Working Paper WP96-4 **November 1996**

Fifth Joint Conference on

Agriculture, Food, and the Environment

Proceedings of a Conference Sponsored by
University of Minnesota
Center for International Food and Agricultural Policy

Università degli Studi di Padova
Dipartimento Territorio e Sistemi Agro-forestali

Agricultural Development Agency - Veneto Region

University of Perugia

University of Bologna - CNR

SESSION III: AGRICULTURAL SYSTEMS WITH LOW ENVIRONMENTAL IMPACT

4. THE USE OF BULLETIN BOARD SYSTEMS (B.B.S.) IN TECHNOLOGY TRANSFER PROCESSES

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FOREWORD

This volume contains the papers presented at the Fifth Joint Minnesota/Padova Conference on Food, Agriculture, and the Environment held at Abano Terme, near Padova in Italy, June 17-18, 1996. This conference was organized by the Center for International Food and Agricultural Policy at the University of Minnesota and the Dipartimento Territorio e Sistemi Agro-forestali at the Universitá degli Studi di Padova (University of Padova) under their international collaborative agreement, along with the Agricultural Development Agency - Veneto Region, the University of Perugia, and the University of Bologna - CNR. The first Joint Conference was held in Motta di Livenza, Italy in June 1989, the second in Lake Itasca, Minnesota in September 1990, and the third in Motta di Livenza in June 1992. The Fourth Joint Conference was held in September 1994 at the Spring Hill Center in Minnesota.

This conference focused on topics of mutual interest in the areas of (1) agricultural and resource policy, (2) land markets, (3) the food and agricultural industry, (4) agriculture and the environment, and (5) agricultural production and environmental quality and sustainability. Although the conference was not intended to provide a comprehensive coverage of all the issues, this volume hopefully represents a useful contribution to current understanding and debate in the areas of food, agriculture, and the environment.

Judy Berdahl, secretary for the Center for International Food and Agricultural Policy at the University of Minnesota, assisted with these Proceedings.

Benjamin Senauer
University of Minnesota

Danilo Agostini
University of Padova

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5th JOINT CONFERENCE ON AGRICULTURE, FOOD AND THE ENVIRONMENT

Abano Terme - Padova, 17th and 18th June 1996

THE USE OF BULLETIN BOARD SYSTEMS (B.B.S.) IN TECHNOLOGY TRANSFER PROCESSES

Dr. Tommaso De Marco - Dr. Roberto Bustaffa
E.S.A.V. - Ente Sviluppo Agricolo Veneto

1. INTRODUCTION

Information undoubtedly constitutes a powerful instrument in a market economy. Indeed, in the continuous exchange of goods and services which characterises it, those operators who know how to obtain the right information in the briefest possible time span are the favoured ones. Therefore, the possession of information becomes a development factor for any activity.

In some ways, information can be assimilated with any commercial product, in the sense that, likewise, it possesses precise characteristics of which the following interest us, particularly:

- *typology*: depends on its content or the matter to which it refers;
- *interest*: is determined by the number of people who are interested in it;
- *usability*: depends on its capacity to satisfy cognitive requirements;
- *reliability*: is defined by what measure it represents reality;
- *perishableness*: is bound to the duration of the interest which surrounds it;
- *timeliness*: is the time the information takes to reach those who are interested in discovering it.

The combination of these characteristics produces the quality of the information from which, in short, its market value depends.

That which interest the vast, industrial, agricultural-food sector, belongs to a wide range of typologies: scientific, technical, legal, administrative, economical, commercial, fiscal, social, etc..

Even for information, analogously with any other product, the problem exists of distributing it into the right market, in the sense that specific knowledge generally interests only certain operators.

In reality, instead, we are often witness to a considerable waste of energy spent in order to spread certain information, even to those who are not very, or not at all interested in it. In other words, everything for everyone.

In spite of this, one of the main problems which the agricultural sector suffers from, and, more generally speaking, the agricultural-alimentary one, is the scarce diffusion of all kinds of information. One of the main causes inherent in the difficulty of spreading technical innovation in agriculture could be put down precisely to this inadequate flow of information, and an obstacle to creating that production organisation which goes under the name of an "agricultural-alimentary die". Even the modest communication existing between research and agriculture is the reason why, very often, the objectives of the former do not occur as the express requirements of the latter, rather they correspond with the inclination or researchers and experimenters.

Particular importance, therefore, is acquired for the E.S.A.V. within the ambit of its institutional duties, favouring and developing the information flow between the various sectors, the various levels, the individual subjects in the agricultural world, bringing about all the necessary connections and adopting the most appropriate instruments and methods of communication.

2. THE PROJECT'S AIMS

This project is aimed at developing the E.S.A.V.'s institutional activities in the area of information propagation, thus permanently activating a different way of producing and having the news circulated, which interest agricultural operators.

Very briefly, the objectives to be pursued can be summed up as follows:

- favour the specific diffusion of information, in such a way a to guarantee the greatest efficiency, activating organisation modes and communication channels, such as to ensure the continuous and mutual exchange of information between the operators concerned;
- increase the quality of information by acting on those factors which determine the typology, interests, usablity, reliability, perishableness and timeliness.

At the beginning, the activities will be limited to some enterprises of an experimental nature, later, to these, others can be added, on the basis of experiences realised and eventual requests from potential users.
In practice, it means selecting some information dategories or trends and concentrating every effort so as the news arrives as quickly as possible to the operators, those who are really interested in getting to know about it, because they can obtain a certain benefit or, in any case, derive some utility.

At this point, it is opportune to remember that the information, as such, has no absolute value. In other words, to provide a concrete example, the pure knowledge of a technological innovation regarding an agricultural, production process has a quite relative value, because it must come supplied with a group of other factors, such as the environmental company and organisational conditions in which it was applied, any problems of various kinds which could have determined its application and, finally, the economic effects which it produced in terms of costs and returns.

It often happens that all this accessory knowledge, whose importance is, in any case, at least as important as the main information, is unavailable from the source which possesses the latter, or is available in lesser amounts, because it is fruit of concrete experience acquired from real-life situations and not simulated by a group of more or less operators. Therefore, any means which makes the mutual exchange of these

experiences possible, considerably increases the adavantages for everyone. If, then, the results of these experiences are worked out and structured in an organic way, they can grow to become a sort of “data bank”, capable of self-serving, using the same methods and becoming a patrimony of knowledge, available for a vaster public of operators.

Basically speaking, by using the appropriate software, functioning in an MS DOS background, one can accomplish the spread of information through the creation of user groups organised on the basis of particular themes of mutual interest. That means that inside each group, known as a Bulletin Board System (B.B.S.) (the name by which the diffusion method, for the information which is to be realised, is indicated on an international level), the news will be spread and the problems, exclusively relative to the theme on which the System has been established, are faced. Each user, as well as every supplier, will also be a supplier of information wihich, basically speaking, will be brought simultaneously to the attention of all the System’s components.

In this way, one obtains, contemporarily, the maximum usability, reliability and timeliness possible, because the exchange of information occurs directly between he who possesses it and he who is interested in obtaining it, all in such a way that is generally transparent, so the news can be verified by everybody.

The presence of a co-ordinator/amateur is required for each Bulletin Board System, and his duties include the organisation and checking of the regular development of the information flow, the evaluation of the users’ access, the checking of its operating capacities and maintaining the circulation of information vital.

A group of various Systems link up, indeed, with a central junction or “sysop” (system operator) on which the whole service’s computer management depends.

It is important to underline that an essential condition for the regular functioning of this direct information diffusion is the individual component’s desire to participate in the System’s activities. An interest which must arise out of the awareness of the utility of his having relations with other operators, and his willingness to actively converse

with them, exchanging information. The Systems' can only survive if a continuous flow of messages exist between the supporters.

With reference to the cost of the telematic connections, this will be totally charged to each individual user.

Finally, it should be noted that the B.B.S. being established will represent an organic off-shoot of the E.S.A.V. information service, which will be realised within the ambit of the so-called "Agripolis Telematic Project", being closely connected to it through the junction established by the "sysop".

3. ACTION FORESEEN

Can be summed up as follows:

- the determination of some themes on which a Bulletin Board System can be organised (water quality, wide-scale cultivation, fertilisation, and E.S.A.V. information);
- the purchase and setting up of the software, through which the Bulletin Board System can be realised (Maximus Scott J. Dudley - Ontario, Canada);
- the drawing up of "operating regulations" for the Bulletin Board System to which all users must comply;
- the training of the service users;
- the acquisition of access to data banks and pre-arrangement of applied software;
- the promotion of the service through meetings, articles, etc..

4. THE STATE OF THE PROJECT

In view of the current state of affairs, we believe it opportune to make an effort to acquire information regarding the users' responses to these requests and, on the basis of this, draw up an experience curve.

The effort involved is that of segmenting the various, potential users thorugh specific initiatives and, thereafter, measuring the response obtained through the number of acceptances and successive questioning.

The response to this instrument is neither easy nor can it be taken for granted and, therefore, requires a long and patient setting up operation, so as to understand how this instrument can provide the best possible return.

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