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Technical Co-operation Service

Or. Fr.

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Directorate for Agriculture

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CO-OPERATIVE ACTION PROGRAMME

JOINT ACTIVITY ON RESEARCH AND DEVELOPMENT

IN SHEEP PRODUCTION

Improvement of sheep flock management

MEETING OF STEERING COMMITTEE

(Paris 19th-22nd March, 1979)

PROPOSAL FOR A WORK  
PROGRAMME

## INTRODUCTION

1. The information submitted by the various countries (see the paper on the economic aspects of sheep production in some Member countries CT/AGRES/4 - DAA/1585) shows that, in general, greater productivity from sheep flocks depends on a number of factors which vary in importance from one country to another. It is clear, however, that in most of them the factor which limits any increase in productivity is the inadequacy and irregularity of feeding resources. The general supply position remains poor, and fluctuates from one period to the other.
2. Specific action for the improvement of flock productivity e.g. schemes to increase the weight of animal products or improve breeding performance greatly depend on the improvement of feeding resources.
3. In addition, any improvement in flock feeding must go hand in hand with improved flock management methods, which are the only way of making optimum use of production factors.
4. Countries also consider that sheep production is very often concentrated in less-favoured areas and that any action to foster production should preferably be undertaken in this type of area.
5. For these reasons countries consider that Joint Activity on Research and development in sheep production, under the Co-operative Action Programme, should focus on improved sheep flock management methods aimed at more efficient use of feeding resources in less-favoured rural areas.

## OBJECTIVES

6. The aim of the Joint Activity is to encourage the development and use at farm level of technical and economic management methods for sheep flocks with special reference to the more efficient use of feeding resources. These management methods enable the producer to improve his knowledge and the analysis of his results and also to check and measure the effect of the techniques he is offered.
7. The activity also aims at encouraging consultation between development planners and local research stations with a view to improving the dissemination at farm level of techniques tested and perfected by the latter.

## EXPECTED RESULTS

8. The purpose of this activity is to improve productivity of sheep flock management methods in order to satisfy more fully the needs of the internal, and if possible external market.

9. Sheep are the main potential users of inexpensive high-roughage feeds which are found on land suitable only for grazing or migration. This activity which aims to develop sheep production, should therefore contribute to revitalising less-favoured rural areas characterized by extensive livestock farming /cf. CT/AGRES/4 - DAA/1585 - Annex III/.

### I - PRINCIPLES AND STAGES OF THE WORKING METHOD

#### Principles

10. The principle of the method is to introduce technical improvements in sheep flock husbandry particularly as regards feeding methods and subsequently measuring the financial results at farm level.

11. These technical improvements would, after analysis of typical farms in the area concerned, be the subject of a "Feeding system improvement programme" drawn up in consultation with regional research stations which are in the best position to propose innovations and improve flock husbandry methods in the light of conditions and potentialities in the area.

12. The financial consequences of the technical improvements will be measured through continuous recording of technical and economic data and the preparation at the end of each financial year of a technico-economic analysis sheet. The latter will enable farm production systems to be analysed and farms to be compared.

13. The annual examination of results will also make it possible:

- . to build up new local - technical and economic reference data at production level to add to the reference material already available for the preparation of future development programmes;
- . to define techniques and innovation factors which may, after testing, be disseminated among a larger number of similar farms in the area.

Stages in the method

First Stage

Choice of typical farms and preparation  
of a programme for improving the  
sheep flock feeding system

14. The first stage concerns the assembly of the various elements required to start the activity it covers.

(i) The choice of the area

15. The area in which the participating countries propose to develop the joint activity has to be chosen. It should meet the requirements decided for the subject of the activity i.e. it should be an area forming part of a less-favoured region because of its physical, climatic and agricultural conditions but should have features conducive to the development of sheep production:

- . presence of a minimum number of producers;
- . availability of usable feed production land;
- . existence of a local or regional research station;
- . existence of a specific revitalisation policy.

(ii) The choice of typical farms

16. The farms chosen should be those concerned by the technical improvement programmes and the development of technico-economic control. They must be as typical as possible of the farms in the areas in which sheep production can be developed. The number of typical farms in each area is to be decided in relation to the diversity of the existing types of farm and the need to have enough farms of each type to permit comparison of the findings within a given production system. In practice each sample should comprise at least 20 typical farms. It would also be necessary to arrange for a number of control farms outside the experiment so as to measure any differences which develop between the typical farms and other farms in the area.

(iii) Analysis of the present production system

17. This analysis will be based on a farm record sheet prepared from the data of the last financial year(1) for which technical and economic information is available. Each farm will have a technico-economic record showing the situation on the farm at the beginning of the activity.

(iv) Definition of a programme for improving the sheep flock feeding system

18. This programme should be prepared at two levels:

- in the area selected and in co-operation with the various scientific and technical bodies in a position to make proposals for the improvement of the area feeding resources and their use, bearing in mind local potentialities;
- on the typical farms, following the lines of the programme in the area mentioned above and the data supplied by the individual farm analysis sheets. At this stage participation by the producer is important to ensure his co-operation in the individual programme prepared with his help.

19. The improvement programme should in the first place concern the flock feeding practices but it will necessarily include proposals in relation to other interdependent factors of flock management particularly breeding management.

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(1) To facilitate comparison it will be necessary to standardise the dates of the beginning and end of the financial year in the various countries. The following dates are suggested:

- . for countries where autumn lambing is the general rule ..... 1st October to 30th September.
- . for countries where spring lambing is the general rule ..... 1st March to 28th February.

Second Stage

Execution and control of a feeding system improvement programme

20. Each group of typical farms should have the benefit of support from a technician in the preparation of the individual programmes previously defined. The technician should have participated in the preparation and preliminary studies so as to be thoroughly familiar with conditions and problems on farms in the area. At the same time as the improvement programme, recording documents for technical and economic data relating to the flock and the farm will be made available. The documents will be filled in by the producer with the assistance of the technician. At the end of each financial year, the technician will compile a technico-economic analysis sheet which will make it possible to examine the results with the producer.

Third Stage

Interpretation and use of the results

21. At the end of each financial year, its achievements and deficiencies will be assessed jointly by the producers, the technician, those responsible for the activity and the regional research body or bodies; this assessment will comprise:

- . the technical and financial results obtained, as they appear from the farm record sheets;
- . any problems met in the use of the new techniques proposed;
- . ways of extending these techniques to other farms, with any necessary adaptations.

The analysis should also enable other factors acting as a brake on production to be gradually brought into focus.

22. The results obtained by each country will be compared at annual international meetings attended by planners in the various countries participating in the Joint Activity. These meetings would also make it possible to improve the joint working methods.

## II - DIVISION OF ACTIVITIES AND RESPONSIBILITIES

23. Development of the present Joint Activity will require a "leader agency" in the chosen area, a "national team" comprising representatives of the various bodies involved in the development of the activity and an "international co-ordination team" composed of OECD consultants.

### (i) Activities and responsibilities of the leader

24. The leader agency will be responsible in the area concerned for ensuring that the activity is carried out at farm level, deciding the number of typical farms in the area, supervising the collection of data and analysing the results. The leader agency should be represented in the national team.

### (ii) Activities and responsibilities of the national team

25. At national level the team's activities will mainly be to:

- help the leader agency to launch the activity, and particularly to ensure compliance with the objectives of the activity;
- interpret the results obtained on the typical farms co-operating in the activity, with a view to their use as reference models in subsequent development programmes;
- facilitate exchanges with the other national teams and ensure contacts between the co-ordination team and the leader agency;
- participate in meetings to pool experiences.

### (iii) Activities and responsibilities of the international co-ordination team

26. The international co-ordination team will mainly be required to:

- afford technical help to the national teams and the leader agencies in the preparation and development of the activity;
- provide standard record sheets for presentation of the farm data and results with a view to their comparison between the countries;

- coordinate the development of the activity and prepare periodic meetings of the national teams for joint discussion of difficulties and results;
- disseminate, at international level, the methodological results obtained from this activity.

III. TIMETABLE FOR THE DEVELOPMENT OF THE ACTIVITY

Stages	Dates	Responsible bodies or Participants	Operation or objective
1st Stage Preparation of technical improvement programmes May 1979- April 1980	End May 1979	National authorities	<ul style="list-style-type: none"> <li>• appointment of national teams</li> <li>• appointment of leader agency</li> </ul>
		National team	<ul style="list-style-type: none"> <li>• choice of area</li> <li>• choice of typical farms</li> </ul>
		Co-ordination team	<ul style="list-style-type: none"> <li>• preparation and transmission of:                             <ul style="list-style-type: none"> <li>- technico-economic record sheets of sheep production</li> <li>- guidelines for analysis of the records</li> <li>- technical and economic data recording documents</li> </ul> </li> </ul>
2nd Stage Execution of technical improvement programmes as from October 1979	June 1979 to February 1980	Leader agency	<ul style="list-style-type: none"> <li>• At the level of the typical farms                             <ul style="list-style-type: none"> <li>- use by the countries of the technico-economic analysis record sheets and analysis of these records</li> <li>- decision as to the technical innovations or improvements to be developed</li> <li>- initiation of these techniques</li> </ul> </li> </ul>
		National team Local research stations with the co-operation of the Co-ordination team	
3rd Stage Interpretation and utilisation of results, as from October 1980	April 1980	Leader agency National teams Co-ordination team	<ul style="list-style-type: none"> <li>• <u>International Meeting</u> <ul style="list-style-type: none"> <li>- submission of analyses and discussion of problems encountered</li> <li>- submission and discussion of technical improvement programmes</li> </ul> </li> </ul>
		Leader agency National teams Co-ordination team	<ul style="list-style-type: none"> <li>• <u>International Meeting</u> <ul style="list-style-type: none"> <li>- discussion of initial results</li> </ul> </li> </ul>