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Setting up of a Foresight Unit for the Andalusian Agrifood System

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SUMMARY. This paper contains a description of the main steps taken by the Public Company for the Agriculture and Fisheries' Development of Andalusia (D.a.p.) providing technical assistance to the *Consejería de Agricultura y Pesca de la Junta de Andalucía* (Agricultural and Fisheries Department of the Andalusian Regional Government) in order to set up a Foresight Unit for the Andalusian Agrifood System. It also contains a brief description of the main methodological advances achieved and some specific studies undertaken so far.

Key Words: Foresight, decision-making support, information network, Andalusia.

RÉSUMÉ. Cette publication décrit les principaux pas suivis par l'Entreprise Publique pour le Développement Agricole et de la Pêche de l'Andalousie (D.a.p.) dans son assistance technique à la Consejería de Agricultura y Pesca de la Junta de Andalucía (Ministère Régional de l'Agriculture et de la Pêche du Gouvernement Andalou) pour créer et développer une Unité de Prospective pour le secteur agroalimentaire andalou. Il contient aussi une brève description des principaux acquis méthodologiques ainsi que quelques études spécifiques réalisées.

Mots clefs: Prospective, appui à la prise de décision, réseau d'information, Andalousie.

INTRODUCTION

Andalusia has been designated as a Objective 1 region of the Structural Funds. The agricultural sector in Andalusia plays a remarkable role in its economy, especially as compared with those of other European regions, and hence becomes a strategic sector.

Quick and deep changes are appearing continuously in the present world, and they all have a profound impact in our region and in our agriculture. As a result of the globalisation process, events happening anywhere in the world and in any knowledge area have more and more repercussion in the Andalusian agrifood sector. The decision making process takes place in an environment characterised by increasing uncertainty. Problems get more and more complicated requiring global and integrated solutions. Anticipation of the changes and response capacity are essential in order to guarantee the survival of any company or productive sector.

In this context, information management plays a strategic role in the adaptation to the changes. Therefore, foresight studies can be a useful tool. Foresight studies can be defined as the organized, selective and permanent way to obtain information from outside, analyse it and turn it into knowledge in order to decrease the risk involved in decision-making and enable the stakeholders to anticipate the

changes. Another definition by Jan de Wilt (2001) is the following "Foresight can be defined as the interactive process involved in systematically attempting to explore future dynamics of science, technology and society with the aim of identifying viable strategies and actions for stakeholders".

The Consejería de Agricultura y Pesca de la Junta de Andalucía (Agricultural and Fisheries Department of the Andalusian Regional Government) started up a Plan for the Modernisation of Agriculture in 1996. This Plan aims to adapt the overall Andalusian agriculture to a world in permanent change. One of the most important tools of the Plan is the establishment of an Agricultural Integrated Information System (AIIS), with the objective of providing support to the decision-making process of all the different agents of the agrifood sector. Within the context of this System, it is considered essential to acquire a foresight capacity. This is why a working party called "Foresight Unit" was set up in 1998, joining resources from the Consejería de Agricultura y Pesca and the Public Company for the Agriculture and Fisheries' Development of Andalusia (D·a·p). The main objective of this working party is to incorporate the foresight studies as a helpful means to support the decision-making process of the Andalusian agrifood sector.

RESOURCES AND DATA

The Working Core of the Foresight Unit is presently formed by a group of 10 engineers integrated in the Innovation and Development Department of D·a·p, working under the facultative management of the Statistic and Studies Service of the *Consejería de Agricultura y Pesca*. The Core of the Foresight Unit is located in Cordoba, a strategic location close to the main agricultural research centres. It is also permanently linked to Brussels through a group member working in the Office of the Region of Andalusia.

The day to day work of the Foresight Unit is based on the following resources and sources of information: (i) territorial structure and agrifood knowledge of the *Consejería de Agricultura y Pesca* and D·a·p; (ii) statistical and other documental information sources; (iii) experts and stakeholders of the agrifood sector; (iv) Andalusian agricultural research centres; and (v) the Catalogue of Andalusian Farms (core of the AIIS).

METHODOLOGY

During almost four years, the Foresight Unit has contributed to support the day-to-day decision-making of the *Consejería de Agricultura y Pesca*, and at the same time it has strived to incorporate the characteristic methodological elements of the foresight studies in a systematic way, in order to make progress in the general objective pursued. Some of these elements are: (i) a systematic access to diverse sources of information; (ii) the establishment of a net of informants in the sector; (iii) building alliances with other foresight centres; (iv) close cooperation with experts in specific areas; (v) development and use of different methods of information analysis and distribution; etc. Fundamentally, foresight is about generating an important stream of information among all the stakeholders involved in constructing the future. During this process, the information gains a great deal of added value.

In addition to the elaboration of specific studies in order to response the demands of the *Consejería*, a Research Project has been undertaken within the Foresight Unit in collaboration with the University of Cordoba (Cantero, M.A., 2002), which formulates a specific proposal about the structure and working procedures for the future development of the Foresight Unit. This proposal has taken into account the working procedures of other foresight centres, different information analysis tools and the specific conditions in which its work is presently carried out. This proposal defines the role to play by each of the agents involved in the Foresight studies together with the relation to be established between the different stakeholders in order to enable them to effectively work in a net. It also defines their specific tasks.

As it has been mentioned above, this proposal has been based on the work done so far in order to meet the specific demands of the Consejería de Agricultura y Pesca, which somehow constitutes an

underlying thread to which the methodological elements of the foresight studies are being progressively integrated.

RESULTS

Design of a Foresight Unit for The Andalusian Agrifood System

Figure 1 shows the proposed design of the Foresight Unit for the Andalusian Agrifood System. The different agents involved are the following: (i) the working core; (ii) the advisory council; (iii) the expert panels; (iv); the net of informants; (v) the net of civil servants; (vi) other Foresight centres; and (vi) sector panels.

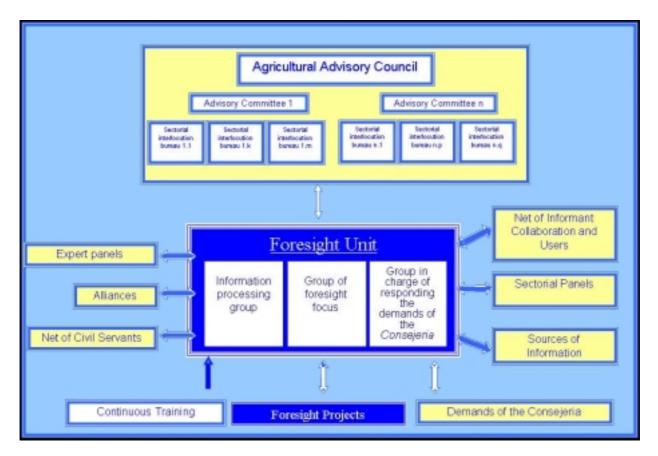


Fig. 1. Design of an adequate structure for the work or a Foresight Unit in the Andalusian Agrifood Sector

The mission of the working core is to coordinate the participation of all the different agents and make sure the information is transmitted in an adequate format, which depends on its particular receiver. In order to do so, a number of diverse tools should be used, such as interviews, meetings, modelling, Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses, brainstorming sessions, etc. The present dimension of this group (8-10 members) is considered adequate.

The agricultural advisory council is a group of high level representatives and experts of the agrifood sector. Its mission is the selection and establishment of priorities of strategic study subjects. The

Consejería de Agricultura y Pesca has a project which aims to develop and reinforce an agricultural advisory council with the structure represented in the figure and the mission of carrying out the interlocution with the agricultural sector. The structure of the council can be adapted with some minor changes in order to make it useful for the development of the Foresight Unit.

The task of the rest of agents involved is to participate at different levels in the process of elaboration of information. The establishment of strategic alliances with other foresight centres is very important in order to make possible a continuous methodological training and recycling of the foresight working core.

Some specific studies

Amongst the different projects undertaken so far, a Characterisation & Modelisation of the Olive Oil Sector and a Strategic Plan for the Horticultural Sector in Andalusia must be highlighted because of its great scope, its utility and its close liaison with the Mediterranean agriculture.

The Modelisation of the Olive Oil Sector is based on the administrative databases for the management of the subsidies of the Common Agricultural Policy (Fig. 2). It is specially remarkable the great deal of added value provided to the administrative databases, which are presently available in a format which could be distributed to any interested stakeholders: researchers, entrepreneurs, individual farmers, politicians, etc. so that they can make an ample use of the information presented. This information includes an in-depth description of the productive and socio-economic structure of the Andalusian olive farms. A foresight study is being developed based on the previous Characterisation. It aims to identify the most important trends that might affect the sector in a temporal horizon of 10 to 15 years. It also aims to identify the necessary strategies in order to enable the sector to successfully face the future.

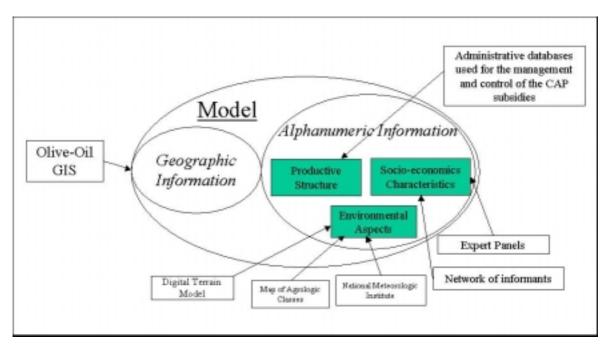


Fig. 2. Development of a Model of the Olive Oil Sector in Andalusia

The most remarkable aspect of Strategic Plan for the Horticultural Sector in Andalusia is the methodology used to design the Plan (Fig. 3), which is based on the collaboration of a large number of stakeholders of this particular sector. In particular, the plan is based on a diagnostic of the sector divided

on three different sections: regulations, producing sector and marketing. The diagnostic of each of the sections is carried out through a draft document that is evaluated and improved in sessions of 20 to 25 participants that represent the main agents of the sector.

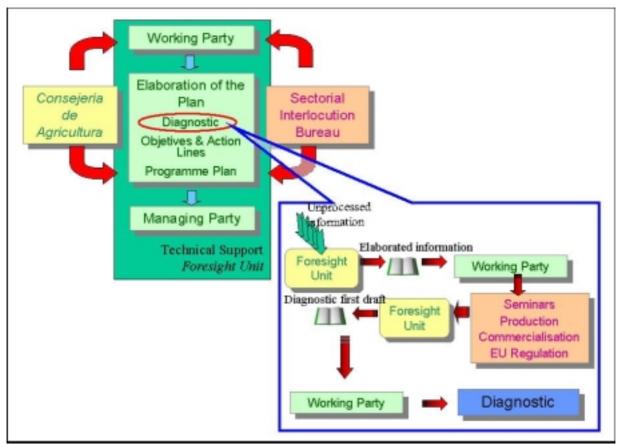


Fig. 3. Scheme of the process of elaboration of the Strategic Sectorial Plan

CONCLUSIONS

Many of the following conclusions have been extracted from the aforementioned work developed by Cantero (2002) within the Foresight Unit.

The Foresight Unit has been useful in order to support the decision-making process and has reinforced the strategic value of foresight studies for the Andalusian agrifood system.

The Foresight Unit represents an efficient way to increase the added value of information through the net integration of previously isolated or individual agents. The establishment of networks is necessary in order to develop foresight studies.

The working core task of coordination is fundamental for the development of foresight studies. The present dimension (8-10 members) is adequate.

The enormous possibilities of strategic subjects to study makes necessary the establishment of mechanisms in order to select them and assign priority.

The endogenous value of the group based on the quality of the elaborated information as an interchangeable good is a very important developing element. In this sense, it is remarkably important to transmit the information in an adequate format, which depends on the particular receiver of it.

The information is the main element for the development of foresight studies, so it is necessary to use resources for the identification and access to different sources of information.

The establishment of strategic alliances with other foresight centres is essential in order to make possible a continuous training for the adaptation to the present permanent changes.

Foresight studies make use of a wide range of tools. In this way modelling is a powerful tool for the characterisation and simulation of future scenarios.

An aspect of interest for the development of a foresight unit is the possibility of establishing Public-Private cooperation mechanisms.

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