Netherlands Journal of Agricultural Science 37 (1989) 398-402 EDITORIAL

Tropical grey literature: no place like home

I. R. C. Cressie

Assistant Editor, Netherlands Journal of Agricultural Science

Introduction

The communication of information is one of the foundations upon which scientific enquiry is built (Ziman, 1984, p. 58). The crucial role of the flow of information to the growth of science has been detailed extensively in the literature on communication in science (see for example Meadows, 1974; Houghton, 1975; Ziman, 1984, pp. 58-69). Maltha (1976, pp. 1-6) has described that flow as an information chain, in which the scientist, journals, libraries, documentation services, etc., are the links.

It is no easy matter for the developed world to maintain and improve what are by and large its own information chains. What, then, are the prospects for the developing nations, especially the less developed countries, to establish, maintain and improve the links so that their information chains will meet their needs. Concern about how poorly the Third World is served by the present international science communication system is expressed in a letter to the editor in this issue (Stigter, 1989). Specifically, Stigter identifies 'grey literature' as an important source of information in tropical (Third World) agriculture and observes that there are few suitable channels available to introduce this literature into the regular information chain: there is no place for this literature in specialized international journals, congress proceedings and so on.

To correct this shortcoming Stigter (1989, p. 396) suggests that international journals should publish synopses of grey literature reporting 'details of the struggles, the failures and the tentative solutions in tropical technical, scientific and extension/advisory research'. While doing so he reproaches the Netherlands Journal of Agricultural Science (NJAS) for asking referees to review synopses against the same criteria they would use when assessing the suitability of a full paper for publication.

I am pleased to have the opportunity to respond to this letter to the editor. First, because misunderstandings about the scientific status of the synopses we publish are commonplace. An opportunity to set the record straight is welcome. Second, as NJAS is one of the few international scientific journals to publish synopses we are in a better position than most to consider the broader implications of publishing synopses of tropical grey literature.

NJAS policy on synopses and refereeing

There has indeed been a change in the policy for accepting synopses for publication in NJAS. When the Netherlands Agricultural Report Depository (NARD) and NJAS began their synopsis publishing activities in January 1984, an open policy of

acceptance was in place: there was no refereeing of synopses (or reports) submitted, the signature of the director of the author's institute or (university) department being accepted as a guarantee for the scientific quality. This procedure was consistent with the recommendations of the Advisory Committee on Scientific Information (SAWI, 1981, p. 6), which officially launched the synopsis publishing idea. Five months later, this open policy of acceptance was replaced by refereeing procedures that were introduced for NJAS as a whole. The decision reflected (and still reflects, I believe) the priorities of a broad spectrum of research workers in the Netherlands that were interviewed as part of the preparatory activities of NARD (Van der Heij, 1984, p. 11). Other research backs up this viewpoint: Rowland (1982) and the Royal Society (1981, p. 10) both report that respondants to questionnaires about choosing journals in which to publish give first priority to the scientific standard of the journal. Given the tensions inherent in the dual roles researchers fulfil as (critical) consumers of information and as producers of information in a 'publish or perish' environment such results must encourage journal editors and publishers to maintain the scientific standards of all articles published in their journals, be they short communications, synopses or full papers.

Nevertheless refereeing may at times appear to authors as an end in itself. Nothing could be further from the truth. At the very least it is a guarantee that the research concerned and its results are scientifically valid, and it is thus a minimum requirement of any article to contain sufficient information to allow peers to establish (refereeing) that validity. This is generally not enough, however. Most editors also require that the articles they publish possess some orginality and have significance for the disciplines to which they belong. These criteria have been discussed extensively in the literature on the publishing of science, for example by Gordon (1983, pp. 7-11).

NJAS makes in this respect no distinction between full papers and synopses. Both are seen to have the same function: communication of the results of research that add to the store of valid scientific knowledge. Scientific quality equal to the full papers published in NJAS is then a self-evident criterion for synopses; standards commensurate with a scholarly 'press release' fall short of the mark. However, the statement that the only difference between a full paper and a synopsis is the length is only half of the story. The other feature that sets the synopsis apart from the full paper is the availability (from NARD) of a source of extremely detailed information about the research — the report — while the full paper remains a compromise between the volume of results that would be contained by a research report and the constraints of brevity imposed upon it by the editorial policies of journals. For more details on this and other aspects of synopsis publishing see van der Heij (1985).

Better dissemination of tropical grey literature

The general issue of publishing synopses of tropical grey literature in international scientific journals can now be addressed. Would it benefit Third World research? Note that any answer to that question presupposes the co-operation of international journals, in spite of Garfield's (1987) statements about how eager publishers are to

help Third World science in any way they can. Nevertheless, assume for the sake of argument that a number of international journals can be convinced that it is in their interests to reserve pages in each issue for what I will call 'tropical synopses'. Would such a measure cater for a large-scale exchange of information relevant to the needs of tropical agriculture? I think not. Consider the following:

— Is it effective to disseminate research (of whatever calibre) done by local researchers on topics of local relevance via a medium that addresses an international audience on topics of broad interest and significance?

— Is it effective to communicate with technologists, extension workers, project managers, farmers, etc., via a medium that focusses solely on one sort of reader — the scientist?

— Is a medium that is so expensive for developing countries (see, for example, Stapleton (1985, pp. 10-11) and Maclean (1984, p. 4)) suitable for the large-scale exchange of information?

— Is a medium that relies heavily on efficient library networks for its availability suitable for disseminating information in developing (tropical) countries?

— If refereeing standards are adjusted for 'tropical synopses' how citable will they be as a reliable source of scientific information upon which new scientific research may be based?

— Who will guarantee document (report, thesis, etc.) delivery of the back-up material upon which the synopsis is based? NARD does this for all synopses published in NJAS, but who is responsible in the case of the 'tropical synopsis'? The international journal? National libraries? The author?

— How likely are secondary services to cover 'tropical synopses' if they do not meet the same scientific criteria as full papers? Recent comparative research by Van der Heij et al. (1990) shows that synopses in NJAS are not anywhere near as well covered as the full papers, despite efforts to ensure the scientific standards of both types of articles. Exclusion from secondary services limits severely the disclosure and dissemination of the research reported.

The concept of the 'tropical synopsis' is appealing in its simplicity but when considered in terms of how well it fits into the information chain it loses much of its shine. Still, something must be done, for information scientists such as Posnett (1978) have definitely established that grey literature is an important source of information in developing countries. Poor dissemination of that information is therefore a problem that demands attention.

In my opinion there are no simple answers to the problem, just as there are no simple answers to the general problem of development in the Third World. However, I don't think the solutions are to be found in the First World, but very definitely in the Third. After all, where could there be a better understanding of the problems faced in informing and staying informed on local topics under local circumstances? Because of this, I see the newsletter as the way forward for tropical grey literature and, more specifically, I see the newsletter as a better means than the international journal of ventilating the trials, tribulations and successes — large and small — of research in the developing world. The newsletter has some distinct advantages. First, it is, in contrast with the scientific journal, acceptable to readers to

find information of varying type, amount and quality side by side in any one issue. Second, local scope can be better guaranteed, so that the impact on the intended audience can be greatest. Third, it builds and strengthens networks amongst workers that have common interests. Networks promote co-operation. Fourth, it is a very flexible medium, e.g. one issue can be 10 pages long and the next three pages. Fifth, it can be produced much quicker than a journal — no long production schedules are necessary. Sixth, the organizational and financial inputs required to run a newsletter are more likely to be within the reach of developing countries and the likelihood of sustaining the inputs is greater.

Establishing good networks through newsletters has advantages for the direct dissemination of grey literature too. Well-targeted mailing lists built for the distribution of newsletters can be used to ensure report literature is efficiently distributed for maximum effect. Against any accusations of information heresy on my part, I should point out that others (Posnett, 1984) have recognized that all grey literature cannot be 'whitened' and that generous distribution is one small but practical step to reducing the negative effects of grey literature.

It is not my intention to trivialize the useful roles that international journals, scientific monographs and similar publications can play in developing nations. Nevertheless by the very limitations of the narrowly defined roles they have in the communication of science they cannot be the medium for the exchange of 'hands-on' experiences that the development process needs. Newletters deserve a more honoured place in this respect, even though they will not count as a source of 'real publications'.

References

Garfield, E., 1987. How to boost Third World science: an international effort can maintain the information flow. *Current Contents* 16: 4-5.

Gordon, M., 1983. Running a refereeing system. Primary Communications Research Centre, University of Leicester, Leicester, 58 pp.

Heij, D. G. van der, 1984. Nederlandse landbouwkundige rapportencentrale; een tussentijdse verantwoording. (A Dutch agricultural report depository; an interim report.) Pudoc, Wageningen, 32 pp.

Heij, D. G. van der, 1985. Synopsis publishing for improving the accessibility of 'grey' scholarly publishing. *Journal of Information Science* 11: 95-107.

Heij, D. G. van der, J. van der Burg, I. R. C. Cressie & M. Wedel, 1990. Comparative analysis of the penetrative capacity of the synopses and of the full papers unrelated to the synopsis published in the same broad-scope agricultural journal. *Journal of Information Science* (forthcoming).

Houghton, B., 1975. Scientific periodicals; their historical development, characteristics and control. Clive Bingley, London, 135 pp.

Maclean, J., 1984. Characteristics of tropical fisheries literature. *ICLARM Newsletter* 7 (2): 3-4.

Maltha, D. J., 1976. Technical literature search and the written report. Pitman Publishing, London, 175 pp.

Meadows, A. J., 1974. Communication in science. Butterworths, London, 248 pp.

Posnett, N. W., 1978. The value and availability of non-conventional literature in tropical agricultural resource assessment and development. Proceedings, International Conference on Modern Systems and Networks and the Reliability of Information. IAALD European Regional Conference, Hamburg, 17-22 April 1978. K. G. Saur, Munich, pp. 261-278.

Posnett, N. W., 1984. Problems of non-conventional literature accessibility. Proceedings, International Conference on Education and Training for Agricultural Library and Information Work. IAALD

Regional Conference, Nairobi, 7-12 March 1983. Kenya Library Association, Nairobi, pp. 330-342.
SAWI, 1981. Een rapportencentrale voor landbouwkundige rapportliteratuur. (A report depository for agricultural research reports.) Adviescommissie Publikatiebeleid SAWI, Wageningen, 23 pp.
Stapleton, P., 1985. Science editing in a different world: future needs of a Third World country. *Earth & Life Science Editing* No. 26, p. 8-11.
Stigter, C. J., 1989. Tropical grey literature: no place to go? Letter to editor. *Netherlands Journal of Agricultural Science* 37: 395-397.
The Royal Society, 1981. A study of the scientific information system in the United Kingdom. British Library R&D Report No 5626, 44 pp.
Ziman, J., 1984. An introduction to science studies; the philosophical and social aspects of science and technology. Cambridge University Press, Cambridge, 203 pp.