

Christian Mosgaard. *Logistic Planning of Disaster Relief*. Copenhagen: Institute of Mathematical Statistics and Operational Analysis. 1973, 38 pp.

This booklet explains how with the use of a computer terminal and a question-and-answer exchange a programme for the distribution of relief supplies can be assessed, it is claimed, within half a minute; either for national, bi-national or international disaster relief activity. By using hypothetical examples based on 'Third World' environments, it shows how the availability and cost of primary transportation to the nearest dock or airport can be determined and similarly what secondary local transportation will be required from what is available. The examples are realistic, detailed and well worked out and the reader is convinced on reading the conclusion that the computer model will only demonstrate its full capacity in more complicated situations. It is surely true that the success of any computer programme depends on detailed and systematic analysis of purpose and corresponding input. It is clear that given sufficient 'data' the computer could, in its half minute, provide answers to many an otherwise unfathomable plethora of demands and constraints. The section of the booklet which gives rise to concern is not the

one concerning the ability of computers to define response to demand, but the brief preceding paragraphs concerning the assessment of needs. For sophisticated technological expertise to depend only on "the local government . . . aware of the catastrophe before anybody else calls attention to . . . the need of aid . . . usually as much help as possible is wanted" and the admission in the same section that 'an exact formulation of demands is out of the question' is in itself a waste of resources.

Much greater attention must be given to the first phase of disaster relief activity if later stages are to be successful. Preferably as part of a programme of pre-disaster planning, the likely needs in the form of contingency planning, can be assessed and considerable attention given in comparative ease to how indigenous resources could possibly be deployed to answer some of them. Such an assessment can only render the use of computers for the deployment of national and international relief more effective.

This booklet was written two years ago at a time when there was much less attention to the formation of a methodology for disaster relief than there is now even, and almost none to pre-disaster planning in any comprehensive sense. It was a forerunner in the field of the logistics of relief supplies and in the application of computers to an activity which had not got beyond

its simple infancy. It is interesting to record now that at precisely the same time work was being undertaken on simple methods for the assessment of post-disaster needs and indigenous resources which by the very nature of the anticipated emergency situation could not rely on computer technology, but which could adequately convey the fluid and rapidly changing situation which exists after most disaster events to a disaster coordinator in the field who would then be able to convey precise relief requirements.

Whilst it is not true that logical solutions to problems are invalid if taken out of context, it is true that practical application will be impeded if research into pre-disaster planning of which this booklet forms an important part, continues as an unrelated series of events. International coordination of research is a prerequisite for the international coordination of relief aid.

James Lewis
Disaster Research Unit
University of Bradford, England