

A Proposal for the development of 'Halcrow Aid'  
and for the support of continued research into  
methods for the mitigation of natural disaster  
and the implementation of research results.

JAMES LEWIS

September 1977

## A Recent History

The establishment of the Office of the United Nations Disaster Relief Co-ordinator (UNDRO) at Geneva in 1972 reflected world concern at that time for increased attention to natural disasters. Emphasis was to be given by UNDRO to the co-ordination of international relief supplies following disaster, but attention was also to be given to measures for prevention and preparedness. UNDRO commenced with an operational staff of five or six culled from within the UN organisation and remained small until 1976 when, as a result of its own appeals for increased financial resources, considerable enlargement in staff and facilities became possible due to support from the US Government. Additional support has continued as a result of voluntary contributions from some UN member governments, and UNDRO is currently appealing for established funding from the UN recurrent budget.

Against this background of concern and uncertainty the Disaster Research Unit was created in 1973 as a result of efforts which had commenced two years earlier. The Unit was formed to focus research on 'predisaster planning', recognising that whilst considerable attention was being given to relief after a disaster had occurred, little or no attention was being applied to planning for the impact of disaster or to its mitigation. The Unit eventually comprised three members, each funded from separate sources for a period of three years by, in chronological order and size of grant, the Leverhulme Trust Fund, the University of Bradford and the Ministry of Overseas Development. In December 1976, principally as a result of pressure upon the Universities to make significant savings in expenditure and overheads, the University made the decision to discontinue the Disaster Research Unit with the expiry of existing appointments in the Autumn of 1977.

A research group at the University of Louvain, Brussels, in disaster epidemiology, has also been discontinued through lack of financial support; the only other source of disaster research in Europe being a recently-formed group of sociologists at Catania in Sicily. The few disaster researchers in the United Kingdom that remain are the principal source of multi-disciplinary disaster research in Europe and possibly the sole world source of disaster research as it relates to developing countries. Research in the US is understandably concentrated on disasters within the North American Continent.

Disaster researchers in the United Kingdom, in addition to the writer, are, principally, the one remaining member of the Disaster Research Unit (a geographer) at Bradford (the other member has taken a post overseas) and an architect and principal lecturer at Oxford Polytechnic undertaking research into emergency shelter. The ad hoc London Technical Group, the core of which comprises a doctor, nutritionist and anthropologist are continuing research which will improve the content of relief food supplies.

The increase in the number of organisations expressing concern and participation in disaster prevention, preparedness and relief is evidence of continued and growing world concern, and the spread of attention out of the traditionally concerned voluntary organisations into governmental and development organisations is evidence of the realisation of the relationship of disaster to social and economic status. For instance the Ministry of Overseas Development established its own Disaster Unit in 1974, the Commonwealth Secretariat co-sponsored the first Disaster Preparedness Seminar in Suva in 1976, the Pan American Health Organisation, a 'branch' of the World Health Organisation, established its own Unit on Emergency Preparedness and Relief Co-ordination in 1977, the United Nations Development Programme has measures for disaster prevention under active consideration, and disaster preparedness and relief are discussed officially by governments both bi- and multi-laterally.

## The Current Situation

Some of the results of research and study have led to the following:

- an examination of some of the less favourable long-term effects of relief, with proposals for improved relief systems to support locally available labour and skills on "self-help" principles.
- replacement of prefabricated temporary emergency housing with locally and rapidly constructed permanent housing.
- the recognition of disaster as a continuum and of the use of the reconstruction phase following one disaster to initiate preventive measures for the next.
- the recognition that prevailing social and economic factors contribute as much, if not more, to disaster as extreme natural phenomena themselves. This is one explanation why more disasters are more damaging in the less developed countries.

Disaster is no longer the prerogative of the voluntary organisations, not even of the donor governments. Relief aid has become more specialised and more closely related to actual needs (although mistakes still occur), relief efforts now receive some national co-ordination through the Disaster Emergency Committee in London and some international co-ordination through UNDRO in Geneva. There is considerably more awareness of the need for increased attention to preparedness and mitigative/preventive measures. The League of Red Cross Societies, formerly solely a relief-aid organisation has declared the importance of, and participated in, disaster preparedness activities.

Furthermore there is a growing realisation, as an awareness of preventive and mitigative strategies grows, of the relationship between those strategies and development. There is also a growing realisation that the conditions for disaster accrue ahead of the actual extreme natural phenomena which

precipitates (and takes the blame for) disaster and that both in the long term alleviation of disaster and the short term mitigation of and recuperation from disaster, social and economic status play the major role. Improvement to that status is the role of the development process, but unless the role of the developer as predisaster planner is recognised, development has the potential for exacerbation of disaster instead of its mitigation and prevention.

Having arrived at some conclusions of its theoretical analysis, some disaster researchers have recognised that vulnerability to disaster of any particular place and population has been assumed. Vulnerable places are known to exist, and others become manifest at each disaster occurrence, but an analysis of exactly what makes them vulnerable, and to what and in what degree has not yet been attempted. A methodology for vulnerability analysis is the next step for disaster research and is a pre-requisite for the application of pre-disaster planning in preventive or preparedness measures.

### The Proposer

It is perhaps not an overstatement to say that the writer has taken a leading role in the development of these ideas. As a co-founder and subsequent director of the Disaster Research Unit, he has taken part in an analysis of the causes of disaster and the effects of disaster on populations and has been personally responsible for the initiation of a methodology of contingency planning for disaster related to locally available resources and skills. He has co-ordinated the first overseas study of a disaster-prone location which led to recommendations for predisaster planning in the Bahama Islands. He has also advised on the management of the first regional disaster fund in the world, set up by a group of ten island governments in the South Pacific. As a result, the first commitment from the fund has been made in accordance with his recommendations following the major earthquake in the Solomon Islands in April of this year. He is a member of the International Editorial Board of 'Mass Emergencies', one of two recently-formed journals for disaster research, and is Editor-in-Chief Elect for a possible third journal to be produced in the USA. A condensed personal history is appended.

In his capacity as Visiting Fellow in Development Studies at the University of Bath, a Research Proposal has been made through the University to the Leverhulme Trust for support for a three-year research programme in the analysis of vulnerability to natural disaster. The amount of the grant requested (at present academic salary scales) is £48,000 over three years for two persons (£37,500 over three years for one person). Details of the research proposal can be made available.

The undertaking of projects parallel with research activity has been an expression of the writer's practical approach to research and to his subject. In an attempt to demonstrate that approach and in order to promote a wider understanding of disaster research and its findings, the writer has also taken steps to establish a consultancy for the implementation of the results of disaster

research and to assist the reduction in losses from natural disaster. This has been a recent development and over 800 personal contacts have been established in 90 countries in inter-governmental and voluntary organisations, governments, the professions and universities. One or two minor assignments have been undertaken.

### Prospect

On the face of it, the world wide representation of a diverse range of engineering and construction skills and technical expertise, within the Firm of Sir William Halcrow & Partners, is of considerable potential value to the many voluntary and governmental organisations, both large and small, who operate in times of disaster. Particularly when disaster is understood in its context of social and economic development and when the role of the development process is recognised in the mitigation or exacerbation of disaster, then the operations of a Firm, much of whose work is in the manifestation of the development process, become totally relevant.

In the shorter term, disaster prevention and preparedness measures involve flood control systems, building construction, water supply and sanitation, transportation and communications, many of which, and more besides, are amongst the Firm's undertakings. Again, at first glance, and with the establishment of appropriate working liaisons and relationships, the Firm could become a source, for instance, of advice and assistance in:

- emergency advice during the mobilisation of relief supplies.
- technical advice within the United Kingdom, and at points overseas, to governments and voluntary agencies in the preparation of relief strategies and preparedness and prevention programmes.

- recommendations to client bodies - in feasibility studies and in project execution related to 'disaster content' of projects and of potential impact of natural disaster upon projects - which may or may not be designed for.
- supporting communications systems to points overseas, and in overseas locations during and following disaster events.

However, the working out of the most effective and satisfying role for 'Halcrow Aid' in a Firm as large, so widely represented and so diverse in skills and activities will not be a straightforward or simple undertaking, particularly not in the territorially defensive world of humanitarianism. The securing of the most effective liaisons with established UN, governmental and voluntary organisations would be most appropriately served by a feasibility study for the purpose. It would commence with a study of the motives, interests, resources and skills within the Firm as it is operating in the United Kingdom and overseas; consider the most appropriate points of contact within the many organisations known to the writer; make arrangements for discussion between representatives of the Firm and these organisations (where such contacts do not exist at present) within the United Kingdom (and with UNDR0 in Geneva for instance). The result of such a feasibility study would lead, perhaps with some modification of the idea, to a precise placing of skills contained within the Firm and specific liaisons and relationships between organisations. It is respectfully suggested that to simply declare an interest and await invitation is not enough; precedent has shown this to be so, in this subject area as in many others.

A programme for the Feasibility Study is proposed as follows:



Stage One      To assess the variety of motive, interest, expertise and resources available within the Firm.

1. Preliminary discussions with senior staff.
2. Group discussions within the Firm, involving staff with interests in the idea of 'Halcrow Aid'.
3. Detailed discussions with selected persons within the Firm, related to projects which have been or are being undertaken, and to connections and liaisons which have already been formed.

Stage Two      An inquiry into liaisons with external organisations.

4. Initial approaches.
5. Formulation of a programme of meetings for discussion in the United Kingdom and Geneva.
6. Undertake discussion programme.

Stage Three

7. Prepare report.
8. Assess and consider.

(This programme can be commenced now as part of the writer's consultancy activities).

The emergence of 'Halcrow Aid' as an expression of a desire to be of assistance in disaster relief and to use the opportunities in reconstruction for the initiation of preventive measures against subsequent disaster, and to project an effective environmentally and ecologically responsible role in the development process - ecodevelopment involving low or alternative technology as well as sophisticated civil and structural engineering - could signal a significant shift of emphasis in the current 'disaster' scene.

Proposal

The outcome of the research proposal made via the University of Bath to the Leverhulme Trust Fund will be known at the end of October 1977. A favourable decision will, as things stand at present, lead to a staff appointment at the University. This proposal is expressed in the assumption that the University will raise no objection to its undertaking as part of the writer's consultancy activities.

In the event of a negative decision by the Trustees, alternative support will be necessary for the execution of the research programme or other activity. In the event that the Firm might be interested in giving such support, detail of the total sum required (£37,500) is appended. Arrangements for continued involvement in the execution of ideas expressed in the paper could be incorporated in the terms of support granted.

In either event it may be considered possible to contemplate arrangements which would continue beyond three years or other short-term programme. Such arrangements could include the analysis of vulnerability of project sites to extreme natural phenomena of tropical cyclone, flood and/or earthquake, and advice on the potential ecological impact of projects.

Implementation through the undertakings of the Firm of the results of research that the Firm has helped to support could surely be a mutually rewarding outcome.

Andrew Shorman  
A.M. Mary Wood

Appendix One

A Condensed Personal History of the Writer

JAMES LEWIS

101 High Street, Marshfield, Avon, Nr Chippenham, SN14 8LT

Telephone: Marshfield (022-124) 426

Date of Birth: 2 March 1934

Status: Married, two children

Nationality: English

Other Languages: French

University of Manchester, School of Architecture 1950 - 55

School of Town and Country Planning 1953 - 55

Diploma in Architecture

Certificate in Town and Country Planning

Associate of the Royal Institute of British Architects 1957

Architect with London practice (following National Service) 1959 - 1963

Architect with New York practice 1963 - 1966

Resident Architect; University of Bath  
Robert Matthew, Johnson-Marshall & Partners 1966 - 1970

Resident Architect; Hong Kong Cross Harbour Tunnel  
Robert Matthew, Johnson-Marshall & Partners  
(Scott Wilson Kirkpatrick & Partners, and  
Freeman Fox & Partners) 1970 - 1971

Freelance Architect 1971 - 1973

Co-Founder and Director Disaster Research Unit,  
University of Bradford 1973 - 1977

Visiting Fellow in Development Studies  
University of Bath 1977 -

Projects and assignments:

A Study in Predisaster Planning, The Bahamas  
For the League of Red Cross Societies, Geneva 1975

A Pilot Study to establish guidelines for the Management of a regional Disaster Fund to provide insurance for natural disaster.  
For Commonwealth Secretariat and South Pacific Bureau for Economic Co-operation 1976

Level One Overview on Natural Disasters  
UN Environmental Programme, Nairobi 1976

Selected Publications

'A Study in Predisaster Planning' Occasional Paper No 10  
Disaster Research Unit/League of Red Cross Societies  
June 1975.

'A Primer in Precautionary Planning' Occasional Paper  
No 13  
Disaster Research Unit February 1977

'Some Aspects of Disaster Research' 'Disasters'  
No 3 1977

Appendix Two

Details of financial support applied for:

Salary at present academic scales, including national insurance and superannuation	£26,100
Travel and subsistence	
First year (estimated)	1,000
Second year (estimated)	2,500
Secretarial assistance (part time @ £1,500 pa)	
Total for three years	4,500
Inter-library loans over three years	500
Report production and copying etc	500
Postage, telephone, telex etc	750
	<hr/>
Total over three years for one person	<u>£35,850</u>

Plus

Research Officer to be appointed for two years (years two and three) at present academic scales including national insurance and superannuation	£9,600
Travel and subsistence (estimated)	£2,500
	<hr/>
	<u>£12,100</u>

OR

Locally engaged assistance on fieldwork overseas	<u>£1,500</u>
--	---------------