the other hand there are people in favour of increasing the data content of FADN with data on environmental issues, pluri-activity on the farms and non-farm-income.

The first group has mainly the following reasons for their (negative or reluctant) attitude:

- extra costs;
- non-acceptance by farmers (and in some countries also by accountancy-offices) which provide data;
- lack of quality of data;
- lack of representativity.

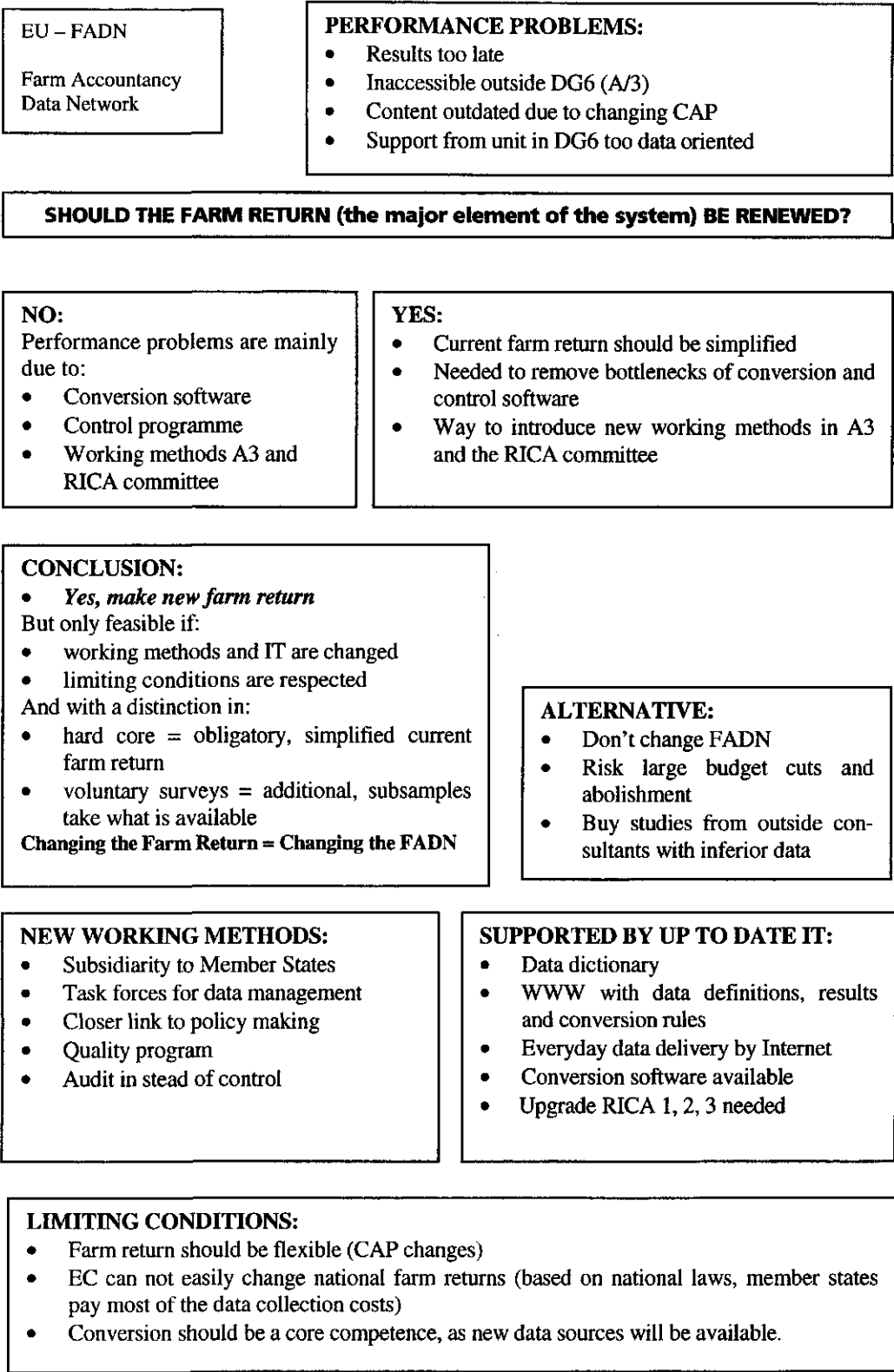


Figure 4.2 A bird's-eye view of the results

In this group some representatives stress that FADN has only as function to present data on income of farmers from agricultural activities. Some suggest also to get additional information by other sources outside FADN, for instance by special surveys.

The second group agrees with them on the fact that the actual farm return has to be improved (on the actual tables, see appendix 5), but finds it also (or even more) important to have new sets of data on the items mentioned (pluri-activity, environment, non-farm-income) in relation to the changes in the farm policy (CAP) and in the functions of agriculture. Linked to this it is also underlined that FADN has to invest more in policy analysis than (only) monitoring incomes.

In this group there are however differences in the views on which data can be added to the farm return. On the many aspects of these (new) items, the position and opportunity per member state to collect data are quite different. For instance in some countries data on agri-tourism are already available or can be made available in a couple of years, in others on forestry or on mineral balances or pesticides. The same occurs on data on special production systems as organic production, the processing and/or (direct) marketing of products on the farm, or on data on landscape maintenance by the farmer and forestry on the farm.

Besides that, on forestry there is a difference in opinion whether these data have to be integrated in the farm-account or separated from it. Users in DG6 stressed the importance of data on forestry (see appendix 6).

A major point, that is supported by many persons involved, concerning results of FADN in future is the need for data on gross margins (per enterprise and as far as possible per product) and on costs of production. This point is also very much stressed by DG VI. In fact for the calculation of the enterprise (branch of production on the farm) profitability it is required to include questions on variable costs and quantities for a set of production lines.

It is also clear that there is a need for more economic indicators, for instance on the effect of subsidies and levies on income and as well as of sale, purchase and lease of quotas and other production rights. For these economic data it would be feasible to integrate them in the (obligatory part of the) new farm return.

Survey	Topics tables	Current	Reference for harmonization
HARD CORE			
Farm structure statement	esu, uaa, awu, crops areas, lu	A, B, C, D, K	farm structure survey
Farm profit and loss account	inputs, outputs in Euro oly	E, F, K	EU accounting directives, IASC
Farm subsidy statement	subsidies per regulation	J, M	CAP regulations
Farm flow of funds statement	cash flow, investments	G	EU accounting directives, IASC
Farm balance sheet	capital, liabilities		EU-accounting directives, IASC
VOLUNTARY			
Mineral balances	nitrate and others		concerted action Elisa
Costs of production	gross margins, physical data	F, K	classex 44 on sgm
Diversification on the farm	organic production		
	processing on the farm	K	
	agri-tourism	K	
	landscape maintenance	J, M	concerted action Elisa
Activities outside the farm	forestry	K	concerted action Mosefa
	non-farm activities		Kshatriya study
	non-farm income/capital		Kshatriya study, OECD ewg2, B. Hill

Figure 4.2 Structure of the new farm return (FR2000+)

Survey	Topics	Countries that have data available, at least for subsamples in some years																
		available	gathering feasible	B	Dk	D	G	E	F	Ir	I	L	NL	A	P	Fin	S	UK
Mineral balances	nitrate and others	6	12						x		x	x	x	x			x	
	gross margins, physical data	11	13		x			x	x	x	x	x	x	x				x
Cost of production	cost of production	8	11	x	x			x		x	x			x				x
	organic production	9	14	x	x	x				x	x	x	x	x				x
Diversification on the farm	processing on the farm	9	13	x				x	x	x	x	x	x	x				x
	agri-tourism	9	13	x				x	x	x	x	x	x	x				x
	landscape maintenance	5	9	x				x	x	x								x
	forestry	7	11		x	x		x				x	x	x				x
	non-farm activities	5	9		x							x	x	x				x
Activities outside the farm	non-farm income/capital	7	13		x	x						x	x	x				x

Figure 4.3 Data availability (details in appendix 4)

Most countries are also interested in improved indicators for large entities; this is also of interest in relation with the enlargement of the EU in the coming years. On the other hand it does not seem necessary to adapt the definition of a farm; of importance is a direct link with the definition in the (national and European) Farm Structure Survey (FSS).

It is suggested in relation to these differences in views and opportunities to make a distinction in the farm return between:

- * a hard core of (obligatory) data; and
- * voluntary data.

For the voluntary (or optional) data this gives the opportunity for exchange between member states, without excluding the access to countries without those data. For the voluntary data it is suggested also to obtain them from sub-samples; this can be done at least at the start of the collection during some years. The voluntary exchange of data should be supported by developing common standards and definitions in the framework of EU FADN. It is stressed in this context that (also) for the voluntary data a minimum quality level is required, for instance on the representativeness of the samples.

Related to the distinction between obligatory and voluntary data, it is suggested to define different incomes:

- a. income from primary agriculture production;
- b. income from all activities on the farm including 'non or semi-agricultural activities';
- c. total income of the household, including off-farm income.

It has to be accepted that in some cases all these incomes can not be gathered or be separated.

In fact this means for the persons concerned, that there is in future no single EU FADN farm return; it will be flexible and adaptable during the years ahead. In this situation, it must be made clear what are the (common European) definitions of different return(-levels).

While there is no consensus as to whether new data and what kind of such data should be added, there is a common view of both groups that there is a need to improve the current farm return; the existing tables are too complex, contain in some respect too much details, which might be deleted, while other aspects should be included. Many suggestions in this respect are presented (see appendix 5 and the working documents: 'Replies to survey of FADN managers' and 'Results of the interviews with stakeholders').

It can be concluded that in this way the content of the farm return can be simplified and made more flexible.

When distinguishing obligatory from voluntary data it is important to be clear about which data belong to category obligatory and which to voluntary.

Basically the idea is that the indicators as represented in the current farm return are obligatory. New data in the farm return will be developed as voluntary data. In this way the methods for gathering the data can be developed in a 'safe' environment by the member states that already have incentive, experiences and expertise to extend to FADN in a specific area. A group of member states can develop the method and definitions further by dealing with the issue of harmonization for exchanging and comparing purposes. When this group has developed the method, tools, definitions etc. and some results to show what can be done with the data, there will be three options:

1. the data remain in the voluntary domain because except for the participating member states no-one is ready to deliver this data;
2. the Commission is interested and there is a strong need for an EU wide set of data; the voluntary dataset has to be transformed, by regulation, into obligatory;
3. the Commission is interested in the data but very much related to a specific CAP regulation; by making a link between the regulation and providing data on the issue by member states, the group of voluntary data suppliers can be extended. (Very rigidly: when using CAP subsidies, information supply can be formulated as obligatory in the regulation.)

Looking at the current farm return and results from the surveys, our proposal for obligatory and voluntary datasets is given in figure 4.3.

4.3.2 Technical feasibility

The technical requirements regarding the new farm return are:

1. central data-dictionary to store the data definitions and conversion formulas;
2. database for storing collected data;
3. connection between data-dictionary and database;
4. connection with the data dictionary for member states to work on the data dictionary (including security);
5. tool to develop conversion software from the data dictionary conversion formulas;
6. applications to send converted data from member state to central database;
7. administration tool to register centrally collected data;
8. tool to make the data in the central database and the data dictionary available for users (in aggregated form) on the Internet (including security).

The technical requirement concerning the conversion software does not mean that the Commission becomes responsible for conversion. It has been argued before that this is not feasible. It is an opportunity offered to member states to improve in time delivery with higher quality.

The technical feasibility for a FR2000+ largely depends on the technical infrastructure that will be developed in the projects RICA 1-4. An up to date IT environment contains databases that are either related to data-dictionaries or have a data dictionary functionality included in the database software package. For demonstration purposes a prototype data dictionary for FR2000+ is operational and available.

It is advised to have reviews on the RICASTINGS proposals by the consultants that will realize the RICA 1, 2, 3 and 4 tenders. This will improve the cohesion and efficiency of the projects.

4.3.3 Organizational feasibility

A new farm return is feasible from an organizational point of view. It seems that most FADN managers have become convinced that change is needed – the alternative is a stand still resulting in large budget cuts in coming years due to underperformance, and the risk that the RICA

regulation is abolished. In addition, the suggestions for FR2000+ as presented in the previous section makes it possible to introduce the new farm return in an incremental way, where the member state can choose the exact date, e.g. with a national change in software or the introduction of the Euro in 2002.

Concerning the hard core data set the organizational setting of the RICA does not have to change much. However especially the voluntary datasets will be critical in the organizational aspect. Many activities will be based on goodwill, which is not a reliable asset. A determining role in this will be played by the network manager. It is his/her task to trace the 'energy' in the member state to work on development and maintenance of voluntary data. It is important to find out and foster the incentives for member states to cooperate in a voluntary dataset. The opportunities for member state to exchange data with other member states should be stressed as well as showing useful publications available to the contributing member states. The experiences in the PACIOLI project, the results from the surveys, and the workshop with FADN managers in this project give hopeful prospects on the organizational feasibility of the voluntary data.

To build in more guarantees for maintaining the supply of voluntary datasets, it will be very useful to realize a relation between CAP measures and the obligation to supply the relevant data for a specific measure. However the organizational feasibility for implementing such a mechanism in the FADN is still to be explored, and depends on the future attitude of top-level policy makers towards the need for monitoring policy-effects as a part of the policy-making process.

4.3.4 Financial feasibility

The survey showed that it is a precondition that the budget for operation of the FADN should not grow. On the other hand member states also have an interest in the availability of data at EU level. The concept of voluntary data as described in this study is based on non-payment for data, the reward is the access to data from other member states. If necessary and possible the Commission could try to link data gathering to policy measures and take the position of Germany and the UK that it makes no sense to pay for an obliged task. This makes money available to pay for voluntary data.

A more ambitious scheme would be to cut the current fee per farm with e.g. 50% and to use the money for additional voluntary data (e.g. EURO 15 per farm per topic as mentioned in table 4.3). This would create a clear incentive for some member states to rethink their data collection. Although there are arguments to cut the fee for FR 2000+ (less details, improved support of conversion) it is unlikely that the FADN management committee will agree with such a proposal. Perhaps budget negotiations at a higher level (or connected to Agenda 2000) could be used to create such solutions.

However, the investments in development of a new FR2000+ system at EU level will bring a cost. Investments in new software in the member states do not need to be paid by the Commission, if the coordination (network management) and planning in time is done well. Several member states revise their software (software is old and adoption of new IT options is on the agenda) or have to do so in 2002 when farmers adopt the Euro. The new data dictionary will contain less data in the hard core and support for conversion, and this decreases costs in member states for data gathering and especially conversion software. On

the other hand member states can go on for several years (e.g. to 2005) to deliver in the old format, with conversion to the new format in DG6. Member states can therefore migrate at the moment of their own software investment.

For developing voluntary datasets it will be helpful if the taskforces that will set up such a dataset and develop the data definitions and description can be supported financially for their start up and sharing their experiences with other member states. These relatively small costs presumably will be compensated by the benefits of the availability for the Commission. If this should be not the case the member states will not be very eager to put effort themselves in development of the dataset.

4.3.5 Legal feasibility

The introduction of a new farm return would have an impact on the current legislation of the FADN (figure 4.5). The impacts are however small. The basic regulation of the FADN supports the introduction of special (voluntary) farm returns already excellently. The current farm return is seen as the farm return for monitoring incomes. The founding fathers of the FADN already concluded in the articles 10 – 13 that the second purpose of the network, business analysis, asks for special farm returns. An option that until now never has been worked out.

Current legislation	Main effects of new farm return	Time for implementation
Basic Regulation (79/65 Council)	Make objectives more clear and update use (article 1, indent 2 and 3)	As soon as possible
	Define the 5 hard core statements (article 7)	As soon as possible
	Change chapter III in "collection of accountancy data for the purpose of policy analysis" and set out procedure when and how a voluntary statement for this purpose will be introduced	As soon as possible
	Introduce articles on quality program, partly replacing current ones on verifying	After introduction quality program
Selection of returning holdings (1859/82 Commission Regulation)	Update in line with quality program	After introduction quality program
Collection, verification and forwarding data (1915/83 Commission Regulation)	Update if fee is paid for voluntary data or penalties are introduced for lacking quality (incl. in time delivery)	After introduction new farm return and quality program
Farm return (2237/77 Commission Regulation)	Limit period of validness to 2005 (or earlier) and announce a new farm return	As soon as possible
	Introduce new farm return	After introduction new farm return, and with only the most necessary details (e.g. only data items, no definitions and explanations)

Figure 4.5 Current FADN regulation and effects of FADN2000+

Nevertheless the text of the basic regulation deserves some updating: bring it in line with current practices and make clearer that special policy analysis are now much more important than the monitoring of income. These changes should be introduced as soon as possible as they are a necessary signal to the stakeholders; the new objectives are also useful as reference point in the working groups that have to renew the farm return. For the same reason the Commission Regulation on the farm return should be adapted in such a way that it is made clear that the return is not valid any more after a certain moment. That could help FADN managers in the member states to justify investments in the network in the coming years.

All these changes are small from a legal point of view, and are not a problem if the FADN committee agrees with the content of this report. Once the new farm return and new working methods are introduced, it should be discussed to which extent they should be written into Commission regulations. It is suggested that not a total datadictionary (the description of the database) is described in a legal text. This makes the system inflexible (or a legal text quickly rendered out of data by new technology as is currently the situation with texts on blocking factors of magnetic tapes) and is a major cost. It would be better to restrict it to the description of the statements or, at the most, a list of statement indicators. Instead it could be attractive to document the quality system partly in the regulations.

4.3.6 Major risks

The major risks involved in development of FR2000+ that can be identified now are:

1. Development of skills for network management in DG6 A3
Action: Development of skills of personal by training, partly on the job with task forces
2. The current reputation of FADN
Action: Much attention for PR around the FR2000+ project, and quick access to aggregated data on the Internet to the public (with a taskforce from FADN managers as editorial board)
3. Technical feasibility
Action: Work with pilot projects and prototypes, including external reviews
4. Work load of A3 unit
Action: Use knowledge and capacity from member states in task forces; networking instead of tendering
5. Continuation of current business
Action: First pilot for conversion is from old database to new database

4.3.7 Conclusion on feasibility DG6's needs

For conclusions on the feasibility of the FR2000+ it is helpful to use all the information gathered in the RICASTINGS project for assessment of the feasibility of the requirements for FADNs as stated by DG6; these needs are explicitly summarized in section 4.1.

1. *Alignment of the dataset to the evolution of the CAP*
This need can be fulfilled partially; an inventarization showed which elements are feasible for the hard core data and which for various voluntary datasets. Adoption of FR2000+, its IT environment and its working methods will result in a flexible system that provides DG6 in the future with more possibilities to learn member states to innovate and put them under pressure to deliver new types of data.
2. *Gross Margin and cost of production data*
Considering the large number of member states that already have these data available on subsamples, it seems to be very realistic to select this item to work out as the first voluntary data set. The need cannot be implemented 100% because in voluntary data use will be made of subsampling and 'we have to work with what we can get'. Putting this in the hard core, will lead to resistance from at least some member states and a risk that such proposals go the same way as the non-farm income data in the early nineties. In the long run it can be foreseen, considering the importance of this dataset, that it will be included in the obligatory data set.
3. *Having data in time including rapid results*
The late availability of data from the member states is only partly due to the complexity of the farm return (conversion software, control program and working methods being more important causes). However a substantial improvement can be obtained by implementation of the new farm return and the proposed working methods. The simplification of the farm return (less accounting details) and the higher transparency (more indicators than data-items) will support this. Replacing control software by audits and quality program will be an even bigger improvement¹. The biggest improvements come from including the conversion-formula in the database to take away the disturbing role of conversion software (see chapter 6), and from the introduction of Internet technology in sending in the farm data. With the new farm return data could be sent in as soon as the data from a farm are complete, instead of the current batch processing per member state². This will result in availability of up to date information and it might be that the 80/20-rule will prove its validity; it takes 80% of the time to complete the last 20% of the farms.
However including preliminary data in the farm return is not feasible as at the moment no member state has experience with that. Better forecasting systems are a more preferred option. The introduction of financial penalties could also help to respect deadlines.
4. *More flexibility, including a split in hard core and voluntary data*
When the network approach and the data dictionary is implemented successfully this will be feasible.
5. *Continuation of series of current indicators*
This is feasible, although some improvements (e.g. regarding to income per A.W.U.) should be considered.

¹ The issue will therefore be discussed in more detail in chapter 6.

² This topic is a bit outside the scope of this study. A vivid example of the proposed new working methods is given in the working paper 'RICASTINGS – the effect of a new farm return on renewed FADN'.

6. *Improvement of interaction with policy makers in other units of DG6 to solve problems of the complexity of the data.*

The network approach and the subsidiarity principle (member states responsible for calculation indicators) after implementation of FR2000+, will give the opportunity for the staff of A3 to focus on the policy analyses, and less room to focus on accounting methodology with policy makers. In case also in this area the network approach is extended to other units in the Commission (not only DG6), in this requirement significant progress is realistic; it has to be facilitated by networking skills of the staff.

5. Proposal for the content of a new farm return

5.1 Definition of the farm return

The new farm return (as the old one) should include data that are gathered at the farm (by asking the farmer) as well as data gathered from another source (e.g. IACS on subsidy data) regarding the same farm. This makes it possible in the regions to select the best data sources, given a minimum desired quality ¹. The argument that e.g. IACS data are already available to the Commission is not correct: not only that data, but especially the link of it with farm structure and income data is needed to do policy analysis. Data should be gathered in the FADN if the policy makers are interested in the relationships within the farm between policy measures on one hand and the effect of income and (e.g. environmental) performance of the farm at the other hand. If one is only (!) interested in e.g. environmental issues and not in the relation of it with the agricultural policy, other methods of data gathering could be more efficient. Integration of different data sources (e.g. fiscal accounts and IACS data) should be done at a regional level.

Information on the field of survey, data on regions in which the farmers are located (e.g. reference yields), and non-accounting data for the RICA Forecasting System are not part of the new farm return (FR2000+). Such data have to be exchanged in the FADN, but are (for the moment) left out of the scope of the new farm return.

The new farm return should be based on current information and communication technology, which is more likely a data dictionary available on the Internet than a book with punch forms and instructions. That has a number of implications. Some of them are technical consequences (e.g. in making the farm return in a data dictionary), others have also to do with the farm return as such. A data dictionary approach makes it possible to include documentation in all languages, and to support the conversion process (see the working paper 'RICASTINGS- the implications of a new farm return on a renewed FADN').

Another aspect is that the information technology makes it possible to make the farm return much more flexible. This asks for new working methods (chapter 6).

The definition of the farm itself also deserves some attention. Several FADN managers have made it clear (appendix 5) that they have problems with the current definitions and especially the operational questions in separation the farm from other rural activities (including forestry) and from the family (e.g. debts). A task force that makes the new definitions and instructions should address these questions. Also with an eye to farm selection and weighting, the definition of the Farm Structure Survey ('a single unit, both technically and economically, which has single management and which produces agricultural products') should be respected as much as possible.

¹ This study has not investigated this availability and the representativeness and quality of those sources. In principal it makes no sense to do so either as the member state is responsible to select the best data sources.

5.2 The position of the EU farm return compared to national/regional returns

As discussed in chapter 4, it is not feasible to replace the national returns by one EU return. National returns are geared to national needs and are sometimes based in commercial law. Where national governments pay a large part of the costs, and buy data from fiscal accounts, the abolishment of the national or regional returns is at the moment not feasible.

In a number of countries (especially in CEEC countries) however the use of the EU farm return for national purposes could be attractive and should actively be supported. By focussing on the published indicators, making the whole system transparent and making the member states responsible for the data published (with EU definitions) on their own country, there are major incentives for harmonization in the longer term. In addition the innovation process in the FADN, where member states learn from each other, should actively be supported.

5.3 Basic structure

The need for a flexible approach makes it necessary to design FR2000+ with an obligatory 'hard core' (obligatory for all 60,000 farms on an annual basis) and a flexible, voluntary part. The hard core should be a number of accounting statements that are together a simplified version (with improved data definitions) of the current farm return. These data are available and this approach supports an easy transition from the old farm return to FR2000+.

Figure 4.3 provides an overview of the statements in the hard core. The table also contains a proposal for surveys (statements) that will be voluntary. This is based on results of the survey. The criterion for inclusion has been that at least 5 member states have already such data available, at least for sub-samples in some years. This also means that a number of items will not be included in FR2000+ in the first years. These are environmental data on pesticides indicators, energy consumption, water-balances, and deforestation as well as data on integrated production and precision farming (although in all these cases about 50% of the member states think there is an interest for such data, and that it is technically possible to gather such data) and data).

Harmonization of data and methods can partly be based on external standards (e.g. IASC rulings), which makes the harmonization process easier and promotes comparability of data with other sources. Therefore harmonization criteria are included in figure 4.3 and appendix 5, which does not mean that such sources also provide enough rules for standardization.

The split between hard core and voluntary data implies a mechanism to transfer know-how on accounting from one member state to another: regions can learn how to gather e.g. non-farm income data from those that do; thus innovation is supported. A disadvantage is that data management in A/3 becomes more complicated.

The data content of the hard core will be much more focussed on the first objective of the FADN: monitoring income developments (including policy analysis on sustaining farm income) and will be based on standard accounting statements like balance sheet and profit and loss account. This implies that data on internal use and allocation of costs will be deleted. Detailed accounting data (stocks per crop) will be replaced by indicators. This

lowers costs, and makes a quicker delivery of data possible. On a number of items (among others: AWU, product codes, land values, quota) task forces will have to improve the data definitions, as FADN managers now complain on lack of guidance. The specification of the profit- and loss account as well as the subsidy statement, makes it possible to use the data for the RICA Forecasting System, as well as to perform policy analysis including the use of models to allocate costs (as far as this does not ask for volume data or enterprise data).

5.4 Voluntary data

Policy analysis on sustaining farm income can be done with the hard core set. To support the second objective of the FADN better (performing policy research on other topics) voluntary data should be exchanged.

Voluntary data are additions to make the data more useful for the FADN objective policy research, especially on specific policy issues where policies are still being developed. Monitoring is related to evaluating established policies, where policy research often deals with new policy proposals and identifying policy issues. This is often on topics where policy making is in a more exploring stage.

For voluntary data, there is less need to be 100% representative for the total FADN field of survey, but of course member states should endorse these data as the best available. Sub-samples could be used as a source. For some countries this would provide an opportunity to base the voluntary data on less representative databases which are now outside the national FADN. Or the EC could even ask competing national organizations for such data. A minimum quality level and quality documentation should be needed.

Although the current legislation mentions two objectives (monitoring income and business analysis) and the second one is the most important nowadays, the surveys from the member states learn that several FADN managers see the FADN as the representative sample for monitoring income, and associate voluntary data on subsamples as 'outside the FADN', so terminology is important here. The objectives should officially be re coined as 'monitoring and analysis of income and other official policy objectives' and 'policy research'.

For a number of data-items, the link between policy making and data gathering can and should further be strengthened. Once that a regulation is passed to hand out subsidies (e.g. agri-environmental), to install quota's etc (e.g. Nitrate directive) the member states can (in the same package deal) also be obliged to provide obligatory data on these items through the FADN. This has a number of advantages. It leads to a closer link between FADN and users (policy making and policy evaluation), it is a method to oblige member states to invest in their FADN and thus improves decision making on the FADN. It is then not the FADN committee that decides to gather new data (who will often reject due to budget problems not due to unwillingness) but other management committees (e.g. on sugar).

In this respect the distinction between voluntary and obligatory data is in line with the life-cycle of policy making: it starts with policy research on new topics (using the best data available, but often voluntary and not fully representative data) and after a regulation is passed there is the (obliged) stage of monitoring the effects.

Member state should be free in choosing their data sources for voluntary data, but they should endorse these as the best available, and give information on the representativity (including weighting factors) and the quality of the data. A quality process with audit processes should be organised to control this quality.

At the moment there is not much information available on the quality of the potential voluntary data sets in the member states. It is however also not a very important item at the moment, and at best a topic for further study. The member states see these voluntary data as the best available (and worth spending the costs) and the quality process will document the quality of the dataset. The quality can also be judged only in relation to its use.

If a data source is used that provides data on farms that are not in the hard core sample, not only the voluntary data but also the hard core statements from those farms should be supplied. Voluntary statements provides room for member states to collect some data (like on non-farm income) only in certain years. It will not be feasible for the Commission (unless it starts to pay for these data), to harmonize these periods of survey between member states. Note however, that most member states have such data sets for subsamples already for a long time (e.g. non-farm income, mineral balances, gross margins).

5.5 Costs of production

DG 6 is (at least at the moment) especially interested in better data to estimate incomes and cost of production for the enterprises that are subject to a 'heavy' market regulation (like milk, cereals, oilseeds, tobacco, sugar, olive oil, beef, wine etc.) In the past it has even been tried to buy such data from other sources and currently much time is spend on calibrating arbitrary allocations of costs and subsidies to enterprises. As farm income is sustained by product-oriented policies, the analysis of costs production is regarded as an important methodology in monitoring or/and policy research on income developments. Appendix 5 shows that 11 member states have data on gross margins and physical data (e.g. yields) for at least sub-samples. The quality of that data is not exactly known, but it is at least good enough to be used and financed in the member state itself. Some of these data sets (e.g. in Denmark, the University of Cambridge) are well known and used in European policy making if the analysis has to be restricted to main regions. In addition to those 11 countries, others think that data collection could be feasible (apart from financial aspects) and have an interest in exchanging data with other countries. This leaves Finland and Germany for the moment without such data.

In addition to gross margins, eight member states indicated that they have even more detailed costs of production data, in which farm overheads and other costs are allocated to enterprises. As such allocations can be highly arbitrary, and are of limited use to model farm decisions, some caution is necessary in this domain. Nevertheless it seems possible, after the introduction of the data exchange on gross margins and physical data per enterprise, to study with a task force on the possibilities to exchange data on cost prices of agricultural products.

Task forces can harmonize the indicators used in these statements. In addition a quality process (including auditing) should be organised.

5.6 Other areas for voluntary data exchange

As shown in figure 4.3, there are a number of other areas where data are already available in member states, and a voluntary data exchange could be started. In the environmental domain only mineral balances reach at the moment the, arbitrary, level of at least 5 member states with data on a subsample. However some of the countries also have data on pesticides, energy and other environmental issues.

On new production systems or rural activities, data are available on processing on the farm, agri-tourism, forestry, organic farming and even landscape maintenance. Non-farm activities and, even more, non farm income are also topics for a voluntary data exchange. This shows that this inventory should be taken with a small grain of salt: in the beginning of the nineties, many more member states than shown here, were (based on the so called Katsada study) willing to provide data on non-farm activities. This shows that a good dialogue and an open process with member states could lead to changes in national data gathering.

On a number of items there are at the moment not enough data available to start a task force on exchanging the data. Two of them deserve a few words. The aspect of the large legal entities in farming (who are e.g. responsible for a large share in poultry production in some member states) should certainly be discussed in relation to the definition of the farm in the farm structure statement. Also the income indicators in the profit and loss account should be good enough to describe their economic position. However there is at the moment no reason to start a discussion on the maximum size used in some countries in the FADN panel. It's better to postpone this discussion until the integration of the FADNs in the CEEC (preferably before instead of after their accession).

The second item in this respect is the so-called Rapid results. Seen the long delivery times of national data to DG6, it has been suggested to investigate if some key data could be delivered earlier. The surveys in this project show that there is at the moment no experience at all with this approach, and only one country is starting to try to collect quarterly data. It is therefore better to restrict the hard core to the most essential data needed for income monitoring, and to make sure (by eliminating as much as possible the control process and even with financial penalties) that data are in after 9 months, to be updated by a good RICA Forecasting System.

5.7 Organization

The proposed structure for FR2000+ means that this farm return will never be ready or complete. At any moment new indicators, statements, languages etc. can be added under the procedures established in the creation of FR2000+. This means that this study will not try to harmonize all the details. This will in the coming years be an ongoing process and the new farm return is only feasible if the development and maintenance is organized as an ongoing process, mainly to be carried out in task forces. The process should include the instalment of new indicators, and even new statements, or making statements (like gross margins) part of the hard core.

The FR2000+ should be an Internet application that shows all the instructions and guidelines in a database format. Such an application shows always the most up to date version

available and is easier to use than a paper manual, as it can be used in software and when data are published on WWW or CD-ROM. Such an Internet site can be enriched by facilities like discussions platforms for users with questions and remarks. Partly it can be password protected, to give FADN managers and task forces a tool for joint discussions and for maintenance of the farm return and its conversion formulas.

6. Managing a new farm return and changes relative to the current organization

6.1 Need for IT support

The new farm return FR2000+ has to support the FADN and DG6 A/3 in a data exchange that is characterized by flexibility (the CAP is a moving target and new data sources arise) and where conversion from other data sources is necessary. Therefore the farm return should be based on the form in which the data are published, but the collected data should be at a more detailed level than currently published (at level I and II). The main advantage to choose this option are simplification (and hence less errors), subsidiarity, transparency (the member states become familiar with the calculation rules used for RICA indicators like output beef and live-stock units and can explain them to users), speed (member states can calculate indicators when these close the accounts), comparability (there are external standards from e.g. the IASC for accounting statements) and harmonization (there is an incentive for member states to harmonize as the national indicators are going to be additional to EU indicators instead of the other way around).

There are two types of data-models imaginable that support such a farm return. The first type explicitly contains all the statements that are part of the FR2000+. Figure 6.1 provides a list of entity types that are part of such a data model. The advantage of such a model is that is clear what the data model describes, and it is perhaps easier to check the quality of all the details of such a model.

However the disadvantages of such a model are not be overlooked: it is a relatively large model to make, to realise in a database and to maintain. This is especially true if also entity types are added to support different languages and conversion (see chapter 4). Another main disadvantage is that it is inflexible: if a number of member states would like to exchange data in 2003 on e.g. water use or CEEC cooperatives, the data model has to be adapted to make this possible.

For this reason it is advised to create a data model on a more abstract level, by grouping all the entity types of statements (see figure 6.2) together in one entity type 'Type of statement', those of indicators in 'Statement indicator', and those of data values 'Indicator data value'. Of course the higher flexibility and lower development costs have a price: the system becomes now so flexible, that central data management can more easily make mistakes or introduce new statements and indicators to easily (e.g. without thoroughly discussing the harmonization and collection issues with the member states). This asks for a qualified data manager and organizational procedures. Where in the past inflexible systems secured the risk of thoughtless introduction of new indicators, organizational procedures (handbooks, documentation, quality management, task forces, decision taking in the RICA committee) will now have to do their work.

Reference entity types (entity types that describe the data a)	Data value entity types (entity types that contain data values)
Member State (name, abbreviation, currency, name FADN responsible)	Region (name, code, LFA status, reference yield cereals etc.)
Balance sheet (name, period valid, description, harmonization base)	BS indicator (name, definition, instruction, code old Farm Return etc.)
Profit & loss account	P&L indicator
Gross margins	GM indicator
Non farm income	NFI indicator
Farm structure	FS indicator
Mineral balance	MB indicator
Geografic information	GEO indicator
Crop category (name, description, instruction, code old Farm Return)	Animal category (name, description, instruction, LU-value, code old Farm Return)
Type of product (name, description, definition, code old Farm Return)	Type of subsidy (name, description, instruction)
Type of labour (name, instruction)	
	Accounting year
	BS data value (identifier BS indicator, value)
	P&L indicator data value
	GM indicator data value
	NFI indicator data value
	FS indicator data value
	MB indicator data value
	GEO indicator data value

a) Between brackets: some examples of attributes.

Figure 6.1 Examples of entity types of a data model with a detailed listing of all relevant statements

A first version of such a flexible data model is given in figure 6.1¹. Central entity types are Type of statement, Statement indicator and Indicator data value, as discussed above. Data values can be numbers (normally), text, or domain values (a choice from a limited list of -text- values). For the moment one entity type Category has been added, as a reference table for crop category, animal category, enterprise category (for gross margins), product category and type of subsidy. Statement indicators can then refer to such a category. Category itself has subcategories to document aggregation (cereals is the sum of wheat, barley etc.). For the purpose of this report this is more than enough to check the approach advised, but for the implementation it should be checked if this is consistent as well as flexible enough. Otherwise the table should be normalised.

¹ For more information on the data model, see the working document *RICASTINGS - the implications of a new farm return on a renewed FADN*.

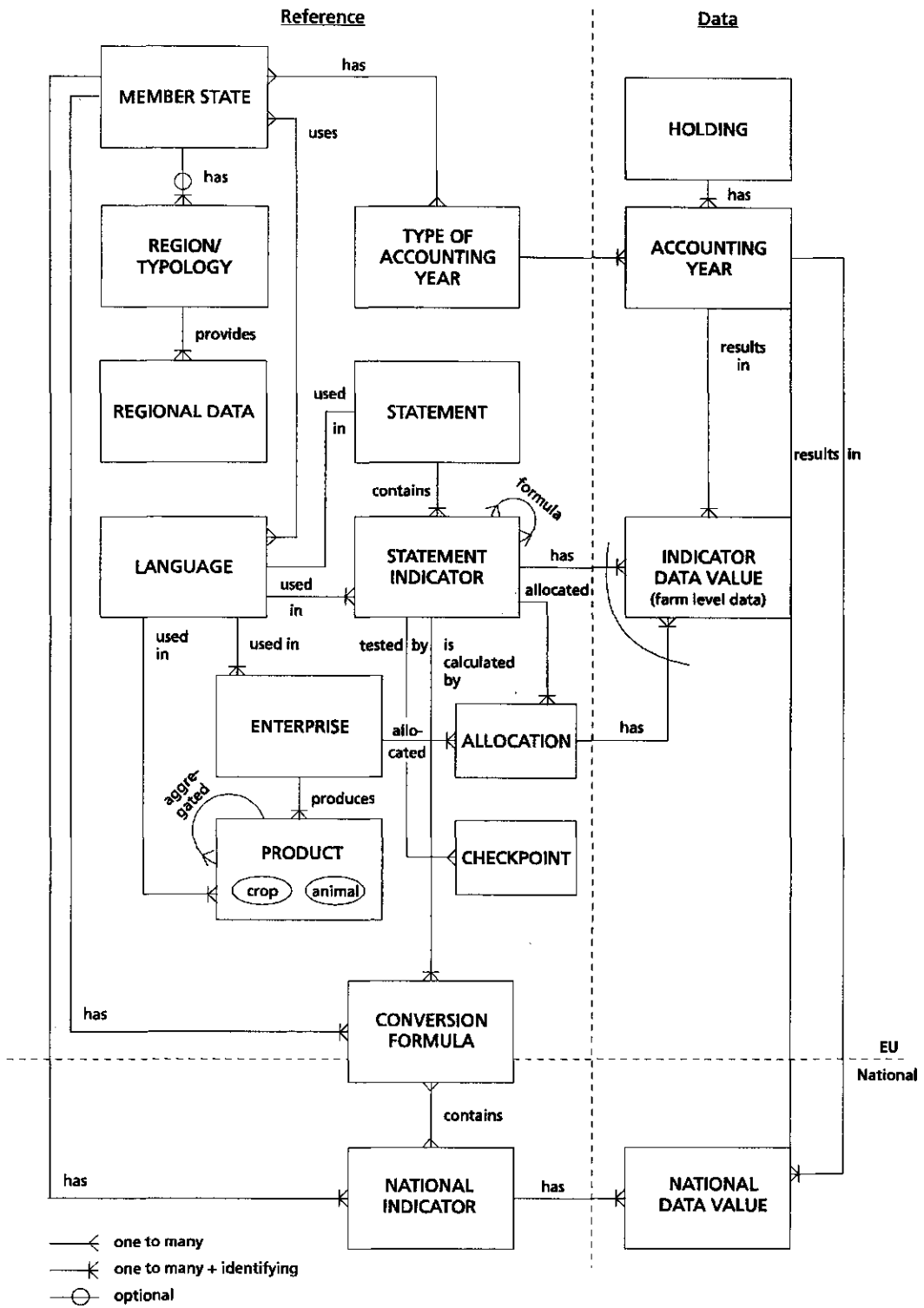


Figure 6.2 Data model Data management

The attributes of Type of statement and Statement indicator provide possibilities to connect the references to a certain period. So it is possible to identify entities for Type of statements like Balance sheet old farm return (valid 1.1.1975 - 31.12.2002), Balance sheet family farms FR2000+ (valid from 1.1.2000 onwards), Balance sheet limited companies FR2000+ (valid from 1.1.2003 onwards) etc. This supports conversion as well as flexibility.

Indicator data values are provided for a certain Accounting year for a certain Holding. As there are a limited number of accounting year types (preferably only the civil year) these have been added and have been identified per member state. Geographical information could be made available in a type of statement (with indicators like postal code, altitude, LFA status etc.). A special entity type Region is than not needed. However, some information is at the moment gathered at the regional level, like reference yields. For this reason this entity type has been included.

To support the language problem (the farm return has to be easily accessible for everybody working in the FADN), an entity type language has been added, that co-identifies all entity types that include text. This is not a 100% solution (although a huge improvement over the current situation): the data model itself is in one language (preferably English to communicate with IT experts and to use texts from e.g. the IASC) and hence words like Type of Statement and 'name' (thus the labels of the entity types and the attributes) are in the main language English. However the texts in the data dictionary (Balance Sheet as an example of a name), can be stored in any language including future relevant ones.

Conversion will be supported by the entity type Conversion Formula. For each member state the Statement indicator has a Conversion Formula that links it with one or more national data items (which have a national data value). This relation is deterministic, so in principle software can be written to calculate an EU FADN Indicator data value on the basis of the Conversion Formula and access to the national database. As these data bases differ, this software needs to have several versions or other provisions to read in databases like Oracle, Sybase, MsAccess, Gemstone etc.

Responsibilities

This leads to the discussion who should undertake the work to fill such a database: it is quite a task to translate instructions from the farm return and to store all the information on the conversion formula. Although this is at an early stage, it is important to face this question. It not only concerns the feasibility of such an approach, but also helps to throw a light on the unclear responsibilities of the current situation. Also based on the discussions in the workshop with FADN managers, figure 6.3 makes a suggestion for the division of work.

To make responsibilities clear ('if many persons are responsible, nobody is') the member state input has been split into four types: the local accountant, the national liaison agency, national experts (mostly from that agencies) that cooperate in task forces and the FADN management committee. This is counterbalanced by A/3 which has been split in 3 'sub-units': the management (head of unit and e.g. staff functions like informatics management), the A/3 RICA desk and the A/3 Micro-economic study desk. This list makes also clear that some persons play sometimes several roles, which can be confusing, but also efficient.

org.unit	local accountant	national liason agency	task forces national experts	FADN management committe	A/3 RICA-desk	A/3 Micro-econ.study desk	A/3 management
PROCES							
Strategic planning				C			RAEW
Network management					RAEW		
Manage taskforces			C				
Organise RICA committee				C			
Make legal arrangements				A			A
Make financial arrangements				C			
Organize m.s.compliance audits		C	EW	A	R		
Make yearly quality report			EW	A	R		
Data management			EW	A	REW		
Maintain FR data definitions			EW	A	REW	E	
Maintain FR formula indicators			EW	A	REW		
Maintain conversion formula		RAEW					
Maintain typology			EW	A	REW	E	
Maintain farm selection+weight.			EW	A	REW	E	
Publish farm return			E	A	EW		R
Provide and analyse test data			EW		RA	E	
Operate help-desk farm return		EW			RAEW		
Database management					RAEW		
Receive FSS and SGM data					RAEW		
Receive member state data					RAEW		
Follow progress data delivery					AEW		R
Check member state data					RAEW		
Check representativity data					RAEW	E	
Operate help desk data users		EW			RAEW		
Data collection							
Translate FR into national fr.		RAEW	E		E		
Collect data at farm level	EW	RA					
Convert data to farm return		RAEW			E		
Operational management							RAEW
Informatics management							RAEW
Publish FADN results			EW	A	R		
Maintain WWW-site			EW	A	R		
Support external users		EW			RAEW		
Policy analysis		E	E			RAEW	A
Making RFS forecasts						RAEW	A
Maintain RFS methodology						RAEW	
Organise member state data						RAEW	
Receive data sector inc. index		EW				RAEW	
Make forecast with task force			EW	C		RAEW	
Publish analysis						RAEW	A
Analyse quality of forecast						RAEW	

Figure 6.3 Suggestions for the division of work between member states and A/3

Symbols: R= responsible (person functions as projectleader, looks after quality and progress); A= authority (organization/person takes formal decision); E= expertise (person/organization provides know-how); W= work (person carries out that activity); C= consultation (due to the network character of the FADN network, a person/organization that is consulted).

Strategic planning, Operational management and Informatics management are mainly out of the scope for the farm return and have been attributed in figure 6.3 to the A/3 management. Policy analysis have been attributed to the A/3 Micro economic study desk, with some authority (e.g. on releasing a study to a client) with the management. It can be attractive to tap the expertise of national experts. The same is true for the RFS forecasts, but here the role of national liaison agencies (providing data) and a task force makes it more a cooperation with member states. The authority for releasing the results however is not the decision of the FADN committee, but of the A/3 management. This in contrast to the publishing of final FADN results: there it is suggested to see the national member states as 'owner' of the data of their country that they have to calculate with EU methodology. Authority for publication is therefore with the FADN committee, with a task force to do the work and A/3 facilitating by being responsible.

The FADN committee has been pictured in figure 6.3 as a body that 'only' has an authoritative role ('rubberstamping decisions that have been prepared by the RICA desk with task forces'). It is not wise to give this committee the role of responsibility for organizing activities: a whole committee can not be project leader, and this job would then fall to the A/3 management that chairs the committee. As task forces have a limited lifetime, they are also not in the position to carry out this task. For this reason the responsibility has been attributed to the RICA desk: with this desk A/3 facilitates the cooperation between member states in providing harmonized data. The A/3 RICA desk carries out database management and important parts of data management and network management. However member states provide expertise and carry out most of the work (for which financial arrangements have to be made). The liaison agencies are solely responsible for the maintenance of the conversion formula in the farm return and for the translation into their national language. The software of A/3 supports this and their incentive is that this supports the conversion process as the software for conversion needs these conversion formula. At the moment national systems are improved or changed (e.g. with an eye to the EURO) there is a good incentive for member states to carry out this maintenance task.

6.2 Role of the conversion and control program

Once the data have been defined ('meta-data') in the data dictionary, it is known what data has to be collected. A second issue is than the control program. This is now in the first place used to check the conversion process by the member states, and is seen as a major bottleneck in the timely delivery of data (see table 3.1). Based on the experiences in the workshop with FADN managers it is suggested to take a number of measures to solve this issue:

- the data dictionary includes the formula to convert member state data to the FR2000+ format, which means that the conversion process is documented and progress on adopting changes in definitions can be tracked;
- the conversion formula in the data dictionary can be audited in advance instead of at the moment of actual data delivery with the control program;
- member states are made more responsible for the calculation of indicators and (weighted) results with FADN methodology. This means less bottlenecks in A3 and

- less errors or quicker repairs of errors as member states have more transparency between data and results;
- a quality program is installed to check the work carried out in the member state and to foster innovation and learning in the FADN network. In the working document 'RICASTINGS - the implications of a new farm return in a renewed FADN' detailed proposals for such a program (including a yearly quality report, standard documentation etc.) have been worked out;
 - in general audit procedures should as much as possible replace end-of-pipe checking. This also support member states in innovation, including control programs in PC software used in data collection.
 - of course in the end there should always be some checking of data (although indicators are more difficult to check than detailed accounting data) and especially (weighted) results.

The control program should, like the FR2000+ data dictionary (in which the controls can be documented) be maintained by task forces from A/3 and the member states. A task force on the quality program could develop a methodology for the audit process.

6.3 Changes in working methods

The introduction of the new farm return in an enlarging European Union, making use of modern information and communication technology, makes that new working methods for the FADN committee and A/3 have to be introduced.

Stakeholders and FADN managers expressed the need for a clear assignment of responsibilities. This is even more the case if data are more accessible and FR2000+ replaces the current farm return. Complexity and the need for flexibility ask for a more organic approach (see figure 4.1).

Member states will be responsible for the quality of the data they supply to the EU database. Core activity of the A3-unit is on using micro economic data for policy studies for the Commission. As the FADN is the main supplier of this data, it is for DG6 important to be involved in its management: this brings the FADN close to its users and gives DG VI access to national know-how on policy studies. The RICA committee will remain responsible for the compulsory data set, the quality system and the guidance of task forces of member states to exchange voluntary data sets.

This situation is roughly in line with the current regulations on the FADN. However, in practice the support of data supply and data publication by A.3 has been overshadowed by managing the conversion and checking of data at the end of the pipeline. This needs to be replaced by a quality program, based on stakeholder interaction for stimulating 'user defined quality' of the data and a peer-review system for exchanging expertise and experiences between member states.

For operating the new system three tasks will be available at EU level:

- a database manager for the technical assistance in inserting data by the member states and making the data accessible for users;
- a data manager for maintaining the definitions in the data dictionary and identifying new data requirements in DG VI;
- a network manager for co-ordination of member state activities, especially for initiating and facilitating task forces that concentrate on the quality system and standardization of especially the voluntary data sets.

These tasks are not new, but especially data management and network management become more important. It is advised to make explicit functions for them, freeing policy analysts from these tasks.

For the implementation of the new farm return, two types of tasks are needed:

- activities regarding the development of the IT infrastructure and software (selecting data dictionary and database, developing network-infrastructure, creating conversion software);
- activities to make detailed data definitions, a quality program and a WWW site.

The IT tasks can be built in or upon the current IT projects RICA 1, 2, 3. The other activities can be sourced out with a tender procedure to taskforces.

The changes are provided in key words in figure 6.4

6.4 Change management

As shown in the Bird's-eye view of the results of this study (figure 4.2) the change to the new farm return is a major operation, that changes the heart of the FADN. It will need the intensive care of the management of DG6 A and the FADN committee, at the level that is normal for 'heart surgery'.

For this reason it is advised to implement the new farm return with a relatively quick time table (change processes should not run too long) but with a number of pilots to test the approach and to convince more reluctant staff and member states that the approach chosen really works.

	Before	After
Data definition management	Not carried out: farm return unchanged	A/3 Network and Data manager make proposals with taskforces
Making changes in data content	Carried out by A/3; FADN managers feel not involved enough	Carried out by task forces under guidance of FADN committee. Results consolidated by A/3 data manager. Data management becomes more important and more time consuming (but database management and control less so)
Conversion regional/national to EU structure	Carried out by undocumented, not audited software	Carried out with conversion formula from database and audited in advance
Maintenance of conversion programs	Each country has own software, undocumented	Make one program or one per type of database
Control of data content and consistency	Mainly done by A3 to check conversion process	Support checks at input, make member states responsible for end results (transparency), audit, check directly when individual farm is send in by Internet
Checking published results (with or without weighting)	Nearly not done due to lack of transparency	Member state responsible, audit process, better possible due to more transparency, improve use of data for feed back
Assuring quality of voluntary data	Not available	As hard core data (but with less requirements on representativity and therefore more on the documentation of the representativity)
Link to information/policy needs	Has already improved in DG6 over the last years	Further improvement possible by better data and more consultancy than data handling; use network (task forces) to prepare analysis documents (like RFS); use FADN indicators in policy documents, make data gathering obligatory in regulations with policy decisions.
Availability of data/results (timetable)	Has worsened in recent years	Bring income data in 9 months and make good RFS possible. More data (on voluntary basis) available.

Figure 6.4 Main changes in working methods

7. Plan for realization

7.1 Introduction

This chapter describes a proposal for the activities to be carried out in order to realize the new farm return and the effects it has on other aspects of the FADN. This proposal will be the point of departure for a draft call for tender, which is also to be submitted to DG 6 A/3 in this project.

7.2 Tasks

To solve the performance problems of the FADN as indicated by the stakeholders and to realize the new farm return FR2000+ the following activities have to be carried out:

A. Selecting, purchasing and installing a data dictionary

The data model of the farm return that has been sketched in the RICASTINGS report will be worked out in detail. Based on this model, the RICASTINGS study and the information systems policy of DG6, criteria for a data dictionary¹ package need to be defined. Software companies will then be invited to make an offer and a package will be selected and installed. The reference entity-types will be installed in the data dictionary, and the access to the data dictionary through the FADN's WWW server will be realized.

B. Filling the data dictionary with data definitions of the hard core dataset.

Based on the RICASTINGS report (especially chapter 6) and the material mentioned in it, a task force will make the definitions and instructions in English for the farm structure statement, the profit- and loss account, the balance sheet, the flow of funds statement, and the subsidy statement. The definitions will be recorded in the data dictionary.

C. Migration from old farm return to FR2000+

In this activity the data from the old database are converted to the new one, by adding to the data dictionary the conversion formulas from the old farm return ('member state 0') to FR2000+. This activity is then also a pilot test for the conversion concept.

D. Development and test conversion-software generator

When the data dictionary is filled with the conversion formulas of one member state (e.g. member state 0 = the old farm return) the generation of conversion software will be build and tested.

¹ A data dictionary is a database that contains descriptions of data-elements (meta data) and their structure, and that can be used to generate a database structure.

E. Pilot production for a member state

When the system works for the hard core statements and the old database has been migrated to the new one, member states will be encouraged (with support of DG6) to translate the data definitions and instructions to their own language(s) and to fill in the conversion formula's. One member state will act as a pilot, with several workshops for other member states to learn from this pilot. It is important to have this activity finished before 2002, as member states will then have an incentive to use the FR2000+ in the update of their software towards the EURO.

F. Pilot for a voluntary data set: gross margins

Based on the RICASTINGS report (especially chapter 6) and the material mentioned in it, a task force will make the definitions and instructions in English for the first voluntary survey, the gross margins statement. The definitions will be inserted in the data dictionary and member states will be invited to translate definitions and fill in the conversion formula's.

G. Development of Internet applications

Three applications using Internet technology have to be developed and tested:

- transporting data from accounting offices/member states to the EU database in Brussels;
- WWW site with access to the data dictionary for maintenance and use;
- WWW site with a user-interface for the database;
- There should be a high level of similarity in tools and techniques for these applications, and privacy aspects are important.

H. Development of the quality system

As the current control program becomes obsolete, it has to be replaced by audits and other elements of the quality system. A task force has to write a guideline for the quality program and test the system in at least one member state.

I. Development of the RFS

Rapid data is not a part of the new farm return and it has been argued in this RICASTINGS study that a task force should yearly report on the estimated income in the current year. This asks for improved procedures for the RICA Forecasting System.

J. Start of production

As soon as the hard core data set is in the data dictionary and tested (activity E), the system can be taken into production. Because conversion tables from the old farm return to FR2000+ are available, the FADN is not depended on adjustments in software in the member states: if they wish, they can still deliver the old data set (without simplifications) to the unit, which can then convert it to the new system.

The activity also includes the creation of handbooks for the data management, the database management, the network management and the maintenance of the WWW site.

K. Public relations

One of the biggest risk during the next years, is the lack of support from users and data providing member states. The users made it clear that current performance is problematic. Carrying out the activities above has the risk that the performance will become even worse. This can be solved by making data available as soon as possible on the WWW site and by a good public relations policy. This is also needed to inform the

FADN managers and other persons in the member states. A short briefing twice yearly in the RICA committee is certainly too little. A monthly (electronic) newsletter and some brochures are needed. At the end of the project, the booklet 'An A to Z' has to be re-issued.

Some of the items above (especially parts of G, H, I and K) have a broader impact than the farm return as such. They result from the performance problems identified by the stakeholders in the member states and DG6.

L. Legal aspects

This activity should include the revision of all legal texts, based on the RICASTINGS study (e.g. new objectives). New legal texts should not contain more details as necessary, as the new system will be much more flexible.

7.3 Timetable and project management

The critical path of the project is, in the sequence of the activities: A, B, D, G, J. Concerning the outsourcing of the activities (figure 7.1), several options are open. DG6 could tender out all activities (A to L) in one contract (of course making a database manager, data manager and network manager available as project-employees), could tender for each activity (and perhaps do some of them internal) or could tender the IT activities (A, D, G) in one contract, and the others in a second contract. It should be realized that for some ac-

<i>Task</i>	Expertise needed from A.3	Expertise needed from outside
A. Data dictionary	IT manager Data manager	IT expertise FADN managers with expertise datamodelling
B. Definitions hard core	Data manager	Task force FADN managers
C. Migration	Data manager Database manager	Somebody from Task force FADN managers
D. Conversion software	Database manager	<i>FADN manager with expertise data modelling,</i> IT experts
E. Pilot member state	Database manager Network manager	FADN manager member state involved
F. Gross margins	Data manager Network manager	Task force FADN managers
G. Internet applications	Network manager	Task force FADN managers, IT experts
H. Quality system	Network manager	Task force FADN managers
I. RFS	Network manager Policy analyst RFS	Task force FADN managers
J. Production	Network manager Database manager	
K. Public Relations	Network manager	Task force FADN managers
L. Legal aspects	Network manager	Task force FADN managers

Figure 7.1 *Indications on the expertise needed for the activities identified in the previous section*

tivities very specific FADN expertise is required. This means that probably only the IT, the organizational and the secretarial functions could be tendered out, where the work of the task force (FADN managers plus A.3) should be organized along the new working methods proposed in this report.

In choosing between these options, the following criteria should be considered:

- time available with A/3;
- speed of knowledge spill-over of the new system towards A/3 staff;
- costs;
- co-ordination risks between the tasks;
- involvement to promote acceptance of the new system by member states and A/3 staff.

The decision on the choice of these options will be the basis for a draft call for tender.

In all options it will be necessary to install an authoritative steering committee (e.g. chaired by the director of DG6 A Mr. Ahner, and with two persons from member states liaison agencies) to which all project activities report. It should meet (for two hours) at least once a month, review progress and take decisions on the time spent for the project in relation to day-to-day work.



Figure 7.3 Time planning

An estimation of the resources needed is given in figure 7.4. The capacity needed from DG A/3 is 6 man years for making full time available a network manager, data manager and database managers. In addition the IT manager and some policy analysts will from time to time have an interest or be involved, but this could be kept at a low level. Training for this staff is needed but assumed to come from the normal human resource budget. The total outside expertise needed is estimated as nearly 1,000 days (also about 6 man years), depending a bit on the IT expertise needed to build conversion software. It should be noted that the number of days is heavily influenced by the working methods. We assumed senior FADN experts that

have know-how in organizing effective work-shops, to yield results with time boxing. Task forces of FADN managers are not included in the estimation if it are 1 day workshops in combination with RICA committee meetings. The total external costs include EURO 70,000 for additional costs like workshop, publications etc.

Task a)	IT expert (days)	Senior FADN exp. (days)	FADN expert (days)	Total Costs (1,000 Euro)	EU database manager	EU data-manager	EU network manager
A		60		60	XX	XXX	
B		175	225	350	XX	XXX	
C			60	36	XX	X	
D	60		10	54	XXX		
E			20	20	X	X	XX
F		60	60	110		XXX	XXX
G				P.M.			
H			30	15		X	XXX
I				P.M.			
J			40	40	XXX	XXX	XXX
K			25	20			XX
L				25			XX
Mgt.		105		105	X	X	X
Total	60	400	470	835			

a) See figure 7.1 for description. Project management is added; For task D the worst case is budgeted.

For the contribution of the Commission the indications are:

XXX = heavily involved, co-producer, initiative

XX = substantially supporting

X = very well informed, 'looking over the shoulder', giving feedback

Figure 7.4 Summary table for the resources for the tasks

7.4 Relation with RICA 1, 2, 3 and 4

To keep the old software and database running, DG6 A/3 recently started a number of information technology projects. The main purpose of these projects is to install more user friendly user interfaces on the software in DG6 A/3.

RICA 1 intends to redesign the collection and control program on the mainframes of the Commission (currently Amdahl in Luxemburg, migrating to DG6 in Brussels), to replace the existing control program and to hand out a multi-lingual new one to the member states, and to set up a new interchange agreement with the member states.

RICA 2 covers the maintenance and evolution of the existing database and analysis system, and its integration with the systems developed in RICA1 and RICA2.

RICA 3 intends to construct a data diffusion system for the FADN.

RICA 4 provides a kind of help desk to support the member states with the current conversion process, as well as the unit A.3 and CEEC FADNs under construction.

These projects will be informed with the results of the RICASTINGS study and will be instructed to take into account as much as possible the effects of the RICASTINGS follow up. The following effects are suggested:

- RICA 1: the redesign and redevelopment of the collection and control program on the mainframes from Luxemburg to the UNIX environment in Brussels and the replacement of the existing control program should be carried out to improve efficiency of the database manager's task. A potential analyses of the control processes in the member states could be useful also for FR2000+ and the quality program. However making available a control program in a multi-lingual version to the member states on the old farm return seems a high investment for a short pay-back period. Expanding the task to develop a new interchange agreement seems more useful. This would be equivalent to the first task under item G above: an Internet application to send in a flat file with data from an individual farm, secured by pretty good privacy;
- RICA 2: concerns the current farm return and has therefore no direct effects. However, the data dictionary used currently/selected in RICA-2 could be considered as the first candidate to store the data definitions of the new farm return. If this data dictionary fits the criteria developed in task A above, this task can be simplified to the creation of the data model and this evaluation of the current database against the criteria;
- RICA 3: this is, from the point of view of the renewed working methods in the FADN, a very important system. It solves one of the main performance problems of the current FADN, the inaccessibility. RICA 3 is comparable to the third item under task G. With the support of some member states that have experience available at this point (and who could also help to run the help desk of the WWW site to prevent that A.3 will be drowned by questions on data definitions and data quality) such a site could be build in a few months time. To clients in and outside DG6 this would quickly show the new attitudes of the FADN. The coordination with RICA 1 (see the remarks on task G) should be looked after;
- RICA 4 ¹: most likely no effects. As the FR2000+ will provide data on the hard core for accounting year 1999 (in 2000) or 2000 for some member states for the first time, it is attractive to have capacity to speed up the data transmission for the years 1996-2000. As the current staff will see persons disappear to tasks in developing FR2000+, there is an extra argument to carry out RICA 4. In advising CEEC FADNs of course the FR2000+ developments have to be taken into account.

In conclusion, it is clear that the effects of the introduction of the new farm return on RICA 1-4 are small and manageable. Two tasks (RICA 3 and 4) support the introduction of the new farm return excellently. The other two are partly needed to keep the current system running and to adapt the existing data dictionary to the new farm return requirements. RICA 1 and 2 are therefore also a building stone for the new farm return.

¹ RICA4 has been postponed due to a lack of tenders of good quality.

A special point of attention will be the management of all these projects, and their interaction. The information analysis carried out, can be beneficial to guard the boundaries between projects, and to secure that the software will be integrated as much as possible. Nevertheless it is clear that running all these projects, in addition to the normal work process of A3 (with potentially new demands for Agenda2000, EU enlargement, WTO negotiations and more emphasis on policy evaluation, to name a few) will be challenging. A mutual effort and intensive cooperation with know-how available in the member states on these points will be beneficial, which brings home once again the main message of this report: to survive the FADN network and all its participants will have to learn new working methods in order to improve its performance.

Appendix 1 Survey to FADN managers

Reflections on the current farm return in general

In this section of the survey we are interested in your experiences with the current farm return in general. In the next section we ask specific questions for each table in the farm return.

The current format of the farm return is a number of tables (A-M) with variables numbered in order and with their identifying number on the magnetic tape, followed by instructions that make the definitions of the variables more clear.

Q1 Is this format (lay-out) from your point of view clear and up-to-date?

Answer ^{a)}:.....

^{a)} In case you need more space for your answers, use backside of previous page or add a blank sheet. You may also use a word processor, if you number your answers.

Sometimes the instructions are adapted as agriculture or agricultural policy changes (e.g. introduction of milk quota) or unclear definitions are made more precise.

Q2 Are the changes needed provided in time for your work?

Answer:.....

Q3 Are the instructions in your opinion clear enough to harmonize the data in

- | | Yes | No |
|---|-----------------------|-----------------------|
| <input type="radio"/> Your country | <input type="radio"/> | <input type="radio"/> |
| <input type="radio"/> The European FADN | <input type="radio"/> | <input type="radio"/> |

Q4 Do you feel that local and national know-how is used sufficiently in the maintenance of the instructions in the farm return?

Answer:.....

Q5 Is the EU RICA Committee in your view playing an adequate role in the maintenance of the farm return?

- Yes
- No, because.....

In your work you are supposed to transform the EU farm return into instructions for data collectors (accountants) at farm level in your country.

Q6 How is this done?

- not needed, national farm return is equivalent to EU farm return and data collectors get copy of EU farm return (go to question Q10)
- not needed, national farm return and its instructions is much more detailed; coherence is controlled afterwards (go to question Q8)
- yes, European farm return is incorporated in a national farm return, that has its own tables, codes and instructions and is printed in a manual
- yes, European farm return is incorporated in software and a software manual, that is provided to data collectors
- other:.....

- Q7 Does your national farm return make use of a (national) standard chart of accounts (like the French plan comptable, or the German Kontenplan) that is used by most accountants?
- no, such a standard chart of accounts does not exist
 - no, such a standard does exist, but it is not attractive to use it
 - yes

The variables and codes used in your national farm return are not equivalent to those of the EU farm return and sometimes a variable for the EU return has to be calculated from a number of variables in your national return.

- Q8 How do you keep track of the coherence between the national and EU variables?
- only directly in the software that generates the magnetic tape for Brussels
 - also in special documentation and tables

- Q9 Do you have any suggestions for changes in the EU farm return (e.g. lay-out, paper/electronic form, moment of publication, type of maintenance) that could support your work to transform the EU farm return into your national farm return?

Answer:

- Q10 Quality control is at the moment not treated in the farm return, but in special control software. In your work you are supposed to check the national data, making use of the control tests, defined by the EU. How is this done (more than one answer possible)?
- by applying the EU control program after creation of the magnetic tape
 - by providing the local data-collectors with information on which points and how their data will be checked
 - by including the tests from the control program in national software used in the collection of the data
 - other.....

- Q11 Where do you convert the data to the format and codes of the EU farm return?
- at farm/accounting office level
 - at regional level
 - at national level

- Q12 Where do you apply (national and/or EU) control software for checking?
- at farm/accounting office level
 - at regional level
 - at national level

- Q13 Do you have any suggestions for changes in the EU farm return or the EU control-program (e.g. lay-out, paper/electronic form, moment of availability, type of maintenance) that could support your work to apply the EU control program in your national farm return?

Answer:.....

The EU publishes the FADN data in so called tables with standard results, that contain (financial) indicators (the income statement, balance sheet, farm structure, livestock units). These results are calculated from the data in the farm return.

- Q14 Are you publishing your national results with the same definitions?
- yes (go to question Q16)
 - no

- Q15 Are the differences between national and European results necessary and explainable to users:
- there are good reasons for differences and users are not complaining (go to question Q16)
 - there is no reason for differences in the future, although users are not complaining
 - users are complaining, and differences should be harmonized

Q16 Do you have any suggestions for changes in the EU farm return that could harmonize differences in financial statements and indicators between the EU FADN and your own publications.

Answer:.....

Two final questions before we turn our attention to the details of the current farm return:

Q17 Which strong points of the current farm return should certainly be incorporated in a new farm return, assuming that we are going to make a new farm return?

Answer:.....

Q18 Which things should certainly be changed, assuming that we are going to make a new farm return?

Answer:.....

REFLECTION ON THE TABLES IN THE CURRENT FARM RETURN FICHE

Please, take now the EU farm return fiche in order to answer our questions. Please mind that those questions deal only with the EU Farm return (and not your national return).

I - TABLE A: GENERAL INFORMATION + TABLE B: TYPE OF OCCUPATION

Q19 Do you think that there are specific problems with the EU FADN definitions concerning:
The definition of a farm:

	No	Yes, definition not clear	Yes, implemen- tation too difficult ¹	Comment
In case of several locations:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coherence with official registrations:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large legal holdings:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Separation from forestry:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Separation from other Rural activities:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Minimum size field of survey:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	No	Yes, definition not clear	Yes, implemen- tation too difficult	Comments
Codes for LFA regions:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Codes for Structure Funds:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Codes for location:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Codes for altitude	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other definitions:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

¹ Implementation difficult due to e.g. problems with collecting data, provision of unreliable values; if data are estimated or calculated (instead of gathered at the farm) you should also cross YES here.

Q20 *On which data-items are there large differences in the definitions with the national FADN, and what are those differences?*

Answer:.....

Q21 *Do you think that some data items could better be deleted because they are not used? Which ones?*

Answer:.....

Q22 *Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?*

- No
- Yes

If yes, comment:.....

Q23 *Are these data items already available in your FADN?*

- Yes, at the national level.
- Yes, but only with some data collecting units (regional).
- No

2 - TABLE C: LABOUR

Q24 *Do you think that there are specific problems with definitions concerning:*

	No	Yes, definition not clear	Yes, implemen- tation too difficult	Comments
The definition of regular unpaid labour:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The definition of casual unpaid labour:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The definition of regular paid labour:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>The calculation of units:</i>				
- seasonality:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- AWU:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Others (if yes, which ones?)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25 *On which variables are there large differences in the definitions with the national FADN, and what are those differences?*

Answer:.....

Q26 *Do you think that some data items could better be deleted because they are not used? Which ones?*

Answer:.....

Q27 *Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?*

Answer:.....

Q28 *Are these data items already available in your national FADN?*

- Yes, at the national level.
- Yes, but only with some data collecting units (regional).
- No

3 - TABLE D: NUMBER AND VALUE OF LIVESTOCK + TABLE E: LIVESTOCK PURCHASES AND SALES

Q29 Do you think that there are specific problems with definitions:

- No
- Yes

If yes, comment:.....

Q30 On which variables are there large differences in the definitions with the national FADN, and what are those differences?

Answer:.....

Q31 Do you think that some data items could better be deleted because they are not used? Which ones?

Answer:.....

Q32 Do you think that some data items should be deleted because they are difficult to collect (problems of getting the information, unreliable values provided)

Answer:.....

Q33 Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?

Answer:.....

Q34 Are these data items already available in your national FADN?

- Yes, at the national level.
- Yes, but only with some data collecting units (regional)
- No

4 - TABLE F: COSTS

Q35 Do you think that there are specific problems with definitions concerning:

	No	Yes, definition not clear	Yes, implemen- tation too difficult	Comments
Specific livestock costs:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farm-produced feeding stuffs used on farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specific crop costs:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farming overhead:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Land charges:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interest paid:				
- long-term loans:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- short-term credits:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others (if yes, which ones?)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q36 On which variables are there large differences in the definitions with the national FADN, and what are those differences?

Answer:.....

Q37 Do you think that some data items could better be deleted because they are not used? Which ones?

Answer:.....

Q38 Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?

Answer:.....

Q39 Are these data items already available in your national FADN?

- Yes, at the national level.
- Yes, but only with some data collecting units (regional)
- No

5 - TABLE G: LAND AND BUILDINGS, DEADSTOCK AND CIRCULATING CAPITAL

Q40 Do you think that there are specific problems with definitions concerning:

	No	Yes, definition not clear	Yes, implemen- tation too difficult	Comments
Market value of land:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Circulating capital:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value of quota:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Separation of:				
- quota and land value:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- buildings and land:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other definitions (if yes which ones)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q41 On which variables are there large differences in the definitions with the national FADN, and what are those differences?

Answer:.....

Q42 Do you think that some data items could better be deleted because they are not used? Which ones?

Answer:.....

Q43 Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?

Answer:.....

Q44 Are these data items already available in your national FADN?

- Yes, at the national level.
- Yes, but only with some data collecting units (regional)
- No

6 - TABLE H: DEBTS + TABLE I: VALUE ADDED TAX

Q45 Do you think that there are specific problems with definitions:

	No	Yes, definition not clear	Yes, implemen- tation too difficult	Comments
Allocation of loans to assets:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Separation from family debts:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informal (family) loans:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Short-term loans:

Other definitions
(if yes which ones)

Q46 *On which variables are there large differences in the definitions with the national FADN, and what are those differences?*

Answer:.....

Q47 *Do you think that some data items could better be deleted because they are not used? Which ones?*

Answer:.....

Q48 *Do you think that some data items should be added to or changed provide a true and fair view of the reality on the farm? Which ones?*

Answer:.....

Q49 *Are these data items already available in your national FADN?*

- Yes, at the national level.
- Yes, but only with some data collecting units (regional).
- No

7 - **TABLE J: GRANTS, SUBSIDIES AND COMPENSATORY PAYMENTS + TABLE M: COMPENSATORY PAYMENTS FOR ARABLE CROPS**

Q50 *Do you think that there are specific problems with definitions:*

	No	Yes, definition not clear	Yes, implemen- tation too difficult	Comments
Due value (instead of as received basis):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allocation to crops:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others (if yes which ones)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q51 *On which variables are there large differences in the definitions with the national FADN, and what are those differences?*

Answer:.....

Q52 *Do you think that some data items could better be deleted because they are not used? Which ones?*

Answer:.....

Q53 *Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?*

Answer:.....

Q54 *Are these data items already available in your national FADN?*

- Yes, at the national level.
- Yes, but only with some data collecting units (regional)
- No

8 - TABLE K: PRODUCTION (INCLUDING PRODUCT CODES)

Q55 Do you think that there are specific problems with definitions:

- No
- Yes

If yes, comment:.....

Q56 On which variables are there large differences in the definitions with the national FADN, and what are those differences?

Answer:.....

Q57 Do you think that some data items could better be deleted because they are not used? Which ones?

Answer:.....

Q58 Do you think that some data items should be deleted because they are difficult to collect (problems of getting the information, unreliable values provided)? Which ones?

Answer:.....

Q59 Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?

Answer:.....

Q60 Are these data items already available in your national FADN?

- Yes, at the national level.
- Yes, but only with some data collecting units (regional)
- No

9 - TABLE L: QUOTAS AND OTHER RIGHTS

Q61 Do you think that there are specific problems with definitions:

- No
- Yes

If yes, comment:.....

Q62 On which variables are there large differences in the definitions with the national FADN, and what are those differences?

Answer:.....

Q63 Do you think that some data items could better be deleted because they are not used? Which ones?

Answer:.....

Q64 Do you think that some data items should be deleted because they are difficult to collect (problems of getting the information, unreliable values provided)? Which ones?

Answer:.....

Q65 Do you think that some data items should be added or changed to provide a true and fair view of the reality on the farm? Which ones?

Answer:.....

Q66 Are these data items already available in your national FADN?

- Yes, at the national level.
- Yes, but only with some data collecting units (regional)
- No

4. REFLECTION ON THE COLLECTING OF NEW DATA

Agriculture and agricultural policies are changing. Some users therefore think that the FADN's should start to gather and exchange data on new topics, like cost of production, environmental issues, pluri-activity et cetera. We would like to have your opinion on such ideas and especially of such data are available already.

1 - Economic indicators

Q67 Do you think that there is an interest (in the EU FADN) to gather data on:

	No	Yes
* the effect of subsidies/levies on income:	<input type="radio"/>	<input type="radio"/>
* the effect of selling and leasing quotas:	<input type="radio"/>	<input type="radio"/>
* improved Indicators for large legal entities:	<input type="radio"/>	<input type="radio"/>

Q68 Are such data available at national level or with some data collectors in your country (also for delivery to the EU)?

	No	Yes for all farms	Yes for sub- samples
For:			
* the effect of subsidies/levies on income:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* the effect of selling and leasing quotas:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* improved indicators for large legal entities: <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Q69 Do you think it is possible to gather such data?

	No	Yes, for all farms	Yes, for sub- samples a)
For:			
* the effect of subsidies/levies on income:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* the effect of selling and leasing quotas:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* improved Indicators for large legal entities: <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

a) Subsamples are certain groups of farms (e.g. specialist farms, special regions, data provided voluntary) and/or data gathered in certain years (but not every year).

Q70 What should be done to make them available:

- * technically:.....
- * financially:.....

Q71 Would you be interested to receive such data from other member states?

- Yes
- No

Q72 Do you think there is a (better) alternative outside the FADN to gather and exchange such data?

- Yes
- No

If yes, comment:.....

2 - Environmental data

Q73 Do you think that there is an interest (in the EU FADN) to gather data on:

	No	Yes
* Mineral balances (incl. manure):	<input type="radio"/>	<input type="radio"/>
* Pesticides indicators:	<input type="radio"/>	<input type="radio"/>
* Waterbalance: irrigation/		

- desertification:
- * Energy consumption/production:
- * Waste management
- * Deforestation
- * Other indicator (which one?):

Q74 *Are such data available (also for delivery to the EU)?*

- | No | Yes,
for all
farms | Yes,
for sub-
samples | |
|---|--------------------------|-----------------------------|-----------------------|
| For: | | | |
| * Mineral balances (incl. manure): | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Pesticides indicators: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Waterbalance: irrigation/
desertification: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Energy consumption/production: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Waste management: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Deforestation: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Other indicator (which one?): | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q75 *Do you think it is possible to gather such data?*

- | | No | Yes,
for all
farms | Yes,
for sub-
samples |
|---|-----------------------|--------------------------|-----------------------------|
| For: | | | |
| * Mineral balances (incl. manure): | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Pesticides indicators: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Waterbalance: irrigation/
desertification: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Energy consumption/production: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Waste management: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Deforestation: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| * Other indicator: | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q76 *What should be done to make them available:*

- * technically:.....
- * financially:.....

Q77 *Would you be interested to receive such data from other member states?*

- Yes
- No

Q78 *Do you think there is a (better) alternative outside the FADN to gather and exchange such data?*

- Yes
- No

If yes, comment:.....

3 - Costs of production

Q79 *Do you think that there is an interest (in the EU FADN) to gather data on:*

- | | No | Yes |
|---|-----------------------|-----------------------|
| * Gross margins per enterprise/activity | <input type="radio"/> | <input type="radio"/> |
| * Allocated costs for costs prices: | <input type="radio"/> | <input type="radio"/> |
| * Physical data for costs calculation: | <input type="radio"/> | <input type="radio"/> |

Q80 *Are such data available at national level or with some data collectors in your country (also for delivery to the EU)?*

	No	Yes, for all farms	Yes, for sub- samples
For:			
* Gross margins per enterprise:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Allocated costs for costs prices:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Physical data for costs calculation:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q81 *Do you think it is possible to gather such data?*

	No	Yes, for all farms	Yes, for sub- samples
For:			
* Gross margins per enterprise:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Allocated costs for costs prices:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Physical data for costs calculation:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q82 *What should be done to make them available:*

- * technically:.....
- * financially:.....

Q83 *Would you be interested to receive such data from other member states?*

- Yes
- No

Q84 *Do you think there is a (better) alternative outside the FADN to gather and exchange such data?*

- Yes
- No

If yes, comment:.....

4 - Pluri-activity, special production systems and non-farm incomes

Q85 *Do you think that there is an interest (in the EU FADN) to gather data on:*

	No	Yes
On the farm:		
* Forestry:	<input type="radio"/>	<input type="radio"/>
* Organic (biological) production:	<input type="radio"/>	<input type="radio"/>
* Contracts in chain (integrated production):	<input type="radio"/>	<input type="radio"/>
* Agri-tourism:	<input type="radio"/>	<input type="radio"/>
* Landscape maintenance:	<input type="radio"/>	<input type="radio"/>
* Processing on farm:	<input type="radio"/>	<input type="radio"/>
* Good farming practice systems:	<input type="radio"/>	<input type="radio"/>
Outside the farm:	No	Yes
* Employment/activities outside the farm:	<input type="radio"/>	<input type="radio"/>
* Income from non-farm activities:	<input type="radio"/>	<input type="radio"/>
* Data of households per farm:	<input type="radio"/>	<input type="radio"/>

Q86 *Are such data available at national level or with some data collectors in your country (also for delivery to the EU)?*

	No	Yes, for all farms	Yes, for sub- samples
For:			
* Forestry:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Organic production:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Contracts in chain (integrated production):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Agri-tourism:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Landscape maintenance:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Processing on farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Good farming practice systems:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Activities outside the farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Income from non-farm activities:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Data of households per farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q87 *Do you think it is possible to gather such data?*

	No	Yes, for all farms	Yes, for sub- samples
For:			
* Forestry:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Organic production:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Contracts in chain (integrated production):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Agri-tourism:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Landscape production:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Processing on farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Food farming practise systems:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Activities outside the farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Income from non-farm activities:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Data of households per farm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q88 *What should be done to make them available:*

- * technically:.....
- * financially:.....

Q89 *Would you be interested to receive such data from other member states?*

- Yes
- No

Q90 *Do you think there is a (better) alternative outside the FADN to gather and exchange such data?*

- Yes
- No

If yes, comment:.....

5 - Statistical applications

Q91 *Is there a difference in the number of observations (holdings) between the EU FADN and your national FADN:*

- Yes
- No

If yes, comment:.....

Q92 Do you have explicit quality objectives?

- | | | |
|----------------|-----------------------|-----------------------|
| | No | Yes |
| On data: | <input type="radio"/> | <input type="radio"/> |
| On results: | <input type="radio"/> | <input type="radio"/> |
| On procedures: | <input type="radio"/> | <input type="radio"/> |

(If 3 times "no", go to question Q95)

Q93 Describe your statistical methods to assure the quality of the FADN (regarding sampling, data collection, data processing, estimations, presentation)

Q94 Do you use quality programs (e.g. ISO, TQM, Balanced Score Card)?

- Yes
- No

If yes, explain:.....

Q95 Are your results compared with or used in other statistical applications in your country?

- No
- Yes:
 - Sector income index
 - National accounts
 - Regional accounts
 - Price statistics
 - Calculation of sgm for typology
 - Farm management handbooks
 - Others (specify).....

6 - Quick statistics and forecasts

Q96 Do you produce quick statistics (e.g. pre-eliminary results) on the basis of the FADN data?

- No
- Yes, please explain

Q97 Do you update your accounting data to get more recent results?

- Yes
- No

Q98 Is it useful to include updating coefficients in the farm return? Why or why not?

Answer:.....

5. QUESTIONS ON INNOVATION

We now enter the last part of the questionnaire. We regard the introduction of a new farm return in the FADN a major innovation, and therefore we have a number of questions on topics that (in our view) could influence innovations. We have distinguished 3 topics: technological problems, identification of new uses and financial issues.

Technological Innovation

Q99 What type of computer-hardware do you use in the FADN?

- Mainframe.
- Personal computers (PC's).
- Both.

- Q100 *How is the transfer of data between local/regional data collection and the FADN unit organized?*
- On paper.
 - On floppy disk.
 - On magnetic tape.
 - By e-mail.
 - By dedicated data lines.
 - Other.....

- Q101 *Do you have experiences in the FADN with:*
- Microsoft Windows
 - Internet-applications
 - E-mail

- Q102 *Do the persons that collect the data in your country (accountants, data-collectors) use software?*
- yes, they directly enter the data in a computer (go to question Q103)
 - no, they write the data on paper forms, which are entered into a computer at a (central) office (go to question Q105)

- Q103 *Are all data-collectors in your country using the same software on their personal computers?*
- no (go to question Q105)
 - yes

- Q104 *What is the origin of this harmonized software on the personal computers*
- commercial software bought in the market
 - software provided uniquely by the FADN (built by the FADN itself, or by a company uniquely for the FADN).

- Q105 *How old is the software that is used (estimation)?*
- younger than 3 years
 - 3 to 6 years old
 - older than 6 years

- Q106 *Which improvements in the use of information technology are planned?*
 Answer:.....

- Q107 *Do you think that cooperation between member states (and the European Commission) on software development is useful and feasible?*
- No (go to question Q109)
 - Yes

- Q108 *Which types of software would you like to see developed?*
 Answer:.....

Financial aspects

- Q109 *Is the level of costs an important issue?*
- Yes
 - No

If yes, comment:.....

- Q110 *Has the department with the FADN unit its own budget to which the payments from Brussels are added?*
- Yes
 - No

Q111 *Is the collecting of new data a question of budget?*

- Yes
- No

Identification of new uses of data

Q112 *Are FADN data used by:?*

Users	No	Yes only national data	Yes also European data
Ministry			
Research institutes			
Farm advisory centers			
Agri-business			
Others (precise)			

Q113 *Could you identify new users of national RICA data (and give the principle domain concerned):*

Users	National data a)	EU data a)	New domains concerned
Ministry			
Research institutes			
Farm advisory centres			
Agri-business			
Others: (precise)			

a) put "X" if applicable

Q114 *According to you, why are data from your country not available error free at the European level at the required 9 months after the closing of the accounting year (what are the bottlenecks, more than one answer possible):*

- Data are always available error-free within 9 months
- Too much time needed in the member states.
- Not enough money to increase capacity.
- Farm return fiche too difficult.
- National FADN unit not large enough.
- RICA unit in Brussels not large enough.
- RICA unit has not enough know-how on national issues.
- Correction of data costs too much time.
- EU control program not available at the national level.
- EU control program not available at the level of data entry.
- Control program detects too much errors.
- Control program does not detect errors quick enough.
- Changes in national farm return do not automatically lead to changes in conversion software.
- Too much differences between National and EU definitions;
- Other priorities in the FADN unit more important.
- Other reason:.....

Q 115 What should be done FIRST to reduce the delay or even to guarantee delivery in 6 or less months time?
Answer:.....

6. *CONCLUSION:*

Q116 *Are there any other points you would like to bring forward or have missed in our survey?*

Q117 *Do you have any suggestions for topics to be discussed in the May-workshop?*

Please write down your country:.....
and your name

Thank you for completing this questionnaire. Please return this copy to the addresses named on page 1.

Appendix 2 Questionnaire FADN stakeholders

A2.1 Introduction

The objective of the interview is to obtain a clear picture on the present problems and the needs in future related to the European Farm Accountancy Data Network (FADN/RICA).

In first instance a number of questions are presented on the present situation (2). A view on the opinions on the current situation is necessary to get the base for more detailed information from representatives of different EU member states about what is required and/or possible in the coming years (RICA 2000+).

The desired situation in future on FADN/RICA can be discussed with the questions under 3.

The questionnaire is in some respect - on some items - quite detailed. It is also open to present opinions on subjects not mentioned. So the questionnaire gives room to bring forward ideas and to improve the FADN on EU and national level (see also footnote ¹).

The results of the interviews, together with the information on the project as a whole, will be communicated with the interviewed persons; such a report can be expected in June 1998.

The output of the project will - as it is expected now - be used to develop a new proposal to adjust and renew the FADN. You will be also informed on the progress on that in the near future.

The interviewer is kindly asked to write a report - in English, French, German or Dutch - on the answers of the questions.

To make this report please use *the model*, which is presented in the appendix.

A2.2 Review on the current situation

A. Use of FADN data

- * *Do you use the national or regional data/results?*
- * *Do you use the EU data/results?*
- * *What kind of use you make of the results, for what kind of objective(s)?*

¹ In case that an interviewed person is mainly responsible for gathering data to the FADN (data provider), it is possible to use the 'Survey of the FADN farm return for FADN Managers'; this gives the possibility to gather more detail answers on data collection, tables in the farm return fiche et cetera. In that case it is not necessary to use the whole Survey for FADN Managers, but (for instance) only the questions in the tables in the current farm return (part 3 of the Survey) and on the collection of new data (part 4 of the Survey). The Survey is included as background information. In case that the FADN manager himself is interviewed, some items like to use of data could also be dropped in favour for items from the written Survey that are of interest for further discussion.

- * *Is the use intensive?*
 - * *Is the use regular (f.e. each year)?*
- (*for data providers and the FADN managers themselves -parts of - the survey for FADN managers can be used to collect more detailed answers (see the introduction))

B. Objective of FADN

- * *What are the goals in your opinion of FADN, on national (or regional) and EU level?*
 - * *Does the current FADN in your opinion meet the desired goal(s), on national and/or EU level?*
- If not, please mention the shortcomings of the existing FADN and mention what kind of information you want.*
- Are there items you are missing in the results of FADN, on national and EU level? (see also the questions under 3b).

C. Organization of FADN

- * *What is your experience on the communication in the framework of FADN?*
- * *Do you have regular contacts, on the national or EU level?*
- * *Is the access to FADN data and information sufficient?*
- * *Is there need for more assistance or a (permanent) helpdesk?*

D. Quality of FADN

- * *What is your opinion on the speed of results, mainly on EU level?*
 - * *What on the frequency?*
 - * *Do you use (official) publications, national and/or European, with data/results of FADN?*
 - * *Is there enough background information on FADN results?*
 - * *Is the methodology used clear? (on EU results) and if so, does it meet the requirements?*
- If not so, what has to be done to inform people better?*
- * *Are you confronted with different micro-economic results in EU reports and national publications on FADN?*
- If so, is it clear what is the reason for that?*
- * *Do you use other micro-economic results, in stead of or together with FADN results?*
 - * *What is the reason to that?*
- (f.e. speed, more or better detailed information?)*
- * *Are FADN data accurate enough in your opinion?*
- If not, what are the shortcomings (for instance sample of farms, lack of information on specific items)?*
- * *Do you have the experience that based on FADN there are different macro-economic results than on other EU data?*
 - * *Is it in that case clear, what is the reason?*

E. Finance

- * *Do you have an opinion on the (budgetary) costs of FADN?*
- * *Also in relation with the benefits?*

A2.3 FADN in future

A. General

- * *Do you have in general ideas in mind about the objectives and performance of FADN in future?*
- * *In the national framework?*
- * *In EU respect?*
- * *What has to be improved and why?*
- * *What has to be added? (see also 3b)*
- * *What might be deleted?*

B. Data content

- * *Do you find it is desired to expand the data content of FADN on (one or more of) the following items, also by receiving information from other EU member states:*
 - a) Nature of the farm (type, location, regional/physical conditions et cetera.)
 - b) Labour on the farm (full time, part time, level of education et cetera.)
 - c) Costs of production (allocation of variable costs in relation of the production of specific products.)
 - d) Way of production ("normal" or organic or directed to special/regional (high) quality products.)
 - e) Marketing of products (direct to consumers or along contracts, cooperatives, producer groups.)
 - f) Processing of products on the farm.
 - g) Environmental issues (use -and eventually waste - of minerals, pesticides, energy, water) and on investments to improve it.
 - h) Other concerns (veterinary/fyosanitary, labour conditions, welfare of animals.)
 - I) Forestry.
 - j) Other activities on the farm (maintenance of nature and landscape-elements, agri- tourism et cetera.)
 - k) Activities outside the farm of the farmer and family.
 - l) Income outside the farm of the farmer and family (non-agricultural income), and.
 - m) Total income of the farm household (per household).
 - n) Use of income (consumption, investments, taxes, savings et cetera.)
 - o) Financial position of the farmer and family (assets and debts.)
 - p) Subsidies and levies on products.

It is of interest to ask in cases that some item(s) is/are not desired, to registrate what is the reason. (f.e. not feasible or possible to collect them, not relevant for publication or policy goals et cetera.)

- * *Are there perhaps other items to be added in the collection of data?*

- C. Presentation of data and results
- * *Do you want the presentation of (all) results on EU, national as well as regional level?*
 - * *What kind of information can be sufficient on the EU level?*
Is it desired to have detailed information per type of farm?
(kind of production and also detailed on the way of production, normal, organic et cetera.)
 - * *Also with a breakdown on the size of farms?*
 - * *What kind of information can be presented with a lower frequency? (f.e. only each 3 years)*
And perhaps also without a breakdown per region?
 - * *In what form you want the results presented:*
printed (official publications or press releases),
micro-electronic (suggestions?)
 - * *Do you desire only data or also analyses of the data (reasons for changes in the results of farms, development over a longer period, comparison between member states and regions et cetera.)*
 - * *Or do you want more exchange of data available for research and analyses in member states?*
- D. Finance and feasibility
- * *Is it reasonable to invest eventually more in FADN?*
If so, what are the priorities (f.e. new data, more speed or higher frequency)
If not, what are possibilities for savings (f.e. less farms in the network, less data per farm)?
And, even when savings have to be obtained, what has still to be improved (f.e. speed, addition of some new items, efficiency in data collection and processing)?

A2.4 Concluding

- * *Are there, besides the answers on the questions under the points 2 and 3, still general or specific questions or remarks on the FADN?*
(especially on the design and operation in the future (f.e. related to the development of the EU, the farm policy, the enlargement of the EU, the role of farmers in the society)).

Appendix 3 Stakeholders interviewed

Interviewed stakeholders

L. Panholzer	Vienna
Dr. H. Pfingstner	Vienna
D.M. Hellmayer	Vienna
Dr. Schmotzer	Vienna
Dipl. ing. A. Astl	Vienna
D. van Lierde	Brussels
L. van Orlé	Brussels
P. Vandebecq	Brussels
A. Mottouille	Brussels
J. de Schrijver	Brussels
J. Ikonen	Helsinki
O. Rentala	Helsinki
E. Hiiwa	Helsinki
Prof. M. Ylätaalo	Helsinki
M. Sütönen	Helsinki
E. Chantry	Paris
D. Hairy	Paris
C. Sechet	Paris
Ph. Bouillet	Paris
L. Bourgeois	Paris
A. Neveu	Paris
S. Taxis	Bonn
M. Kortegast	Bonn
Dr. J. Hauser	Bonn
Dr. P. Maier	Stuttgart
E. Kammler	Stuttgart
A. Väinas	Athens
Dr. K. Tsimboukas	Athens
T. Stauros	Athens
T. Sklavos	Athens
M. Roche	Dublin
S. Mc Philips	Dublin
B. Fingleton	Dublin
P. McDonald	Dublin
C. Abitabile	Rome
Dr. G. Serino	Rome
R. Giordani	Rome

A. Fiorini
 Mr. G. Pütz
 R. Kayl
 R. Ley
 A. Schmit
 K.J. Poppe
 G.G. van Leeuwen
 L. Rietema
 ms. A. Burrell
 J.H. Chomel
 V. Morard
 R. Flies
 D. Ahner
 E. Williams
 B. Bufferia
 J. Vonthron
 R. Ribeiro do Rosario
 O. Baptista
 N. Siquiera
 C. Noéme
 C. Garcia Penas
 J. Calatrava Requena
 V. Flores Redondo
 G. Larsson
 K. Wahlgren
 P. Persson
 A. Lindall
 H. Andersson
 E. Fahlbeuk
 B. Sjöholm
 M. Insulander
 R. Haynes
 S. Walker
 D. McRae
 D. Grieg
 A. Tolstrup Christensen
 O. Larsen
 S. Rasmussen
 S. Møllenberg

Bologna
 Luxemburg
 Luxemburg
 Strassen
 Luxemburg
 The Hague
 The Hague
 The Hague
 Wageningen
 Brussels
 Brussels
 Brussels
 Brussels
 Brussels
 Brussels
 Brussels
 Lisbon
 Lisbon
 Oeiras
 Lisbon
 Madrid
 Granada
 Madrid
 Örebro
 Jönköping
 Jönköping
 Uppsala
 Uppsala
 Uppsala
 Stockholm
 Stockholm
 Edinburgh
 Newbridge
 Edinburgh
 Edinburgh
 Copenhagen
 Copenhagen
 Copenhagen
 Copenhagen

Interviewers

G. Beers and K.J. Poppe (the Netherlands)
 C. de Bont (the Netherlands)
 E. Chantry (France)

in Brussels DG VI and DG IXX
 in Scotland (United Kingdom)
 in Belgium

W. Kleinhanß (Germany)
G. Larsson (Sweden)
B. Meier (Switzerland)
S. Møllenberg (Denmark)
L. van Orlé (Belgium)
F. Pennacchi (Italy)
M. Roche (Ireland)
R. Ribeiro do Rosario (Portugal)
C. San Juan (Spain)
N. Taragola (Belgium)
P. Wadin (Belgium)
N. Williams (United Kingdom)

in Austria
in Finland
in Germany
in Sweden
in Luxemburg
in Italy
in Denmark
in Spain and in Greece
in Portugal
in the Netherlands
in France
in Ireland

Appendix 4 Working documents

The following working documents have been prepared (and are available from LED).

- * Replies to survey of FADN managers
- * Results of the interviews with stakeholders
- * Taking stock of DG6's requirements on a new farm return
- * FADN managers: criteria for the future farm return
- * RICASTINGS - the implications of a new farm return on a renewed FADN

Appendix 5 Detailed remarks for new statements

Remarks below are taken from the survey of FADN managers.

Abbreviations used for member states and DG6-A/3:

A=Austria, A3=DG6-A3, B=Belgium, D=Germany (Deutschland), Dk=Denmark, E=Spain (España), F=France, H=Greece (Hellas), I=Italy, IRL=Ireland, L=Luxemburg, NL=Netherlands, P=Portugal, S=Sweden, SF=Finland (Suomi), UK=United Kindom

Farm structure statement	
<i>Member states with data</i>	<i>All (old farm return)</i>
<i>Task force</i>	<i>TF Hard core</i>
<i>Hard core /voluntary survey</i>	<i>Hard core</i>
<i>Reference for harmonization</i>	<i>Eurostat's farm structure survey, CAP policy regulations, old farm return (in that order)</i>
<i>Relevant data old farm return</i>	<i>Tables A, B, C, D, K, M</i>
Suggestions for data to be deleted	Remarks
Working hours	Difficult to measure [IRL]
Animal cat. 31	Not available in IRL
Days of grazing in mountains	Is not used [NL], Definition Almen questionable [A]
Altitude	Is not used [NL], implementation difficult [SF, F, S], not used [A3]
Difference manager/holder	Not applied [A], too many details in labour [S, D]
Goats and sheep	[A]
Cattle sex and age classes	[P]
Rabbits and bees	[A, A3]
Cull dairy cows	[UK]
Average number of pigs	Difficult to implement [S]
2, 40,41,42	[SF]
Horses	[A3]
Table A 55-58, 63-66	Not used in analysis [H]
Table D-50 other small animals	[H]
Poultry	[D]
Suggestions for data to be added	Remarks
Forestry area	Is now included in income but not in UAA [IRL]
Machinery	Number, type and power [I]
Relations with cooperatives	[I]
Organic production yes/no	[I, F]
Number of fields/locations	[I, A3]
On farm processing yes/no	Or type of activities [I, NL]
Other rural activities yes/no	Or type [I, NL]
Commodate (use of assets for free)	[I]
Detailed data family members	[I]
Detailed data casual unpaid labour	[I]

Number of units regular paid labour – others	[I]
Specific categories tobacco and fruit	[H]
Gender (sexe)	[I]
Hours for contract work	[I, A3, F]
Labour for land investments	[I]
Land rented for less than one year	Should be part of total area [B]
Irrigated crops + non-irrigated crops	[H]
Livestock categories	Donkeys and race horses should be separated [IRL], separate horses from other equines [SF] bees, rabbits, ostrich, aquaculture [I], bees [H], rabbits [H], young sheep and goats like piglets [H], fish [H]
Free access of land/metayage	needed for stocking rates [H]
Separate fallows and setaside	[A3]
Quota	[I] Average quota per year in stead of end year [B, DK]
Geographical data	More data on Structure funds like 5B [NL] and with better definitions [A, F, P], location on islands [H]
National weighting factor	[NL, A3]
Hours worked outside farm	To check reliability hours inside farm [NL, P, A3]
Type off farm occupation	[P]
Data items to be harmonized or better documented	
Farm/holding	Improve definition regarding renting in/out [IRL], separation from tourism [H], different locations [B, F, NL, I], joint exploitation, contract farming, coherence with official registrations [I, F], large legal holdings [I, S, A3], rural activities [I, B, F, A3, NL, A, S], separation from forestry [I, P, A, S, A3, F, H], outsourcing animal rearing [P], contract-farming [B], crop associations [P], share cropping [UK], code for location [A3]
Livestock units	Include alternatives used in different CAP regulations [NL], no simple averages [A3], not tenths of units [A3]
AWU, FWU	Improve definition and give practical examples for calculation; regular and casual labour difficult to implement [I, NL, P, SF, E, F, UK]; In all countries 1 person should at maximum be one AWU [B]; regular unpaid labour [A, P], part-time workers and labour providing agencies [NL]; correction for disablement [NL, H], Holder/manager: what to do with farmer's wives that are manager, sometimes for fiscal reasons [NL], seasonality [S, P, F, DK]
VAT system	Include VAT system, make clear what to with 2 systems on one farm (in one year). Discuss if a calculations with the real VAT system on the farm would not provide better data.[NL]
Type of occupation	Change type of occupation in direct/with paid labour/in share cropping/others and type of ownership in ownership/rent/commodate [I]
Pigs	Definitions sows and fattening pigs in kg. [L] Piglets are defined by 25 kg and 50 kg class breeding sows not used [NL], review classes [A3, DK], 20 kg = 22 kg [B], unclear if pigs on contract are part of total [B]
LFA region	What to do if a farm is in two regions [NL] Hanging winefarms [D]

Type of crop code	From table K: difficult to understand [NL, D] hard to implement as some codes are not crops [UK], excessive detail in trivial areas [UK, D, H], "not regularly marketed" is a very vague term [UK], less detail [A3], set aside: different types unclear [H]
Voluntary set aside	Current farm return extremely difficult [NL]
Total area/Land rented for less than one year	National definition quite different [P] Treatment of land rented out unclear [D]
Energy forest (Salix)	Nationally a permanent crop [S]
Specification of cattle to breed	Autochthonous breeds, major crossbreedings [P]
Types of accounting year	Wider range [UK]
Crop areas in horticulture	Several crops per year: difficult to gather and recalculate [NL]

Farm profit and loss account	
<i>Member states with data</i>	<i>All (old farm return)</i>
<i>Task force</i>	<i>TF Hard core</i>
<i>Hard core /voluntary survey</i>	<i>Hard core</i>
<i>Reference for harmonization</i>	<i>EU Accounting directives, IASC exposure draft Agriculture, old farm return and indicators (in that order)</i>
<i>Relevant data old farm return</i>	<i>Tables E, F, K</i>
Suggestions for data to be deleted	Remarks
AWU, FWU	Are problematic in income indicators; if hours are given [A3]
63 and 86	[E]
Rental value	Not used [IRL, NL, A, SF, UK], land with free access is neglected [H], calculate directly [A3]
Interest costs	Interest farm/non-farm cost difficult to split [NL], cannot be split up [D, DK, E, B, S], Costs of credit are possible without loans [A], drop 91 [A3]
Taxes and insurance	Allocation to land and buildings [NL]
Allocation of costs to forestry	Should be done in gross margin calculation [NL], not used [SF]
Car expenses	As a separate item [NL]
All internal (farm produced) items	[UK, F, S] Fodder crops not included [IRL], not gathered [D] silage maize is treated as grassland, that is not valued [NL] evaluation of certain types of pastures and forages for farm produced feedings stuffs [P], difficult but not 'too' [SF] Definition not very clear [H]
Farmhouse consumption	Details should not be given [NL]
Output categories like beet tops	Too detailed and not used [NL] Structure too complex [F] too much details [B]
Some horticultural details	[A3]
Forestry items	Are not included in agriculture [SF], are not handled consequently in farm return [S]
Details like quality wine/table wine	Should be optional or deleted [A]
Opening/closing valuation	Details should not be given, certainly not per crop [NL]
Suggestions for data to be added	Remarks
Euro	All member states convert data to Euro
Livestock	Valuation and Commission's formula probably unharmonized [B] Categories see farm structure statement: coherence table D and E old farm return [A, A3, F, H]; number of births, dead [I, A] Split cattle under 1 year to veal/ other males/ other female [A3], review age classes [A3]
Detailed costs for crops	[I]

Costs for agri-tourism and farm processing	[I]
Costs pension funds	[I]
Product codes	More detailed [I], crops on land leased short term -148 [B]
Production for repeated UAA	Second harvest or second crop ? [I]
Horticulture products	Sometimes more details in products is needed [NL] Other vegetables is missing under vegetables [A], stocks difficult [H]
Potatoes	Should be split in ware/seed/starch [NL]
Quantities for sales, purchases and opening valuation	[I], but potentially not in line with more general level of information exchange; for all categories number slaughtered + weight + farm use [A3]
Disaggregation of costs	[P], two types of feed costs [F], split costs for animal, reared by third farms, short term rent of land for fodder (not in total ag.area) and straw [B]
Allocation of costs to activities	[P] –see gross margins, split insurance to animal/crop [B]
Sales of fodder crops in store	Difficult to implement in current farm return [UK]
Assesment of stock values and self-consumption	[P]
Cost leasing quota	[A3]
Separate regular and casual labour	[A3]
Split rent and interest to land/building	[A3]
Data items to be harmonized or better documented	
Car expenses and depreciation	[IRL]
Receipts from occasional letting (leasing out)	e.g from quota and land excluded in UAA [IRL]
Missing value codes	More codes needed [I]
Cost for animals rearing by third parties	[L]
Share cropping arrangements	[UK]
Item 99	Difficult to understand what is required [UK]
Land charges	Rates [UK]
Implementation 146, 147, 150, 151	Difficult [S]
Wages and social security costs	[S]
Family labour	Receive sometimes an unrealistic low wage, although they are registered as regular paid labour [UK], unpaid labour should be labour not receiving a salary [A3]

Farm balance sheet	
<i>Member states with data</i>	<i>All (old farm return)</i>
<i>Task force</i>	<i>TF Hard core</i>
<i>Hard core /voluntary survey</i>	<i>Hard core</i>
<i>Reference for harmonization</i>	<i>EU Accounting directives, IASC exposure draft Agriculture, old farm return and indicators (in that order)</i>
<i>Relevant data old farm return</i>	<i>Tables D, G, H</i>
Suggestions for data to be deleted	Remarks
Circulating capital	Should be calculated with optional normative formula [IRL] separation from family/non-farm activities difficult [NL] calculated as forfait [B]
Land improvements	[I] can be included in value [NL]

Allocation of loans to assets	[S] In practice this does not take place [L, B] Loans are provided to the total farm: a mortgage on the land for the new kitchen [NL] Impossible [A], difficult [P, SF, UK, E, DK]
Separation of quota purchased and quota initially allocated	After many years of trade not distinguishable [UK]
Acquisition costs	Can be included in value [NL]
Market value of land	Implementation difficult [I, A, D, DK], national values are historical cost [L], lack of clear rules in land market [P], not clear [A3, H]
Suggestions for data to be added	Remarks
Euro	All member states convert data to Euro
National quota	Values should be added [NL], only milk quota available [A], should be all quota [UK, B, H,]
Separation of short-term loans and credits from suppliers and the state	[P]
Quantities for opening and closing stocks major products	[A3]
Data items to be harmonized or better documented	
Buildings and land improvement	Are only gathered if subject to depreciation [IRL], should be split [B] difficult [H, D], values not based on replacement value [D]
Separation from family debts	Overdraft facilities/loans [IRL], difficult to obtain information [P, F, B, E, DK] unclear definition [D]
Circulation capital	Definition not clear [I, A3, H, DK] clarify stocks [A3]
Informal family loans	Definition not clear [I, D], difficult to obtain information [P, A3, F, B, E, H]
Short-term	Definition of short-term should be changed in 'less and equal than one year' [I], separation short term loans from other short term credits unclear [A3], separation from family debts difficult [B, E]
Valuation animals	Probably not harmonized [NL, B], problematic [D]
Quota value	Not valued [A], information difficult to obtain at farm level [P], implementation too difficult [S, DK], separation from land value not clear [S, F, H, D], definition of quotas and other rights not clear. Freely acquired quota unclear [A3], quota difficult to obtain [E] Only if on balance sheet [D]

Farm flow of funds statement	
<i>Member states with data</i>	<i>All (old farm return)</i>
<i>Task force</i>	<i>TF Hard core</i>
<i>Hard core /voluntary survey</i>	<i>Hard core</i>
<i>Reference for harmonization</i>	<i>EU Accounting directives, IASC exposure draft Agriculture, old farm return and indicators (in that order)</i>
<i>Relevant data old farm return</i>	<i>Tables ???</i>
Suggestions for data to be deleted	Remarks
Suggestions for data to be added	Remarks
Euro	All member states convert data to Euro
Data on national quota	e.g. environmental quota [NL]
Uptake of new loans	[H]
Data items to be harmonized or better documented	
Sales of quota	[NL]

Separate VAT on investments from inputs	[A3]
Farm subsidy statement	
<i>Member states with data</i>	<i>All (old farm return)</i>
<i>Task force</i>	<i>TF Hard core</i>
<i>Hard core /voluntary survey</i>	<i>Hard core</i>
<i>Reference for harmonization</i>	<i>EU Accounting directives, CAP regulations; discuss in task force how data can be received from EAGGF/IACS system</i>
<i>Relevant data old farm return</i>	<i>Tables J, M</i>
Suggestions for data to be deleted	Remarks
Allocation set aside to crop	[L]
Reference yield	Is not a farm-level data item [NL] totally unnecessary [B], arable subsidies in the framework of the regionalization plan and its different productivities [P]
Codes 112, 115, 116	Should be optional [A]
Allocation to crops	[A, P], not possible completely [SF], only to cereals, not wheat [B], definitions unclear [H]
Allocation to animals	Not always completely possible [SF]
Suggestions for data to be added	Remarks
Euro	All member states convert data to Euro
CAP regulations	Classify subsidies to CAP regulations. [I, NL] Provide reference yields and % national topping up etc. per region [NL] classify animal subsidies to categories table D.
Subsidies on investments	Should be written down with asset [L]
Actual amounts received	At least for types of cattle/crops [IRL]
LFA-subsidies	[H]
Data items to be harmonized or better documented	
Due value	Depends on grant type [IRL]; definition not clear [I, B], too difficult as unknown at farm level [A], implementation too difficult [P, E], as received basis would lead to less inaccuracies [UK] are gathered on an as received basis [S] Probably difficult [A3], should be due value as a principle [DK]
Disaster	Should be defined: official decree or relative to farm situation [NL]
Subsidies in general	Practical adaptation to local situation [P]
Subsidies included in land rent	[NL]
Allocation to crops	[F]

In the voluntary tables below, countries have been characterized as 'member state with interest and feasible data gathering' if they think that data gathering is at least for subsamples technically (not necessarily also financially) possible, and when they indicated an interest in exchanging such data.

Mineral balances statement	
Member states with data	L, NL, A, SF, S, IRL
Member states with interest and feasible data gathering	I, P, UK
Task force	TF Mineral balances
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	FAIR concerted actions, e.g. Elisa
Relevant data old farm return	None

Gross margins and physical data statement	
Member states with data	B, Dk, F, I, L, NL, A, P, S, UK, IRL
Member states with interest and feasible data gathering	
Task force	TF Cost of production
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	Eurostat's Classex 44 on sgm, old farm return
Relevant data old farm return	Table D, K (for definition enterprises)

Cost of production statement	
Member states with data	B, Dk, F, I, L, P, S, UK
Member states with interest and feasible data gathering	NL
Task force	TF Cost of production
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	Eurostat's Classex 44 on sgm, old farm return
Relevant data old farm return	Table D, K (for definition enterprises)

Organic production statement	
Member states with data	B, Dk, D, I, NL, A, SF, S, L
Member states with interest and feasible data gathering	IRL, P, UK
Task force	TF Organic production
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	CAP regulation
Relevant data old farm return	

Processing on the farm statement	
Member states with data	B, F, I, L, NL, A, SF, S, UK
Member states with interest and feasible data gathering	P
Task force	TF Processing on the farm
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	
Relevant data old farm return	Table K

Agri-tourism statement	
Member states with data	B, F, I, L, NL, A, SF, S, UK
Member states with interest and feasible data gathering	P
Task force	TF Agri-tourism

Hard core /voluntary survey	Voluntary survey
Reference for harmonization	
Relevant data old farm return	Table K

Landscape maintenance statement	
Member states with data	B, F, L, NL, S
Member states with interest and feasible data gathering	I, P
Task force	TF Landscape maintenance
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	FAIR concerted actions like Elisa, Farm subsidy statement
Relevant data old farm return	

Forestry statement	
Member states with data	Dk, D, E, F, A, SF, S
Member states with interest and feasible data gathering	IRL, I, P
Task force	TF Forestry
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	FAIR concerted action Mosefa, CAP regulations
Relevant data old farm return	Table K

Non-farm activities statement	
Member states with data	Dk, NL, A, SF, S
Member states with interest and feasible data gathering	I, P
Task force	TF Activities outside the farm
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	Kshatriya study, Eurostats TIAH
Relevant data old farm return	None

Non-farm income and capital statement	
Member states with data	Dk, D, NL, A, SF, S, UK
Member states with interest and feasible data gathering	I, P
Task force	TF Activities outside the farm
Hard core /voluntary survey	Voluntary survey
Reference for harmonization	Kshatriya study, Eurostats TIAH, OECD ewg-2
Relevant data old farm return	None

Appendix 6 Results interviews European Commission stakeholders

A6.1 Introduction

In the RICASTINGS project interviews with stakeholders were organised. The stakeholders were identified by the FADN managers. The unit A/3 selected the following DG6 officials to be interviewed: Mr. Chomel, Mr. Morard, Mr. Flies, Mr. Ahner, Mr. Willems, Mr. Buffaria. In addition also Mr. Vontron (DG19) was nominated. The main impressions from these interviews are reported in the next section. Interviews have been held at the end of April 1998 by George Beers and Krijn Poppe.

After the workshop, the unit A/3 underlined its data requirements in a letter to the RICASTINGS team. That letter is summarised in section A6.3

A6.2 Results from the interviews

Policy analysis in general

In policy evaluation the main question is 'Are the CAP objectives (stability of markets, income of farmers, environmental and rural objectives) fulfilled?'. RICA is a very important instrument, especially for the income-objective. The unit for policy analysis hopes to install evaluation-groups, to which a policy-analyst of A/3 should be attached. RICA's strongest point is the comparability between member states, but there are severe doubts if this comparability is reality. Current income definitions are difficult to use, especially net income and income per AWU.

Variable costs are important, as variable cost are linked to CAP and fixed cost much more influenced by national member states. For income the impact of CAP on farm (CAP products) income is important, and in addition non-agricultural income is important.

The analysis is sector by sector. Too much attention in RICA is paid to mixed farms and methods should be found to relate income to products. Specialist farms and specialist regions are most important. RICA data are not fully representative: it are the better performing farms. This will improve automatically and users know this: they always use other sources as well as theoretical know-how. So RICA is only one (but an important) part of the policy analysis.

For the structure policy, the structure data for the regions (5b etc., notice that these categories will disappear) are important. Using the case of durum-wheat as an example it becomes clear that there is also a need for background data: potential yields, irrigation possible yes/no etc.

There is a need to have an idea on the management level/education of the farmer: he is maximising yields or optimising income? For subsidies it is important that we know from which regulation the subsidy origins.

Experiences with the Mac Sharry analysis are as follows: data are not up-to date enough, not always representative, not detailed enough and comparability sometimes lacks. Therefore sometimes other sources were used and the analysis for cereals was restricted to important regions like N. France and East Anglia, using local data sources (Sondes, University data). This however is also uncomparable.

Environmental data is of interest, but at the moment difficult to define (birds in hedgerows, lower cost of production, irrigation, trees for desertification?). The role of farmers in rural development is very unclear. Forestry is an important issue, especially in some regions, in combination with farms as well as a separate entities. There are 2 important regulations from DG6 on forestry and reforestation.

The product of RICA is a database plus the analysts of A/3 to explain and to do research on request. The current feeling is that users have too little knowledge on what is available. The content is too complex. It is not harmonized and in discussions there is too much wealing and dealing between member states, which results in unclear compromises on the data content. The RICA responds on questions for analysis with a large set of indicators, and proposals to enlarge the set even more. Complexity should not be added but must be reduced by the RICA and the A/3 analysts. It all results in data that are too complex and too late to be used by decision makers.

The RICA seems to forget that their data are only a small (but important) part of the policy paper. An analysis will always be conditional on the statement 'on the basis of the RICA information available at today'. The A/3 analysts should improve the communication between the database and the users at this point, without passing all the research-decisions to the users.

The cooperation with member states in evaluating policies is different between structures policies and market policies. In market policies the Commission (FEOGA) has the lead, but in structures the member states deliver reports that the commission synthesis. Especially in that procedure national data are used and these tend to be incomparable, sometimes even within member states. Therefore there are clear complaints on the use of different national indicators in the member states. A European set of indicators should be available and used also by the member states.

RICA is not an exclusive instrument for DG6. The results should also be available with researchers, DG11, DG2 and the member states.

There is no interest with the unit on policy evaluation to be involved in the steering of the RICA system. They have the user-role. RICA should listen to its users. The unit can not predict what will be needed in 5 years time. By joining evaluation teams, RICA analysts can learn what type of data is often used and needed. The RICA unit should learn this.

Environmental aspects of policy

FADN is a good tool for evaluation. However the data content is not sufficient. Also seen from the broad view of the 3 DG's involved in environmental issues, RICA's role must be evaluated in the total statistical system, with FSS and REGIO as other important data sets. There is not a specific need for RICA data but for solid data. They could come from RICA as well as FSS, to the user that is equal. However there is a strong need for more micro-data on environmental issues. It is unsatisfactory that the FSS turned down the requests for some basic

environmental data. OECD agri-environmental Indicators seem to be too global and not disaggregated enough.

Data should account for local circumstances. Checks should be made with other data sources. From concerted actions like ELISA it seems to be clear how mineral and pesticide data will be gathered (Nuts 2 and 3). Items like landscape, biodiversity, organic farming, soil degradation, farm systems are however still very difficult. Landuse (CORINE) and the Environmental Agency in Copenhagen should also be kept in mind. Users clearly have alternatives for data. Therefore use a flexible approach: take what is available and regionally important.

FADN should at least take a role in management practices, with questions like 'do you practice an explicit mineral/nutrient management', 'do you take wildlife protection into account'. The response of farmers to all aspects of policies is important. Farms should be classified to Nitrate vulnerable zones.

Users in policy departments do not have time to dig into all the RICA details. Data for LFA regions could be quite different from those of intensive production areas, as problems and issues differ strongly. For LFA the topic is how to design good policies for those areas. Maps like those published by Eurostat with EECONET data (habitats) and mineral balances are a case in point: it is clear that these areas have a good score on those issues. Data on such topics could better be gathered on intensive production areas, to see how policies influences these issues.

The current definition of a farm is questionable: it is linked to production. In LFA this is more and more only a part of the farm: services and subsidies are other sources of income. Can we prove that farmers have an income from environmental activities? Landscape is becoming an important issue.

It is important to use the FADN as a data source for all European institutes: all DG's, the European Parliament etc. DG2, DG23 (agri-tourisme) and especially DG16 are very interested in access to the data. Broadening the use is a logical consequence of broadening the scope of agriculture.

Forestry aspects of agricultural policy

Forestry is an important policy topic for DG-6, and it is certainly not true that DG6 would not be interested in data on forestry. There are two important regulations by DG6 on forestry and a forestation. There have been unsuccessful attempts in the 1980s to improve the forestry data in the FADN. The new member states and new policies hopefully help to swing the balance.

Farm forests as well as non-farm forests are of interest. An overview of the currently available data on forestry is provided in a recent report by the Economic and Social Committee, that has a good appendix on this point. The EU forestry institute in Helsinki also has a good picture of the data. The comparability of data is an enormous problem. Remote sensing makes sense to measure changes in standing timber, but it tells nothing on biodiversity or economic aspects. The current concerted action Mosefa on a FADN can be useful.

Agricultural policy analysis

The RICA should become more transparent (making it more clear how things are organised and calculated). Network management becomes more important and work should be carried out in task forces and visiting committees. Voluntary data may not lead to a free rider/bandwagon problem that some countries get data but do not deliver data.

In the hard core should be:

- output main products;
- main costs;
- some data on balance sheet;
- gross margins;
- subsidies;
- structural information on the farm;
- some physical data.

In addition:

- strip all details;
- exchange this for gross margins;
- make the system more transparent: everybody must be able to explain data;
- trade off: more data on less farms is negotiable but data should be available Eurostats Nuts level (groups of Nuts-2?).

For the coming years:

Agenda 2000 will not bring much change, but: more environment, more rural development.

Is the RICA the best system to deliver this? Only voluntary as a subnetwork would already be a big advantage. For each topic a critical mass of 5-7 countries is needed.

Energy and funding should come from the member states, where RICA is facilitating to initiatives.

Suggestions for data outside the hard core:

- non-farm income on professional farms.

Criteria should be developed to add new data-sets, e.g.:

- if the new data helps to understand the farm (non-farm income and viability, local environmental issues);
- related to CAP;
- related to new DG6 policies;
- improve comparability between farms;
- improve policy analysis.

There are alternatives to RICA and indeed alternatives are used, e.g. national data like Mr. Colson's analyses, gross margins from a Paris based organization, a Europe wide telephone survey from BVA (a French survey organization), UK data to calculate the slippage effect in cereals, offers from private firms.

All these alternatives have their problems. Reports made outside DG6 mainly report conclusions, not data that can be used for policy analysis and it is often unclear who commissioned the study and with what objective.

Being in time is a big problem. Mr. Fischler does not understand why there are not yet data on 1997. (Where 1995 is still not finished).

A3 (like A/2) has two faces: the network management and doing analysis. The analysis can be done with whatever type of data. The analysts must have an interesting job in this respect, as the internal labour market is tough. There is no problem at all in sharing data with other users, like other DG's. What is standard should be available in the most transparent form

(if participating countries agree). This could strengthen the system. RICA is at the moment too much seen as an agricultural (DG6) system, where also DG11 is very interested.

The advantage is that more use could lead to better quality.

About 2 years ago dissatisfaction with the performance of RICA has led to an internal evaluation that centred on questions like 'do we need RICA' and if yes, is there a need for renewal. This because some persons in DG6 were very annoyed with the RICA performance.

The background of the evaluation of the RICA, two years ago, has been that no data were available for preparing the 1992-MacSharry decisions, were the system costs a lot of money (8mln ECU + 10 persons?). Secondly the data and reports of RICA are not very accessible: the report are very difficult to read as they focus on indicators and definitions ('too much complexity'). This is in sharp contrast with e.g. reports from Mr. Colson, where the methodology is much more explained between the lines or as an appendix.

The evaluation resulted in the conclusion that RICA is needed and that the system must be improved. It has a number of weak points and RICA should show its benefits much more clearly. A radical improvement in quality should be reached quickly. The tool should be made available internally and externally as soon as possible. The evaluation was the start of a number of projects, including the projects on the database and RICASTINGS.

Suggestions on the farm return: it becomes more and more difficult to impose decisions from a central point (simplification, subsidiary), so there should not be a single farm return. Collect data that are important in a region (olives in Sicily, flowers in the Netherlands).

The only important thing is the results that can be used by policy makers: harmonized data provided in time.

Production cost is more important than income. For production costs, specialised regions are taken into account. Policies become more regional. The sample is o.k. for income monitoring but not for types of production.

Procedures for checking on representatively should be installed.

Typical items for a voluntary exchange are non farm income and environmental issues (important for GATT). Working groups should make proposals for such issues, to be endorsed in EU regulations.

Alternative working measures are to use a call for tender (to get data directly from accounting offices or landwirtschaftskammer) and to top up the normal fee per fiche for additional data. Another possibility is to provide better policy deals to those countries that provide data (if you don't provide data on non-farm income we suppose it is high).

Provisional data should be available after 6 months, so generally in July. Final results after 9 months (End of September). For long-term planning a calendar approach could be used, especially for voluntary data (e.g. data and analysis on sugarbeet in 2000 before the end of the current market organization?).

Budget aspects (DG19)

Important items in RICA are/would be: the effect of direct aids: is it skewed?; subsidies allocating to crops and to the budget lines. Ideally the subsidies should be gathered by number of regulation.

RICA is too late. Sector is more important than farm type.

Work on the 1999 budget starts in January 1998 and is published firstly in April. In October the last forecast is made. This is a good moment for assessment of the sector. At that

moment at least the data from the previous year should be in, with a first assessment of income in the current year.

There are complaints on the differences between micro and macro statistics.

The underspending of the budget arises partly from farmers who do not ask for premiums. Can RICA find out which type of farmers do not ask for subsidies?

The cooperation between RICA and EUROSTAT should be improved to promote efficiency. DG19 will certainly be not in favour to allocate more money to RICA. DG 19 also uses data from commodity committees and FEOGA. 'DG19 will survive without RICA'. The efficiency of budget spending is a growing business. The efficiency of subsidies also in relation to non-farm income and taxes is becoming an interesting area of research.

A6.3 Summarizing A/3 requirements

In addition to the results of the interviews, presented above, the unit A/3 expressed a list of requirements and suggestions after the workshop. These are (in order of importance):

- enterprise profitability with gross margins: this is by far the largest gap between the current farm return and the data needed in day to day policy analysis. The estimates that are now made on cost of productions are very difficult if not unreliable. In this light it should be investigated if gross margins and physical data to improve the allocation of costs, could be made obligatory;
- micro-economic results at the end of the calendar year for the current year (rapid results);
- for voluntary data items the representatively should be made available by the member states;
- a better understanding of the definition of a farm, which now seems to be unharmonized between member states;
- a continuation of series of current indicators;
- a number of items of small importance could be eliminated.