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## *in agricultural information*

**S**OPHISTICATED TECHNIQUES for making technical information available to the farmer have been worked out by the Agricultural Extension Service. Technological details become widely available through various media as soon as the information can safely be released for practical use. Doubtless, some improvements could be made, but on the whole, the system is working effectively.

In contrast, researchers, extension specialists, and librarians are faced with steadily increasing difficulties in handling the current explosion of scientific information. In certain fields, libraries must double their holdings about every decade. Scientific journals proliferate and become increasingly specialized, thereby compounding library problems. Many of them have extensive backlogs of articles to be published. Books rapidly become obsolete, and a useful scientific library must be able to afford substantial new acquisitions annually.

One result of this situation is that the researcher is tempted to concentrate on a narrow specialty—a trend which diminishes progress in science. Another result of the present difficulties in handling scientific information is that personal communication has become important in the top levels of science. This is particularly true in fast moving fields such as physics or biochemistry, where discoveries are widely known before they can be made a matter of record in journals, or discussed at scientific meetings.

One of the unfortunate results of the present situation is that vast quantities of information are filed away where they will be seen only rarely if at all. This information may be important for solving some problems, but it may remain unknown to the particular person who could make good use of it. Modern methods of information retrieval may do

much to remedy this situation. Even a genius is limited in the amount of information he can handle successfully, but some electronic aids are now available which extend the powers of the human brain considerably.

As long ago as 1946, Vannevar Bush proposed a national computer bank of scientific information. Computers have been vastly improved since that time, but his proposal still remains a dream, although certain segments of scientific information—especially in the medical field—are now being computerized.

Fortunately, we have the incomparable National Agricultural Library which was recently moved from Washington to Beltsville, Maryland. It has recently put bibliographies, catalogs, and specialized publications on magnetic tapes for computer read-out. Already some of the Land Grant College libraries are using the computer in some way. Conferences are being held to work out ways of coordinating the agricultural library systems in the nation, and worldwide.

Photography has revolutionized library methods. Machines that produce inexpensive facsimile reproductions are now in use. Microfilm methods reduce bulky newspapers or books to a few rolls of film. It is possible to put an entire book on small cards which can be read by magnifiers. Photographic methods can be linked to computers so that they can furnish, not only the title of the article or an abstract, but also the article in its entirety, in a reduced size.

It is difficult to predict all the ways in which electronic processing of information will be used, but it is certain that the specialist or researcher of the future will be able to effectively use a much larger body of information than is now possible. The only question is "WHY NOT NOW?"