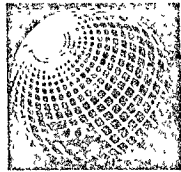
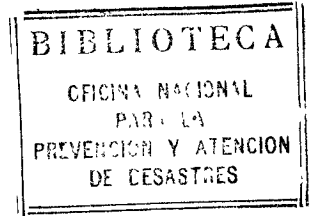


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# DISASTER MANAGEMENT CENTRE

EFFECTIVE MANAGEMENT OF DISASTER SITUATIONS

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and

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These guidelines are dedicated with gratitude and great affection to Elaine Cook and Jean Smith, secretaries in the Disaster Management Centre from 1981-89 and 1976-89.

The attitudes and skills called for in this booklet are embodied in Elaine and Jean as together they have helped establish the Disaster Management Centre on a firm footing. May they, in new spheres, continue to manage crisis situations with calm efficiency and dedicated commitment.

## ACKNOWLEDGEMENTS

The guidelines that follow are not our own, rather they have been shared with us by numerous friends and participants in Disaster or Refugee Management workshops in Oxford, Delhi, Manila, Bangkok, Brussels or Geneva from 1982 to 1989.

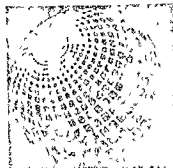
Then having produced the first draft in January 1989 I was most grateful for the enthusiastic reception of the guidelines by participants at a Workshop on Christian Response to Disaster Planning in Dhaka, Bangladesh. They made some constructive criticisms which have been incorporated into this text.

But certain people must be singled out for their special insights: Yasemin Aysan, David Jacques, Peter Winchester and Paul Oliver who have worked with me in Oxford Polytechnic. Various friends in the USA have also contributed ideas, Fred Cuny, Fred Kringold, Henry Quarantelli and Russell Dynes. Within the UN I owe special thanks for suggestions and shared experiences from John Tomblin, Giles Whitcombe and Ludo Van Essche. Then Brian Ward, Everett Ressler and Moira Hart provided further insights whilst in the leadership of the Disaster Management Workshop in the Philippines in 1988. David Scott-Luther, Steve Bender, Franklin MacDonald, David Oakley, Nick Isbister and George Ritchie have assisted in running workshops with me in Oxford when they also shared their knowledge.

Finally, special thanks to my co-author, Gustavo Wilches-Chaux, who shared numerous constructive suggestions for the topics during a hair-raising drive across some precipitous Colombian mountain roads where these issues took on a new urgency!

Just as these guidelines are the cumulative product of many peoples insights and experience, the authors hope that the process will continue. Therefore, if there are constructive criticisms with suggestions or disagreements on the advice offered, please write to Ian Davis at the Disaster Management Centre, we will be delighted to hear from you.

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# CONTEXT

## ■ THE CONTEXT OF DISASTER MANAGEMENT - A CRISIS SITUATION

*"You have the choice you will either have to develop management skills, or you will be managed by the crisis."*

Jerry Adams, TEAR FUND

## ■ SOURCES OF GUIDELINES

The following guidelines have slowly evolved from some exceedingly painful mistakes and failures as well as positive and, at times, exciting experiences gained in disaster planning and management. We have joined forces to write in partnership since our very different backgrounds are complimentary.

Gustavo Wilches-Chaux is a lawyer now working as the manager of SENA in the Colombian town of Popayán. SENA is a national training institute with local branches throughout Colombia. Gustavo was abruptly introduced to disasters in 1983 when he had to manage the recovery operations of his organisation following an earthquake which devastated his own town. Since that date he has been involved in two fields of the subject: firstly in the sector of public awareness programmes to provide environmental protection or address disaster vulnerability. This work is taking place in parallel at both national and international levels. The second sphere is in the development of national and regional policies for disaster planning and management in Colombia.

Ian Davis is a lapsed architect where, in the early phase of his career, he worked for twelve years in general architectural practice in the USA and UK, managing projects which involved supervision of professional teams, client relations and site supervision. Since 1972 this experience has been amplified in the very different management context of disasters (although some of the early building projects tend to fall into this category!) These experiences of disaster management have been specific to the fields of shelter/housing/physical planning and in the broad area of preparedness recovery management. Knowledge has been gained from seeing management theory and practice through three sets of spectacles: academic life, the voluntary agency and government, firstly through involvement in research and teaching; secondly as the Director and later consultant to a non-governmental agency - TEAR FUND and finally as a consultant to various UN agencies and governments.

The partnership that has led to this joint writing began in 1986 when we jointly led Disaster Management Workshops in Oxford. Such training workshops have provided a continual forum for the exploration of the essentials of effective management. The authors are deeply grateful for the insights of their teaching colleagues and all participants who may well see their own ideas in what follows. Where we can reveal who provided a specific knowledge we will credit the source, but in most instances individual contributions have become fused into collective ideas, which is after all a desirable objective of management.

In addition to our own experiences and those of workshop participants we have both gained from the massive literature on management. We therefore want to acknowledge that the ideas that follow are rarely original - what may be new is the sifting of topics into groupings and relationships, and in their application to disaster situations.

In the guidelines that follow this introduction Part 1 will consider key attitudes that form the bedrock of effectiveness. They will be followed in Part 2 with the specific needs of management. But on the assumption that some readers may not be able to adopt such guidelines since they are weak in self-management, Part 3 will proceed to identify eight elements in the development of self-management skills. This section will conclude with some checklists that may help readers learn about their relative strengths and weaknesses, in order to identify areas for growth. Then in Part 4 these attitudes and skills will be related to the process of disaster planning.

■ Crisis Management

There is a common theme to this subject and it is the major difference that distinguishes disaster planning from normal administration. This is the distinctive nature of CRISIS MANAGEMENT. On pages 19-20 we will return to this topic with specific guidelines. Our experience and that of others has indicated that if a system of management develops that is reliant on techniques and skills, then it is likely to be totally inadequate in a crisis situation. In such stressful conditions effective performance is primarily determined by much deeper attitudes and the character of decision makers. Attitudes shape policies and we make no apology for stating the obvious as we will describe the basic values that form the bedrock of well-run operations or projects.

■ The links between attitudes, management techniques and implementation

Management is a sequence that grows from:

ATTITUDES/PERSONAL QUALITIES Pt.1

to

MANAGEMENT STRUCTURES/PROCEDURES AND POLICIES Pt.2

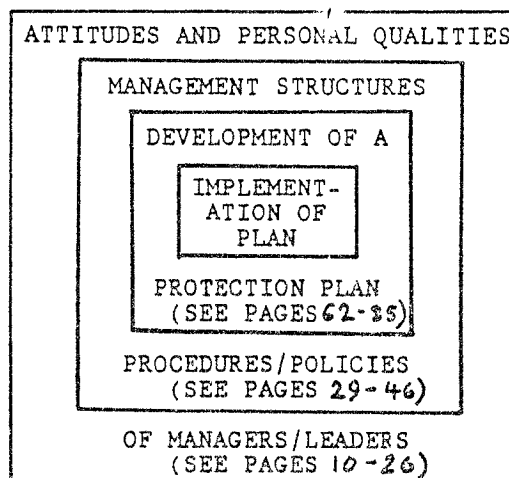
to

THE DEVELOPMENT OF DISASTER PLAN Pt.4

to

THE IMPLEMENTATION OF THE PLAN

In diagrammatic form the sequence can resemble a set of Russian Dolls - each process being shaped by the one that surrounds it:



For example (working backwards through the boxes) in the Protection Plan - noted on page 79 it is suggested that good management will establish (5b) a series of Performance Standards.

This will occur as a result of a Management Policy that will relate to good management practice (page 33) with clear aims (page 35) based on knowledge and skills (page 41).

These characteristics stem from a wide variety of Personal Qualities that will follow this introduction which include such rare commodities as integrity, foresight and trust. (pages 10-26)

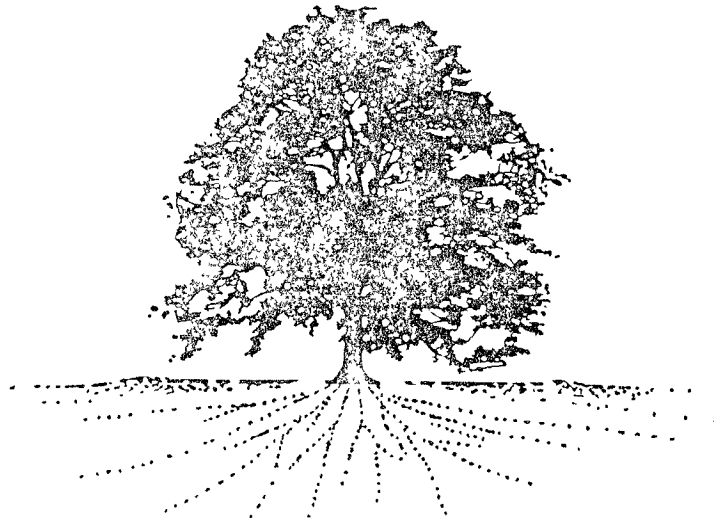


Therefore we will argue that management never exists in isolation, rather that effective organisational skills and techniques are analogous to the leaves of a healthy tree but the roots are the underlying values and attitudes of a given manager.

Taking just one example and working backwards:

- In the Implementation of a recovery operation a large number of parallel tasks have to be performed.
- For this to occur the Management Skill of delegation has to occur (see Management Guideline No 2 Management).
- But a pre-requisite to delegation is the Attitude of trust and mutual respect between two people or two organisations (see attitude No 2 Faith and Trust).

Whilst the linking of attitudes to management policies is essential in all situations - we want to re-emphasise that in a crisis situation where vulnerable people's lives and livelihoods are at risk and at stake the link is absolutely imperative.



leaves and roots ...

## **PART 1.**

# **Attitudes and Personal Qualities**

Part 1: ATTITUDES AND PERSONAL QUALITIES

- 1. **INSPIRATION AND ENCOURAGEMENT**  
(Linked to Management Guideline No 1 Leadership)
- 2. **FAITH AND TRUST**  
(Linked to Management Guideline Nos 2 Management; 4 Confidence; 5 Participation and 7 Co-ordination)
- 3. **KINDNESS, RESPECT AND COMPASSION**  
(Linked to Management Guideline Nos 2 Management and 4 Confidence)
- 4. **IMPARTIALITY**  
(Linked to Management Guideline No 10 Evaluation)
- 5. **INTEGRITY, HONESTY AND DEPENDABILITY**  
(Linked to Management Guidelines Nos 1 Leadership; 4 Confidence and 10 Evaluation)
- 6. **RESPONSIBILITY AND ACCOUNTABILITY**  
(Linked to Management Guidelines Nos 3 Aims; 4 Confidence; 5 Participation; 6 Authority; 10 Evaluation and 11 An Organisational Structure)
- 7. **COURAGE, CONFIDENCE AND PERSISTENCE**  
(Linked to Management Guidelines Nos 1 Leadership; 3 Aims; 4 Confidence and 9 Crisis Management)
- 8. **ADAPTABILITY AND FLEXIBILITY**  
(Linked to Management Guidelines Nos 6 Authority; 11 An Organisational Structure)
- 9. **CREATIVITY AND IMAGINATION**  
(Linked to Management Guidelines Nos 1 Leadership; 8 Resources and 9 Knowledge)
- 10. **PATIENCE AND CALMNESS IN A CRISIS**
- 11. **A SENSE OF HUMOUR**  
(Linked to Management Guideline No 1 Leadership)
- 12. **OPENNESS, TEACHABILITY AND HUMILITY**  
(Linked to Management Guidelines Nos 1 Leadership; 2 Management; 4 Confidence; 9 Knowledge and 10 Evaluation)

ATTITUDE NO 1

■ INSPIRATION AND ENCOURAGEMENT

(See Management Guideline No 1 Leadership)

*"Genius is one per cent inspiration and ninety-nine per cent perspiration"*

Thomas Edison

*"Not only strike while the iron is hot, but make it hot by striking"*

Oliver Cromwell

- To be able to galvanise a team who may be suffering from shock, exhaustion, fear or depression into an effective work force. Similarly to be able to inspire hope into disaster victims.
- To be able to lead a reluctant community concerned with short-term issues towards a more responsible longer-term desire to improve safety standards.

*An example of Inspiration and Encouragement in Disaster Management :*

It is not difficult to persuade people two months after a major disaster to develop preparedness plans, or revise building codes. However, to maintain a spirit of disaster awareness and active protective planning years after the last damaging event will require the leadership qualities of inspiration and encouragement as noted in Management Guideline No 1. (Page 31)

ATTITUDE NO 2

■ FAITH AND TRUST

(See Management Guidelines Nos 2 Management; 4 Confidence; 5 Participation; and 7 Co-ordination)

*"Transforming leadership is dynamic leadership in the sense that the leaders throw themselves into a relationship with followers who feel 'elevated' by it and often become more active themselves, thereby creating new cadres of leadership."*

MacGregor Burns

- To be able to put your confidence in some other person or agency, to enable delegation to occur without endless meddling or cross-checking to verify that it is being carried out.
- To accept different ways of working or diverse solutions to those you would have expected. To develop a sense of judgment of personal character to know who to trust to do what with what level of responsibility.

*An example of Faith and Trust in Disaster Management :*

To provide cash rather than kind to disaster victims trusting them to use their resources effectively, and relying on your staff not to pocket the funds or allocate them in an unfair manner.

ATTITUDE NO 3

■ KINDNESS, RESPECT AND COMPASSION

(See Management Guidelines Nos 2 Management; and 4 Confidence)

*"Do unto others as you would have them do to you"*  
Jesus Christ

- To be able to treat others with respect and loving concern. To practice the gentle art of tolerance by understanding the pressures and weaknesses of others and by avoiding destructive criticism of another person or agency.
- To have time for others and to have the concern to respond to their physical and emotional needs.
- To be able to respect another person's position even if it is very different than your own. To recognise you may be wrong, and if you are proved to be wrong to be able to apologise and if necessary to publicly admit to your error of judgment.

*An example of Kindness/Respect/Compassion in Disaster Management:*

To be on the guard against the cynicism or 'hardness' that often comes to those who continually deal with the victims of poverty or disaster. To remain 'moved' by the needs of disadvantaged people, and to express compassion without patronising victims or refugees, treating them in a paternalistic manner.

In effect to maintain respect for the dignity of others when it is most threatened.

ATTITUDE NO 4

■ IMPARTIALITY

(See Management Guideline No 10 Evaluation)

*"Justice is truth in action."*

Benjamin Disraeli

- To have a deep concern for justice for nations, communities and individuals. Avoiding any action that rewards friends and supporters at the expense of those who criticise or cause trouble.

*An example of Impartiality in Disaster Management:*

A concern for justice is the bed-rock of an effective strategy to assess needs, allocate resources and establish and maintain systems of accountability that are effective instruments not platitudes (see Attitude No 6 - Responsibility and Accountability).

A concern for justice will inevitably push the manager beyond the short-term limitations of relief programmes towards longer term mitigation/preparedness initiations. Jo Boyden has commented on this link between justice and mitigation in her suggestion that:

*"...relief by its very nature creates a relationship of dependency between donor and recipient. Mitigation on the other hand aims to increase the self-reliance of people in hazard-prone environments - to demonstrate that they have the resources and organisation to withstand the worst effects of the hazards to which they are vulnerable. In other words, disaster mitigation - in contrast to dependency-creating relief - is empowering." 1.*

- 
1. Jo Boyden and Ian Davis, Editorial: 'Getting Mitigation on the Agenda', Bulletin 18 October 1984, Reading Rural Development Communications, Page 2.

ATTITUDE NO 5

INTEGRITY, HONESTY AND DEPENDABILITY

(See Management Guidelines Nos 1 Leadership; 4 Confidence and 10 Evaluation)

*"A few honest men are better than numbers."*

Oliver Cromwell

- To be scrupulously honest in dealing with resources - money, material and people.
- To avoid any of your staff needing to supplement their income by taking bribes, it is essential to check whether they are paid an adequate wage for their jobs - even if this is above the prevailing market rate - thus not requiring them to be dishonest.
- Integrity is the bedrock of a whole range of management roles, tasks and procedures. For example, the basic reasons why managers introduce monitoring or evaluations is due to a concern to manage resources effectively. A manager without such ethical standards would never bother with such tiresome distractions that at best will rock the boat and create further work, and at worst reflect badly on the operating team.
- Further, integrity is the root of any desire to become accountable. Or put more specifically, accountability to disaster victims is the evidence of integrity (see the following Attitude No 6 - Responsibility and Accountability . Page 15)

*An example of an ethical dilemma in Disaster Management occurred in 1988:*

A director of a voluntary agency was running a disaster assistance programme in an environment where corruption had become the normal pattern.

He was importing seeds to plant in bulk following severe coastal flooding. The particular type he needed had to be shipped in from a neighbouring country. However, they were stuck in the airport customs hall and the agency had been asked to pay a massive 'service charge' to get them released. Unless they were obtained rapidly the planting time would be missed for the new crop to grow before the next monsoon. If the Agency Manager paid the bribe he would inevitably contribute to a rotten system that lay at the very root of the country's underdevelopment. If he refused he would have destroyed the aid project.

If he decided to write to the Minister of Relief Assistance that might remove the bottleneck but there is a strong likelihood that the Minister himself was expanding his income by means of 'service payments'.

For a manager wanting to practice integrity the illustration poses the dilemma, and no advice is offered here as to how to resolve the issue. However, it will help to maintain clear aims and work within guiding principles in such situations. (See item 3.5 - Aims linked to Principles, page 35)



## ATTITUDE NO 6

### ■ RESPONSIBILITY AND ACCOUNTABILITY

(See Management Guidelines Nos 3 Aims; 4 Confidence; 5 Participation; 6 Authority; 10 Evaluation and 11 An Organisational Structure)

"People who are accountable usually have four qualities:

Vulnerability - capable of being wounded, shown to be wrong even admitting it before being confronted.

Teachability - a willingness to learn, being quick to hear and respond to reproof, being open to counsel.

Availability - accessible, touchable, able to be interrupted.

Honesty - committed to the truth regardless of how much it hurts, a willingness to admit the truth no matter how difficult or humiliating the admission may be. Hating all that is phoney or false."

Charles Swindoll

An accountable person is one who accepts the need to 'give account' for his or her actions to those to whom they are responsible (i.e. head of department, board of directors, government agency that licenses the work in question). Managers will also see the need to make everyone in their organisation accountable to someone else so that there are no free agents acting in a situation of independence which can deteriorate all too rapidly into anarchy.

#### *Examples of Accountability and Responsibility in Disaster Management*

Disaster managers will recognise that accountability to those above them is insufficient, they will therefore seek to develop ways to become accountable to the objects of concern: those who are at risk or victims of disaster. Such a concern will not rest with a vague promise or platitude, it will seek to develop active mechanisms to make accountability into an active tool to promote increased effectiveness of programmes (see Management Guideline 4.3 Page 36)

Fred Krimgold has written:

"Disaster relief efforts must fundamentally be directed to meeting the expressed needs of the victim populations. They must be enfranchised and given choice in the relief process. Further, any collective mechanism for the improvement of relief activities must be based on the evaluation and critique of the victim population. Mechanisms must be developed which tie donor agencies to the judgement of the supposed object of their activity." 1.

An evaluation is required by various donor agencies of a major housing reconstruction programme following an earthquake. Rather than importing a team of highly paid external consultants, the occupants of the dwellings are initially invited to 'self-evaluate' the effectiveness of the housing according to the aims and standards that they helped to formulate at the outset of the programme. Their views are then conveyed to the donors who may then ask the operating agency to correct any obvious weaknesses that the evaluation has noted. Or in an extreme example of a major failure they may not use the agency again unless major improvements are made. Implications of a healthy pattern of accountability for the donor agency include a long-term commitment to the recipient community as well as the retention of finance to support further programmes to improve the housing, infrastructure or income generation in the area where their resources enabled the project to occur in the first instance. Such long-term commitment may be regarded as a good indication that the agency is treating the group in a responsible manner.

1. Quoted in; Ian Davis 'The Intervenor', New Internationalist, No 53, 1977, p 22.

ATTITUDE NO 7

COURAGE, CONFIDENCE AND PERSISTANCE

(Management Guidelines Nos 1 Leadership; 3 Aims and 4 Confidence)

*"Must one point out that from ancient times a decline in courage has been considered the first symptom of the end?"*

Alexandr Solzhenitsyn

*"Death and sorrow will be the companions of our journey; hardship our garment; constancy and valor our only shield. We must be united, we must be undaunted, we must be inflexible."*

Winston Churchill, 1940

The ability to make good, clear-cut, but at times unpopular decisions and stick by them despite the barrage of subsequent criticism. In effect to exercise the leadership skills noted under guideline No 1. However, this self-assurance will not be the over-confidence of pig-headedness.

But in contrast to Winston Churchill's wisdom the ability to be confident and persistent but able to balance these attitudes with the qualities which on the surface appear the precise opposite of persistence - adaptability and flexibility (see next Attitude No 8 . Page 17)

*An example of Courage, Confidence and Persistence in Disaster Management*

A highly vulnerable community is at risk from flood impact. Due to pressure on available land marginal communities live in settlements on the shoreline of the river estuary. Each year your agency is called upon to mount relief programmes to help displaced communities. Eventually you decide to attempt to implement a long-term disaster mitigation plan into the area. However, this introduces two possibilities:

- Relocation of the community looks very improbable since the families are very poor and are landless. To purchase land in the area is out of the question since it is exorbitantly expensive and it is one of your principles to avoid using your gift income to pay for land owned by dishonest property barons.
- To press the government into taking action to allocate free land for the families is unlikely to get very far given a right-wing government with strong supporters amongst the land-owners.
- Therefore the only clear options are:
  - (a) Leave the situation as it stands (i.e. retain the vulnerable status quo).
  - (b) Make marginal improvements to the existing situation (i.e. helping families raise their houses on mounds or stilts above flood water levels).
  - (c) Relocate the community to a distant site where land is available. But this will obviously cause economic disruption to the families. Such a move implies that your agency will become involved in the new location in income generation work to strengthen their economic position to a higher level than was their lot on the banks of the river.

Assuming that alternative (a) is not a viable option then (b) and (c) will both require courage, confidence and persistence over time by leaders and their staff.

ATTITUDE NO 8

■ ADAPTABILITY AND FLEXIBILITY

(See Management Guidelines Nos 6 Authority and 11 An Organisational Structure

*"The reasonable man adapts himself to the world: the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man."*

George Bernard Shaw

*"The man who never alters his opinion is like standing water, and breeds reptiles of the mind."*

William Blake

- To be able to recognise that the chosen course of action has to be modified in the light of new conditions. This can pose serious problems to many highly organised managers who wish to appear resolute - sticking to a course of action with stubborn commitment. Such individuals tend to regard a flexible approach as a symptom of weakness. (See items 6.3, 11.5)

↓ ↓  
Page 38 Page 43

*An example of Adaptability and Flexibility in Disaster Management:*

You have developed a detailed Preparedness Plan and carefully rehearsed its various steps. Now you are involved in managing an actual disaster situation that is different from the scenario of your plan. However, you are sufficiently flexible to discard the details of the plan whilst holding on to its guiding principles. (see Management Guideline 3.5 Page 35)

ATTITUDE NO 9

■ CREATIVITY AND IMAGINATION

(See Management Guidelines Nos 1 Leadership; 8 Resources and 9 Knowledge)

*"Imagination, which in truth, is but another name for absolute power and clearest insight, amplitude of mind and reason in her most exalted mood."*

William Wordsworth

*"Either do as your neighbours do, or move away."*

Moroccan Proverb

- To be able to see recurrent issues and old problems in new ways, and then to be capable of unexpected solutions that replace well-worn stereotype answers. To continually challenge accepted reasoning and conventional wisdom.
- Creativity is often displayed by following a 'lateral approach' to decision making. This means to look at a problem from a different angle, to come at it from an unusual route (perhaps even by accident).

*Two examples of creativity in Disaster Management:*

An example of creativity was the development of a low-cost construction project in Colombia that:

- (a) provided new housing but also
- (b) generated incomes as people marketed their newly acquired building skills, but also
- (c) taught new building skills to its builders, but also
- (d) developed institutions, but also
- (e) built leadership within a community that had only come together at the time of rebuilding.

At the end of the project the Manager stated that (b), (c), (d) and (e) were probably in the long run far more important than (a) the original object of the exercise. This project was essentially a highly creative approach, exhibiting lateral thinking, a 'process' rather than 'product' orientation. Its success grew from a broad emphasis on a guiding principle - the development of self-reliance within a community where it would have been easy to have followed a normal 'relief approach' that could have created dependency.

A further example concerns an Indian family needing to recover after a cyclone. They requested (a) shelter and (b) an income. The agency provided a house (95% of the aid) and two coconut seedlings which were less than 5% of the aid to each family. Within eight years when the house was needing repairs the trees were producing shade as well as palms for use in repairing their roof, and the roots were stabilising the soil. But most important the coconut crop now comprised 25% of the family's income. So the insignificant item in the original aid package turned out to be its primary economic success.

Creativity only occurs when there is genuine trust between members of an organisation. This is due to the inhibiting effect of fear in taking risks; this ability to take risks is frequently the result of creative decision making.

To summarise:

Rarely act alone and seek regular advice, teamwork can be mutually supportive in times of crisis where stress can slow some individuals down to a standstill as they contemplate a vast, unprecedented task, where there are distressing human elements present.

④ Avoid distractions from all sectors

Special measures must be adopted to prevent the senior management teams from being distracted from their tasks by non-essential tasks such as intrusion of press, taking VIP'S or political candidates to visit the affected area, etc. Such tasks can normally be delegated. In addition it is vital for HQ staff to avoid distracting their own key field staff in this crisis.

It is worth noting that whilst compassion is a vital quality in a disaster manager - close contact with those in acute need can make an effective manager/leader into a less useful person at a critical time. Therefore trained social workers/medical staff/counsellors are better able to tackle these cases.

④ Cut Bureaucracy

Certain time-consuming management techniques will need to be suspended in a crisis such as:

- writing memos to colleagues (talk to them, it is faster)
- cash accounting - to provide staff who are in the field needing to spend small sums a block figure so that they can avoid calculating petrol/meal costs, etc.

The aim will be to cut bureaucracy to its absolute minimum and these cuts can all be practised in simulations and built into a preparedness plan.

④ Guard your health, cover your weaknesses and practice patience

Be particularly careful to avoid 'Disaster Heroism' (i.e. 80-90 hour weeks, missed meals, no relaxation, no contact with your own family - as your 'coping mechanism') - DON'T JOIN THE VICTIMS! (See Attitude No 11 Personal Health Care *Page 21*)

Know your skills, and also understand your weaknesses (husbands, wives, children and colleagues can normally be counted on to provide this information!). Make absolutely certain your weaknesses are covered by others by effective delegation.

With all those around you who are in 'flat spins' support and encourage them, and where necessary relieve them of pressure until they are fully operational.

ATTITUDE NO 11

■ PERSONAL HEALTH CARE

*"All bodily suffering and limitation has its meaning. We can learn from our bodies. Some of my patients, filled with high ideals and fine ambitions, resent the way their bodies hold them back. Perhaps they ought to be thankful for this check on their over-impulsive natures."*

Paul Tournier

*"Do your best to treat your body as a friend, not as an enemy."*

Richard Foster

*"Very often the protests of the body are the alarm signals."*

Anon

*"Don't join the victims!"*

Anon

○ To be able to link a concern for the health and welfare of disaster victims/refugees with the maintenance of your own health.

○ Personal Health Care - Key Issues

To be concerned for your own physical and mental health and that of your staff, particularly during stressful emergency conditions by means of:

- careful management of time
- healthy diet
- moderate alcohol intake
- avoidance (or reduction) of smoking
- regular exercise
- regular sleep patterns
- avoidance of overwork
- time for relaxation
- time with family

*Examples of personal health care in disaster management*

It is much easier to describe a few mini-case studies of health neglect!

Case Study 1

An international consultant is doing excellent work that is in great demand. He returns from one disaster assistance mission to be greeted with the news that he is wanted 'yesterday' on the other side of the globe. Since it is difficult or 'professional suicide' to say no he reluctantly accepts the new commission, as he has been doing for about ten years. But as his income and prestige grows his family life and personal health deteriorates. Whilst he is writing and lecturing about community health care his own community of wife and children are in disarray. Eventually his failing health and marriage brings him to a resounding halt.

Case Study 2

The director of a non-governmental agency in a disaster-prone country finds it very hard to obtain staff that are sufficiently competent to undertake a series of demanding tasks. But rather than accept the limitations and reduce the workload the director continually takes on programmes that put himself and his staff under tremendous pressure. He argues that the needs are so great that they are obligated to become involved even though this is likely to result in tremendous pressure.

The results are;

- stress
- overwork over long periods
- declining efficiency
- absenteeism of staff for health reasons
- some staff dismissals for incompetence
- family separations

ATTITUDE NO 12

■ A SENSE OF HUMOUR

(See Management Guidelines No 1 Leadership)

*"Men will confess to treason, murder, arson, false teeth or a wig.  
How many of them will own up to a lack of humour?"*

Frank Colby

*"The most perfect humour and irony is generally quite unconscious."*

Samuel Butler

- The sense of humour is perhaps unique in all the thirteen attitudes in these guidelines in that if used wisely has the capacity to be a positive contribution to a very difficult situation but conversely when used insensitively it has limitless powers of destruction.
- On the positive side humour can help an individual to recognise the funny side of a situation - however desperate or stressful. Humour can lighten tough burdens, weld dispirited people together and release pent-up nervous tension, and when used wisely (and often instinctively) it can help people to avoid taking themselves, their ideas or their actions excessively seriously. Put another way it is a great corrective power against pomposity or bureaucratic cant and hypocrisy.
- The negative potential of misplaced humour is the devil's own weapon in trivialising an important situation causing additional distress to people who are suffering and by laughing at someone's expense causing discomfort and even pain. The person to beware of is the resident comedian (or less frequently comedienne) with their tiresome 'laugh a minute'.

*An example of humour in disaster management*

In the difficult stressful conditions after a disaster it is always an asset to have some sensitive team members with a good sense of humour (but not too many!)



ATTITUDE NO 13

**OPENNESS, TEACHABILITY AND HUMILITY**

(See Management Guidelines Nos 1 Leadership; 2 Management; 4 Confidence; 10 Knowledge and 10 Evaluation)

*"He must become greater; I must become less."*

John the Baptist

*"Do nothing out of self ambition or vain conceit, but in humility consider others better than yourselves. Each of you should look not only to your own interests, but also to the interest of others."*

St Paul

*"Serve is used in the sense that all who are touched by the institution or its work become, because of that influence, healthier, wiser, freer or autonomous, more likely to become servants... That, I believe, is what the times we live in require."*

Robert Greenleaf

- To be childlike in an approach to others and to knowledge.
- To avoid the chic-sophistication that comes from world-weary specialists who have ceased to listen in their over-riding concern to communicate their superior wisdom and knowledge.
- Open people have sufficient confidence in themselves to be prepared to appear weak, ignorant or even foolish in asking for help. They will want to learn in all situations, be open to new knowledge, insights and fresh ideas. They may not enjoy criticism but they may even invite it, accept it and seek to apply it to their ways of working or relating to others. Openness implies accessibility to others who may have needs you can fill or skills, knowledge and insights you may lack.
- Open people are direct in their dealings with others. They will avoid indirect criticism of poor performance by telling A about the weakness of B, in the expectation or desire for A to then pass on the criticism to B. Rather to be open with people telling them directly and privately of any criticism, and expecting them to do the same in return.
- Teachable people have enquiring minds that will grasp the new challenge despite the inherent risks. They will be always seeking opportunities to learn from contact with others, by reading, writing and study courses. And, they will want to encourage such learning processes in others they work with. Teachable managers will by definition be wanting to promote staff development programmes.
- Humble people possess one of the rarest of human qualities, to be more concerned for others to grow and shine than themselves. They delight in working for the common good of others and other groups and they guard assiduously against the waste, vanity and self-interest of competition that aims to elevate themselves or their department or agency over others.

*Two examples of Openness, teachability and humility in Disaster Management*

The first example is in connection with a disaster assistance programme being run in a situation where other governmental departments or agencies (both past rivals) are at work. The manager goes out of his way to meet his counterparts in these bodies with the aim of sharing information (assessment data, etc), any insights, as well as learning about their approaches and picking their brains! From such a meeting some useful form of collaboration may develop that would result in less duplication and increased effectiveness by agreeing on standards of assistance.

The second example of humility relates to the ability to share a valued possession. If a manager receives a very good book or manual on disaster planning that proved helpful in her work, instead of it resting idle on her bookshelf she puts it to work by lending it to others, photocopying key sections (subject to copyright limitations) or buying more copies to give away. In effect to regard knowledge as flowing through her to others rather than sticking or ending in her possession. So effective managers become conduits of knowledge, information and experience rather than mere receptacles.

*"The hand that gives, gathers."*

James Howell

# Implications from Part 1

Ideally leaders and managers will embody and exhibit these attitudes in their personalities and dealings with others. However, in reality it will be an exceedingly rare event, perhaps realistically an impossibility to find anyone with such a range of splendid attributes. Therefore:

- 1 look for such personal qualities in staff recruitment (do not restrict the search to experience, qualifications or skills)
- 2 build management teams where the collective strength of the group combines this range of attitudes
- 3 consciously nurture these attitudes in your own life, and that of your colleagues by example and encouragement; and as a leader or manager show that you expect and value such qualities highly
- 4 incorporate a discussion on attitudes, character and values into all management training programmes.

1. Recruitment	2. Build Teams
3. Value Qualities	4. Training

[If you wish to test your own Attitudes and Personal Qualities, turn to page 57]

## **PART 2.**

### **Basic Management Guidelines**

THE CHALLENGE OF DISASTER MANAGEMENT....

*"More than any other human event, a disaster traumatically brings into focus all the basic problems in a society. It reduces all issues to their most fundamental level and strips away all the ancillary issues that obscure or confuse the fundamental questions that must be faced. Critical decisions previously unaddressed can no longer be ignored, and choices must be made."*

*Fred Cuny  
Disasters and Development  
Oxford University Press,  
New York 1983, p11*

Part 2: BASIC MANAGEMENT GUIDELINES

Common Failings of Disaster Management

In 1981 Fred Cuny of INTERTECT wrote a perceptive paper on 'Why Disaster Plans Don't Work - Common Problems and Issues.' He has kindly agreed to me repeating his conclusions:

1. Over centralisation of authority and failure to delegate authority to local levels.
2. Failure to properly sequence post-disaster activities.
3. Failure to fully structure the emergency response and actions in the reconstruction phase.
4. Over-reliance on electronic communications, especially telephones.
5. Failure to plan adequate and appropriate disaster assessment measures.
6. Failure to build in flexibility and an ability to respond to changing situations.
7. Over-emphasis on the speed of delivery of material aid rather than on the process of determining actual needs and priorities.
8. Failure to determine appropriate mechanisms for delivering assistance in appropriate periods.
9. Failure to establish methods for terminating or diverting inappropriate aid.
10. Failure to protect critical facilities.
11. Placing responsibility for preparedness planning in a non-operational agency ministry.
12. Over-emphasis on relief activities (as opposed to search and rescue, protection of critical facilities, lifelines, etc).
13. Over-reliance on committee structures.
14. Establishment of organisations that are ineffective due to their system of organisation.

Since Cuny listed these topics others have been added, but alas many of his concerns persist and grow in importance, not just as problems rather as formidable obstacles to effective disaster management.

Their resolution will never be an easy task. It is likely to be a combination of:

- A shift in attitudes and values within managers and management teams (as described in Part 1).
- Improved management patterns, tools and techniques (as will be described in Part 2).
- Redesigned or radically overhauled administrative structures (as introduced in Management Guideline 11, page     ).
- Effective protective planning (as described in Part 4).

The following topics are regarded as the minimum requirements that have to be satisfied for effective protective planning for emergency management to occur. To take effective control of an emergency situation, responsible authorities need to:

## ■ LEAD AND MANAGE

- by maintaining clear aims
- by providing effective leadership
- by establishing mutual confidence
- by participatory planning
- by exercising authority in a responsible manner
- by co-ordinating actions
- by coping in a crisis
- by operating within an organisational structure

To do this they will need:

## ■ KNOWLEDGE AND SKILLS

- by learning about the range of subjects and issues
- by evaluation and feedback from existing and previous projects

Such leadership/management skills when strengthened by knowledge will always be needed prior to a crisis. Therefore by anticipating needs and resources the outcome of leadership, management and knowledge will lead to the planning process that will be described in Part 4.

As far as possible the list that follows will be concerned with specific management requirements, rather than the attitudes described in Part 1. However, there are inevitably strong overlaps, particularly in the first item 'Leadership' which could well be regarded as an attitude or personal quality. But it remains in this section as a useful bridge between broad attitudes and specific requirements.

Following each of the 11 topics we have identified just five keypoints. Obviously the list could have been infinite given the complexity of each requirement, but to aid officials by simplifying matters we have been highly selective in our choice. However, readers may wish to challenge our selection, and we will be delighted to hear any counter proposals.

# Leadership

## 1. LEADFRSHIP to be established and respected

*"Leadership is not magnetic personality - that can just as well be demagoguery. It is not 'making friends and influencing people' - that is salesmanship. Leadership is the lifting of a man's performance onto a higher standard, the building of a man's personality beyond its normal limitations."*

Peter Drucker  
The Practice of Management 1955

*"In order to lead the leader learns to follow."*

La Tzu - 500 BC

Keypoints:

### 1.1 Managers = Leaders?

Chiefs are appointed to manage affairs and theoretically lead but they frequently do not possess the essential qualities to inspire others to follow them. So whilst chiefs are appointed, leaders often emerge in unexpected places. If managers lack essential leadership qualities then an honest self-appraisal could lead to leadership teams being constructed to cover such weaknesses and express skills. If such delegation does not occur there is a serious risk of a programme failure.

### 1.2 Security and Confidence

Leadership is not the same as management of people or resources. It goes far beyond the organisation of a task or agency in providing a sense of safety and continuity in a time of rapid change and stress. Such conditions are highly threatening to many people who are used to operating within an ordered, well established routine.

Therefore leaders will need to attach considerable importance to establishing, building and maintaining:

- a spirit of mutual confidence
- respect for others
- good humour
- the expression of kindness.

Such qualities are essential both in dealings within the management team and in running assistance programmes for vulnerable communities such as refugees. (See Part 1.)

### 1.3 A Sense of Purpose

Leaders inspire a sense of common purpose as they weld together the varied members of a task force or team. In order to:

- fuse their own ideas into a single policy
- share their insights
- compensate for their weaknesses.

The ideal will be a team that is stronger than its most gifted member, which is often the reverse of what we have experienced.

### 1.4 Foresight, Insight and Awareness

A wise leader will always need to be sensitive to wider and longer-term issues than those that his or her team are immediately preoccupied with. He or she will look beyond current concerns and will be anticipating the underlying problem that lie within current solutions.

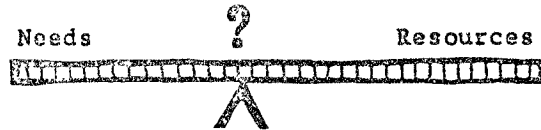
In addition, leadership is concerned with making connections with parallel processes and currents that relate to the activity in hand. This need is essential since problems are interdependent and wise leadership will be aware for example of the implications of political factors on technical or social policy.



■ 1.5 Need: Resources and Gaps

Leadership is the art of balancing needs against resources. Massive needs obviously require extensive provision to meet them. (See the Protective Plan, item 2B on page      Thus leaders need to be able to organise accurate assessment of needs as distinct from 'wants' and also to be able to rapidly assemble essential goods and services to satisfy requirements (often using creative abilities to gain the maximum from minimal resources.

Their task is to notice any gaps between needs and resources and to devise strategies to fill them from either internal or external sources.



To summarise, the ideal leader will possess the attitudes described in Part 1, with a particular focus on five basic qualities:

footnote 1.

Vision (able to inspire and motivate others)

Wisdom (growing from wide knowledge and experience)

Commitment (with dedication to the task)

Personality skills:

- good humour
- maturity
- sincerity
- honesty
- confidence

The confidence of those he or she is hoping to lead

footnote 2.

**The Fortune Seven**

The old style of leadership, in which virtually all responsibility and authority is lodged at the top of the management pyramid, is becoming obsolete, according to *Fortune* magazine. Citing case after case in corporate America, the magazine shows that the new, effective style of leadership has seven characteristics that can serve as guidelines for those who would be better leaders:

- 1. **Trust your subordinates.** Push responsibility down the ladder and rely more on the energy and talent of your subordinates. If that's not happening, it may be because they don't trust the company to reward these qualities and the company doesn't trust them to exhibit such qualities.
- 2. **Develop a vision.** Subordinates like to know where they're going and why. Leaders must plan for the long term and must be able to sell their vision to subordinates.
- 3. **Keep your cool.** By demonstrating grace under pressure, leaders inspire those around them to stay calm and act intelligently.
- 4. **Encourage risks.** Encourage subordinates to take chances and accept errors. The future of an enterprise lies in willingness to experiment and move in untested directions. And leaders must lead the charge personally.
- 5. **Be an expert.** Do your homework and know at least as much as your subordinates.
- 6. **Invite dissent.** Smart leaders hire people with youth and vitality— and those who complain a 'y' about the status quo.
- 7. **Simplify.** Zero in on essentials. Come up with simple answers to complex questions.

Fortune Oct. 24, 1988

# Management

- 2. MANAGEMENT skills are essential that are appropriate for specific tasks and levels of responsibility.

"...people take precedence over projects. And people must be neither 'manipulated' nor even 'managed'. Though the latter is less demeaning to human beings than the former, yet both words are derived from 'manus' - a hand, and both express a 'handling' of people as if they were commodities rather than persons."

John Stott

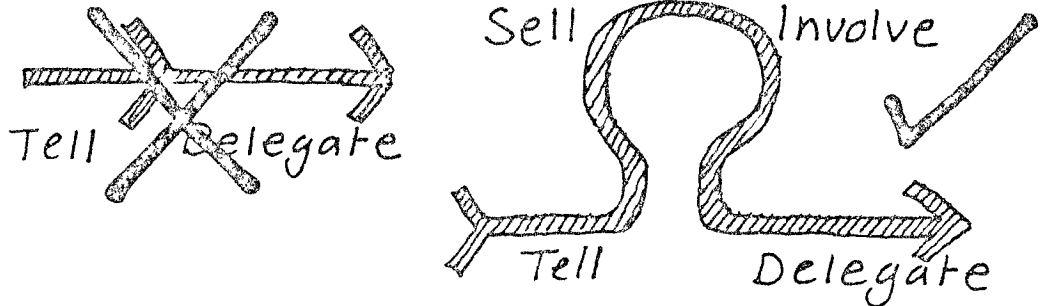
Keypoints:

- 2.1 Scope of Management

Effective management of emerging situations aims to instigate, build, establish, maintain and improve all the twelve requirements of effective management outlined in this paper.

- 2.2 Delegation of Tasks

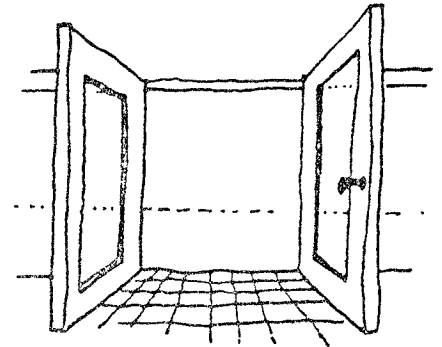
Delegation skills are the essence of good management using the principle of 'Tell → Sell → Involve → Delegate' and if there is a problem via the reverse process 'Involve → Sell → Tell'. This sequence is an improvement on the traditional 'Tell → Delegate' principle.



- 2.3 Open Management

Managers must be open to:

- knowledge
- criticism
- the needs of their staff
- new ideas from other fields
- changes to satisfy new situations.



- 2.5 Access

Managers must be available to their staff by:

- allocating time for them
- keeping an open door
- avoiding excessive 'business
- 'walking around' their offices
- visiting field contexts as frequently as possible
- attending regular information exchange meetings.

P.S. Some definitions:

A Manager

A Manager is responsible for so large an undertaking that he cannot supervise it on his own, and therefore needs people (subordinate staff) to discharge this delegated role.

Management Style

Management style is a description of how managers control, delegate, communicate, etc.

Management is has been variously described as:

- the way to get work done efficiently through others
- meeting the needs of others as they work to accomplish their jobs
- the way to capitalise on the present whilst providing for the future
- to lead, guide and direct operations
- to achieve a consensus in the accomplishment of a specific task.

# Aims

- 3. AIMS to be established and accepted.

*"Tell me", said Alice, "which is the best way to go - well, that depends on where you want to get" - said the Cheshire cat. "I don't mind where I am going", replied Alice. "So go any way you wish", said the Cheshire cat."*

Lewis Carroll

Keypoints:

## ■ 3.1 Definition of Aims

Objectives need to be defined for both short-term and long-term situations, and be shared and accepted by all the management team.

## ■ 3.2 Short-term and Long-term Goals

Aims of emergency operations need to conform with developmental goals of a given society.

## ■ 3.3 Standards

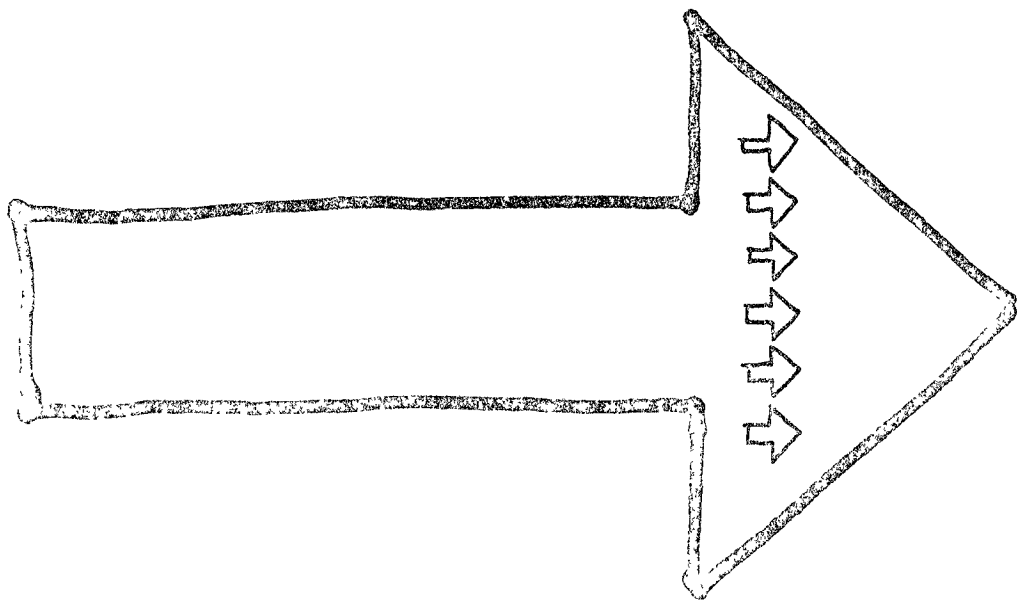
Aims relate to standards of assistance that need to be defined as an element in preparedness.

## ■ 3.4 Modesty vs Ambition

Aims need to be fixed that strike a careful balance between over-modest objectives and utopian expectations.

## ■ 3.5 Aims linked to Principles

Aims always need to be defined within a wide framework of principles that permit flexibility to redefine them to satisfy changing needs and resources.



# Confidence

- 4. MUTUAL CONFIDENCE has to be established and maintained

*"Good leaders refuse to: 'treat pawns like pawns, nor princes like princes, but persons like persons'".*

McGregor Burns

Keypoints:

- 4.1 Building and Confidence

Mutual confidence stems from:

- respect for the leadership
- trust relationships
- a clear policy for a task
- open administration without hidden agendas
- an environment that encourages constructive self-criticism of its staff and policies - thus permitting learning to occur
- information being freely available to those who need it.

- 4.2 Trust in Management

Confidence grows within a management system that aims to facilitate the development of their people, with the allocation of resources to enable them to perform effectively.

- 4.3 Accountability (See Part 1 Attitude No 6)

Mutual confidence is strengthened where patterns of accountability are strongly developed, i.e.

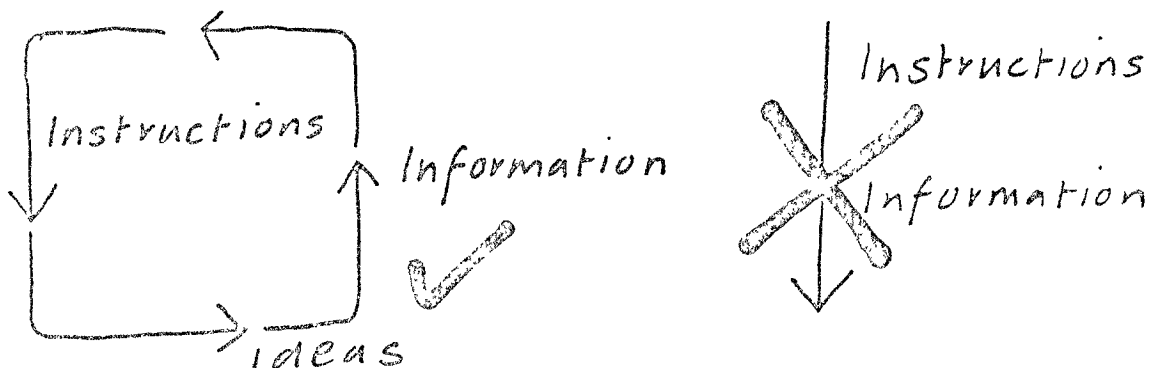
- aid workers accountable to refugees or disaster victims
- aid workers accountable to national governments
- aid workers accountable to their headquarters staff
- aid workers accountable to their constituency of donors/voters, etc.

- 4.4 Models of Management and Relationships of Trust

Mutual confidence is best fostered by decentralisation patterns that permit the ready form of information and instructions up and down the management structures rather than by a centralised 'command and control' style of management.

- 4.5 Career Prospects and Staff Development

Mutual confidence has a lot to do with career prospects. If achievements are rewarded or failures noted for corrective constructive action then confidence can be encouraged. It is eroded when the quality of performance is ignored by the leadership, thus minimising any aspiration for quality workmanship.



# Participation

5. PARTICIPATORY PLANNING is essential for effective action with minimum wastage of energy and skills.

*"Renewers constantly use words such as teamwork and trust. They are relentless in fighting office politics and power contexts and in breaking down the 'we/they' barriers that paralyse action. They are not lone rangers: there's no emphasis on charisma rather they are heroic leaders - outstanding people supported by others with heroic skills."*

Bob Waterman

*"I must follow the people, am I not their leader?"*  
B Disraeli

*"Nothing demotivates people more than the frustration of not being involved in the decisions that affect them. Over a period of time this makes them antagonistic to any new plans. The time and energy wasted in repairing the damage caused by lack of consultation and involvement is far greater and less fruitful than spending time thoughtfully at an earlier stage."*

Video Arts, from:  
'So you think you can manage'

Keypoints:

## 5.1 Essential Qualities

Participatory management is best promoted where the qualities listed above under Management Guideline 1.2 are encouraged and developed.

## 5.2 Role-casting

To enable participatory management to flourish, leaders will need to 'role-cast' staff for appropriate tasks in consultation with them.

## 5.3 Participation vs Speed?

Given the lengthy time it can take to make collective decisions within a participatory management system, it is essential to determine in advance how rapid decisions can be taken in crisis situations where urgent issues will always need to be addressed.

## 5.4 The Majority Vote Problem

A further problem of popular participation will be referred to under item 6.2 - the taking of essential yet unpopular decisions. Mechanisms are needed to allow these to take place without the sterilisation from majority voting for their self-interest.

## 5.5 Utilisation of available skills

The greatest asset of a participatory management system is its capacity to maximise the commitment, skills and knowledge of all the management team. Therefore, leadership teams need to continually monitor their human resources.

# Authority

- 6. AUTHORITY to act in a given situation.

*"You will never have so much authority as when you begin to give it away."*

Anon

Keypoints:

- 6.1 Sources of Authority

Just as chiefs and leaders may not be the same (see item 1.1) similarly whilst authority will always go with an office it has other sources. Therefore there may also be those in a team with an authority that stems from their knowledge or their behaviour or their high ethical standards in social relationships.

The implications for managers with implicit authority is the need to expand their authority of office with the deeper authority and respect that comes from knowledge, attitudes, behaviour patterns and moral standards that were outlined in Part 1.

- 6.2 Authority and Responsibility

For effective working at any point or level in a management structure, an individual must have authority commensurate with their responsibility.

- 6.3 Rigid or Flexible Authority?

In disaster or refugee situations authority is essential but its power has to be exercised lightly. Within stressful contexts it is essential to adopt a leadership style that is open, flexible and not coercive.

A characteristic of flexible authority will be the ability of information to flow up the system. However, if needed the authority must also be strong enough to assume centralised responsibility if unpopular decisions are needed (see item 4.4 Page 36)

- 6.4 Clarity of Authority

The frequent chaos of an emergency situation is due to numerous factors but a central issue is the lack of clear definitions of authority of the various participants. It is essential for all 'actors' in an emergency to know to whom they are responsible and how patterns of authority relate to integrated operations involving voluntary agencies, government bodies and international organisations.

- 6.5 Well-defined Policies

Authority must be based on well-defined policies. Firstly in order to avoid confusion if contradictory orders are given, and secondly to allow the people in low levels to take fast decisions in a proper way if there is no possibility to consult higher levels.

- 6.6 Accountability

Authority carries with it the need for full accountability to the body that has delegated the authority (see item 4.3 Page 36)

However, such accountable relationships can be strictly notional and mechanisms are needed to ensure that accountability operates in practice (see Part 1 Attitude No 6 Page 15)

# Co-ordination

- 7. CO-ORDINATION of actions into an integrated well organised response.

*"Everyone sees the need for co-ordination of emergency assistance but no one (repeat no one) wants to be co-ordinated by others."*

Ian Davis

Keypoints:

- 7.1 Trust and Confidence

Effective co-ordination is the product of trust and mutual confidence of groups that share a set of common principles and aims.

- 7.2 Practices

Therefore effective co-ordination will not occur amongs strangers who have first met at the scene of a disaster or refugee emergency. It is essential to practice co-ordination in simulation exercises.

- 7.3 Control Centres

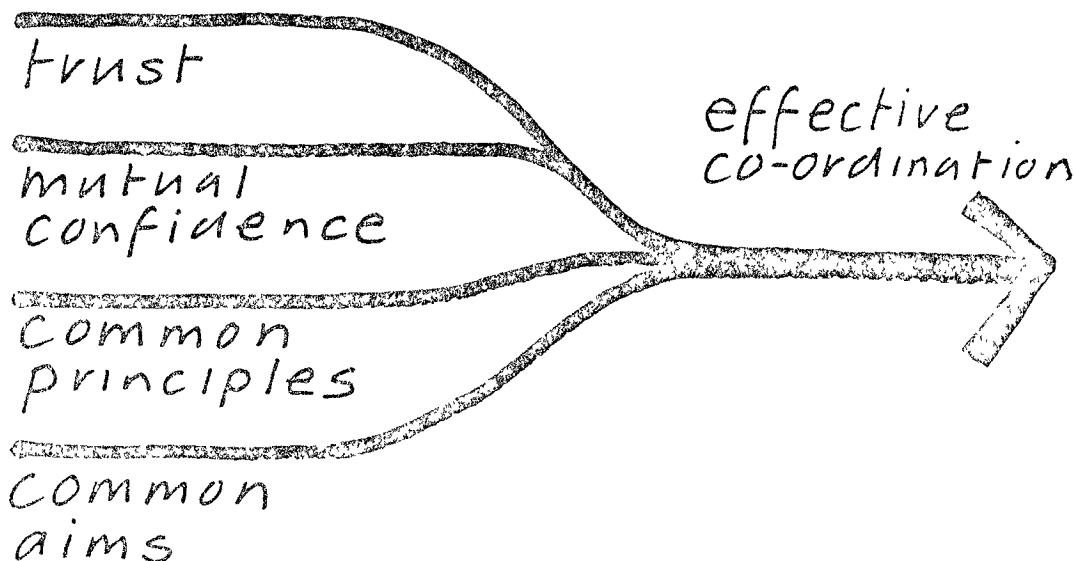
Co-ordination implies a single point of control for a given set of tasks. Multiple control centres at diverse levels are the enemy of effective co-ordinated action, resulting in a fragmented response.

- 7.4 Co-ordination and Authority

Co-ordination relates to patterns of authority as noted in item 6.3. Therefore a lead agency or ministry responsible for co-ordination has to be identified within preparedness plans.

- 7.5 Dynamic vs Static Co-ordination

Co-ordination is best regarded as a dynamic process that energetically looks for gaps to be filled by appropriate people or bodies rather than a static activity that directs the actions of others, similar to that of a traffic policeman.





# Resources

- 8. RESOURCES to deploy, satisfy identified needs.

*The resources of civilisation are not yet exhausted."*  
W E Gladstone

*Our experience would indicate that in most situations there is an exaggeration of damage by the authorities and an under-estimate of local resources to cope effectively with their own problems."*  
E M Quarantelli

Keypoints:

- 8.1 Types of Resource Available

Authorities need to make an inventory of the location, quantity and availability of the wide range of local resources, which will include:

- human power, knowledge and skills
- transportation
- materials and goods
- cash
- credit
- information dissemination by the media.

- 8.2 Economic Inputs

In order to regenerate the local economy local resources should be used whenever possible in preference to those from outside the area.

- 8.3 Financial Flexibility

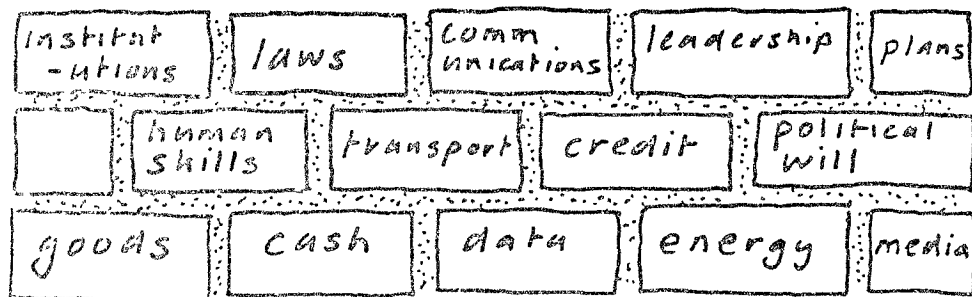
Budget limits need to be set before a disaster to allow spending in excess of normal ceilings to facilitate the flow of rapid assistance.

- 8.4 Stockpiling

Active stockpiles of goods (often maintained by the private sector) are more effective than passive stockpiles. This is due to problems of limited shelf-life of many goods, corruption risks, the high cost of storage, and the major problem of tying up capital in stockpiles over extended periods of time.

- 8.5 Cash and Credit

Provision of cash and immediate credit are neglected resources that can be highly effective mechanisms for speedy recovery and revitalisation of the local economy.



# Knowledge

- 9. KNOWLEDGE AND SKILLS are essential requirements for managers or leaders.

*"Where is the life we have lost in living  
Where is the wisdom we have lost in knowledge  
Where is the knowledge we have lost in information?"*  
T S Elliot

*"Bad decisions are always likely to be made where there are political constraints at work on a situation. But it is much harder for politicians to make ill-conceived politically motivated decisions when good, relevant and usable technical advice is at hand that indicates recommended actions based on detailed observations and research."*  
Anon

Keypoints:

- 9.1 Scope of Knowledge

Officials should aim to know:

- what to do
- when
- where
- with what resources
- why
- to whom, and
- with what likely consequences.

Therefore a 'learning environment' is needed within each agency where knowledge is valued and encouraged.

- 9.2 Documentation of Research Findings

Research is needed with careful documentation and dissemination of results in order to replace myths with knowledge.

- 9.3 Training and Education

These can fill gaps in knowledge and skills and therefore need to be incorporated in any agency's budget and staff development programme.

- 9.4 Internal Knowledge

Wise officials will always look for knowledge and skills within any community of disaster survivors or refugees before importing staff with such abilities.

- 9.5 Testing

Knowledge and skills have to be tested in actual disaster/refugee situations or simulation exercises in order to prove their effectiveness or indicate limitations to be addressed.

# Evaluation

- 10. EVALUATION MONITORING AND FEED BACK from actions to improve existing and future programmes.

*"Deliberate and conscious learning from experience is not part of the non-profit welfare tradition. ... Good intentions do not always equal good results."*

Alan Taylor

Keypoints:

- 10.1 Objectives

In order to monitor or evaluate a programme it is essential to know the objectives of the community in question relative to the project. Feedback mechanisms are also essential back into the project or sponsoring agency.

- 10.2 Involvement

In order to complete an evaluation it needs the involvement of the community in assessing their own programme and for their observations to be added to the results to improve new projects.

- 10.3 Budget Provision

In order to ensure that monitoring and evaluation occur adequate budget provision has to be incorporated in all project design work.

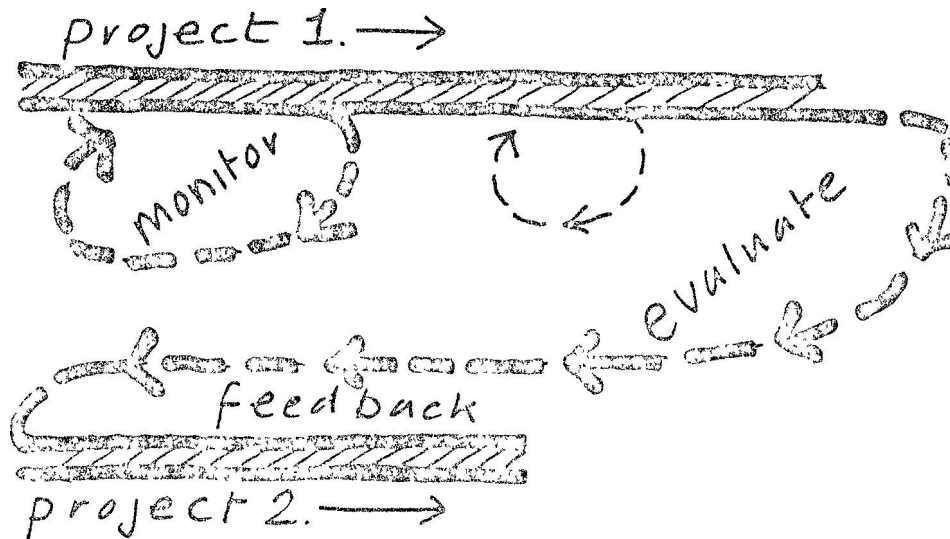
- 10.4 In-House or Out-House

Monitoring and evaluation should be a carefully balanced mix of 'in-house' appraisal (for self-learning and 'on-course programme correction') and 'out-house' scrutiny (for reasons of accountability and to ensure an external objective view).

When complete evaluations should be published to help others to learn from your set of lessons, obviously some editing will be necessary to remove names of individuals or agencies being criticised.

- 10.5 Quality or Quantity

Methods of monitoring and evaluation need to be a mixture of quantitative and qualitative assessment.



# Organisational Structure

- 11. AN ORGANISATIONAL STRUCTURE is a prerequisite for effective management and protective planning to take place.

*"Every good idea, every exciting concept is useless unless it has a home."*

David Oakley

Keypoints:

■ 11.1 Two-way Flow

It is important in attempting to manage an event as complex as a disaster/refugee situation to have an organisational structure that facilitates a smooth communication flow in both directions.

Information, instructions, advice, encouragement, inspiration, knowledge, wisdom and resources needs to flow from those able to offer it to those needing it.

■ 11.2 Authority

Patterns of authority as noted above under item 6 need to be established and maintained.

■ 11.3 Acceptance of the Organisational Structure

It is one thing to have a developed organisational structure, but quite another to have one that is respected and accepted by those involved in its operation. Without such endorsement/validation any organisation risks failure or only partial functioning particularly under stress conditions.

■ 11.4 Accountability

As noted repeatedly organisations need to become accountable in various directions that will include the object of concern, i.e. disaster victims, the donors who have contributed resources to the agency, and to authorities who authorise work to take place. Such accountability requires mechanisms to make certain it occurs in practice to avoid 'tokenism'.

■ 11.5 Flexibility

Various guidelines (3.5 and 6.3) have emphasised the need for a flexible structure that can be sufficiently elastic to accommodate new challenges and respond in a rapid manner to changing demands. However, this flexibility should not be regarded as a licence for lax practices or ill-defined procedures, rather it requires more careful planning than a rigid management system. Note particularly the need for Aims to be linked to Principles (see 3.5).

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## PROGRAMME MODELS

As a post-script to the discussion on Organisational Structure, the following list contains several descriptions of common programme models to be wary of. They are taken from 'They Know How ... An Experiment in Development Assistance', Inter-American Foundation, Washington DC, 1977.

○ Lawrence of Arabia Syndrome

" The Lawrence of Arabia Syndrome refers to the high failure potential of projects built around or sustained by a strong central figure which are, therefore, subject to autocratic decision-making and paternalism rather than true participation.

- Beware of projects built around one person and justified on the basis of that individual's impressive record. These projects are highly susceptible to the personal whims of the central figure, the time and effort he or she can make available, and his or her shifting personal priorities which may not necessarily reflect community needs.

- Beware of projects in which the leadership does not make itself accountable to the community for the use of funds or responsible for the appropriateness of project objectives.
- Beware, on the other hand, of projects administered by progressive intermediary groups accountable to a conservative central organisation or constituency. The ability of intermediaries to act and respond is often severely restricted, and project expectations should reflect that potential limitation.
- Beware of projects in which the community's stated social philosophy and purpose are apparently in accord with operational principles but for which the key administrative personnel have not been selected at the time of the grant. One also should take into account the possibility that the leadership of a project may change during its formative stage, transforming the project's character and scope to such a degree that it may even become counterproductive.
- Beware, too, of projects predicated on the expectation that progressive individuals voicing visionary socio-economic perspectives can significantly influence the policy decisions of a conservative organisation. These voices can be isolated, removed, ignored, or otherwise silenced.

### ○ Pollyanna Syndrome

The Pollyanna Syndrome is illustrated by projects in which the required level of management expertise, marketing ability, or similar administrative skills were naively underestimated in the romantic belief that what is right will emerge triumphant.

- Beware of projects which assume, that with a little technical help and a little capital, small autonomous enterprises can be launched which will be efficiently managed by the chronically unemployed or underemployed. The tendency to grossly underestimate the complexity of these business enterprises results in intermediaries continuing to make management decisions and indefinitely postponing turning over the decisions to employees.

### ○ Messiah Syndrome

The Messiah Syndrome includes cases of high failure potential resulting from funding an administrative elite that advocates and implements a project idea that has not been internalised by the affected community. Funding gives the 'messiah' a favoured position to legitimise this idea, or even institutionalise it, thereby upsetting the community's natural and preferred place.

- Beware of any projects that experiment with an idea not rooted in the community directly affected. The need should be identified by the people, and the problem-solving approach should come out of their unique experience and their critical reflection on that experience.
- Beware of any project in which the people most directly affected are not fully aware of the risks involved.
- Beware of projects that introduce new programme components that have not been discussed with local people even though the larger project has won community support and has proved successful.
- Beware of projects in which urban cities define the goals of rural projects and then administer the project from an urban location and perspective.
- Beware of projects in which a good idea (one that worked somewhere else) is transplanted on the basis of its alleged intrinsic merit rather than local demand and acceptance.

- Beware of projects administered by intermediate groups when the community does not have control over the required sources.

### ○ Artificial Insemination Syndrome

The Artificial Insemination Syndrome appears in cases where external funding serves to artificially induce or sustain the vitality and momentum of an otherwise static project idea that lacks a community commitment to action.

- Beware of projects where funding could exceed the project's natural growth rate, thus overextending local management and support capability.
- Beware of project administrators who believe they have a special relationship with funding source and perceive the funding agency as being obligated to sustain the project.
- Be careful that too high a level of outside funding does not make the project so prematurely or excessively vulnerable to hostile political pressure that it could not survive.
- Beware of projects that are the only available income-producing option and, therefore, attract many participants. The level of participation is often wrongly equated with community acceptance. It actually amounts to buying project participants who have virtually no other choice.
- Beware of projects that assume that an outside grant will create a coalition or linkage where they previously did not exist. This may mean that available funding, rather than natural affinity or shared action agendas, is supplying the cohesion.

### ○ Dr Strangelove Syndrome

Projects characterised by the Dr Strangelove Syndrome serve as vehicles for social engineering to inculcate and reinforce certain behavioural responses and attitudes that an administrative elite believes to be productive or desirable.

- Avoid projects in which people are being experimented upon. These are projects that have a control group subjected to an innovative approach whose validity, applicability, and appropriateness which the individuals did not determine themselves.
- Beware of projects whose operational assumption is that the people to be affected do not understand how to co-operate, cannot effectively participate in decision-making, and must be taught to do so.
- Beware of projects in which the community's needs and action priorities are identified by intermediaries or elites, without critical reflection and analysis by the community, and in which motivation is considered to be an external function.
- Beware, too, of projects in which a demonstration is expected to convince people that an action is in their best interests and should be given top priority. When this fails to stimulate change, the people are blamed for being undermotivated.

The Dr Strangelove Syndrome has been the focal point of ongoing debate within the Foundation and remains a controversial and contested aspect of project analysis. One side of the debate takes the form of an ethical imperative against all projects which experiment with human beings by favouring some and discriminating, by omission, against others. The opposing view is that control groups are required if experiments are to have validity and recognition. "

# Implications from Part 2

These essentials of Disaster Management will only be satisfied where there is a clear commitment to the task of managing highly complex, stressful situations. As in Part 1 it will be an exceedingly rare occasion when all the essentials are found to be 'in place'. Therefore to encourage their growth:

- 1 Make certain that both leadership and management are well established.
- 2 Recognise that some groups have knowledge, others resources, others authority, etc. Therefore build management teams that aim to cover the eleven necessities in Part 2.
- 3 Create a stimulating environment where learning and training are valued and wanted by all management staff.
- 4 Pre-plan (as in Part 4) so that the difficult issues, dilemmas and problems noted in these guidelines are systematically developed in 'non-emergency situations'.

1. Leadership	2. Build Teams
3. Teach and Learn	4. Pre-Plan

[If you wish to test your (or your organisation's) management skills, turn to page 58.]

## **PART 3.**

# **Testing Management Skills**



Part 3: TESTING YOUR SELF-MANAGEMENT ABILITIES

*"If you cannot manage yourself you cannot manage anyone."*

In Part 3 readers can do some self-analysis to gauge their general effectiveness as managers. At the conclusion of the three tests there will be a section that discusses the implications of the results of these tests.

The three tests relate to:

- ☐ A - Skills in self-management reviewing eight basic topics.
- ☐ B - Attitudes and personal qualities (as discussed in Part 1).
- ☐ C - Basic management (as discussed in Part 2).

Inevitably there are overlaps between the three tests, but hopefully this will reinforce some particularly critical issues.

A Skills in Self Management  
Eight Principles

In this section eight guidelines will be suggested as a checklist for readers to reflect on their self-management skills. Each will be followed by some questions and score sheets that will hopefully test manager's general performance in each area.

[The listing of topics has been drawn from a very helpful book - 'So you think you can manage' published by Video Arts, Methuen, London 1984, Chapter 1, The Unorganised Manager, from damnation to salvation, pp 11-34.

PRINCIPLE 1

IF YOU CANNOT MANAGE YOURSELF, YOU CANNOT MANAGE ANYONE.

Note the symptoms of an unorganised manager:

- A briefcase full of work is taken home regularly.
- Reports are late.
- Interruptions fill his day.
- Not enough time for him to prepare for meetings or interviews.
- Dispirited staff due to endless disruption he has caused.

TEST

- Ask yourself, your secretary, your staff and your wife/husband what they think of your personal management skills. If their answers average:

- 5 = Excellent
- 4 = Very Good

then ignor the next few pages !

But if they are in the following categories:

- 3 = Good
- 2 = Weak
- 1 = Very Bad
- 0 = Hopeless Case

then read on!

**PRINCIPLE 2**

**YOU CANNOT KNOW HOW TO PLAN IF YOU DON'T KNOW WHAT TO PLAN**

If the above description relates to you you may have great difficulty in clarifying objectives of a given task. Put another way you cannot 'see the wood for the trees'. [If this is a problem re-read the first three Basic Management Guidelines 1 Leadership, page 31; 2 Management, page 33 and 3 Aims, page 35].

**TEST**

- Look at the four most important tasks/projects that currently fill your desk and your mind, and ask three questions:
  1. What are the primary, long and short-term objectives of each task?
  2. Have the aims been broken down into manageable sections (i.e. the target for this week, 6 months, 1 year?).
  3. How do you know whether the aims are being achieved or not?

	Primary Objective of Task	Short Term Objective	Long Term Objective
Task 1			
Task 2			
Task 3			
Task 4			

PRINCIPLE 3

THE MANAGER WHO DOESN'T KNOW HIS JOB ENSURES THAT NOBODY ELSE KNOWS THEIRS

If you found yourself in a situation where you are 'at sea' without a sense of direction and the necessary knowledge to act, what should you do?

[Re-read Attitude No 12 Openness, Teachability and Humility, page 24, and Basic Management Guideline No 10 Knowledge and Skills, page 42]

TEST

1. Write out your job description.
2. Are you confident in your ability to perform well in all aspects of your job?
3. If the answer is negative, where do you need knowledge and what new skills do you require? How can you acquire them?

JOB DESCRIPTION

PRINCIPLE 4

THOSE WHO HAVE TIME FOR EVERYONE END UP HAVING TIME FOR NO ONE

1. Plan your time.
2. Spend time to make time.
3. Take full control of the time at your disposal.
4. Remember that time is a budget item and an expensive one at that.
5. Time management will grow out of a clear understanding of your aims.

TEST

1. What are you here for within your organisation?
2. Do your answers match the purpose of your organisation?
3. Do you have a time management plan?
4. Are you controlled by the casual demands of others on your time, or have you decided who to see for how long, how often, when and why?

What are your main functions in your organisation?

What is the purpose of your organisation?

Note any obvious discrepancy between the above answers.

PRINCIPLE 5

IT IS EASIER TO BE BUSY THAN TO GET THINGS DONE

1. Make a list of all the jobs you have to get done - all short and long-term tasks.
2. Study the contents, it will contain:
  - large and small tasks
  - urgent and non-urgent
  - immediate and long-term
  - boring and interesting.

TEST

1. Make the two lists of short and long-term tasks as noted above.
2. Think about the items on your list and mark in red the tasks which help you to achieve the primary purpose of your job.

Your Short-term Tasks

Your Long-term Tasks

PRINCIPLE 6

WHAT IS URGENT IS NOT NECESSARILY THE SAME AS WHAT IS IMPORTANT

1. Before scheduling a task you must determine two things about it:
  - (a) How long to spend on it?
  - (b) How quickly you need to complete it?
  - (c) Remember that urgent tasks are not necessarily important tasks. Many tasks that people demand from you 'yesterday' are trivial items that don't merit much of your precious time. Therefore deal with trivial matters NOW leaving lots of time for important tasks.

TEST

1. Make two lists of URGENT and IMPORTANT tasks you have undertaken in the last week.
2. Try to honestly say how much time you devoted to each.
3. Were the urgent tasks trivial or important?

TASKS UNDERTAKEN LAST WEEK

Urgent Tasks:

Important Tasks:

PRINCIPLE 7

DOING YOUR TASKS IS NOT THE SAME AS DOING YOUR JOB

1. Tasks fall into two categories:

Active Tasks - the ones you must do to achieve the objective of your job.

Reactive Tasks - All the others - all the junk that lands on your desk each day that has to be dealt with to keep things running.

The danger is to spend so much time on Reactive Tasks that you fail to address Active Tasks.

TEST

1. List the Active Tasks you are currently undertaking.
2. List the Reactive Tasks.
3. How can you re-allocate more time for Active Tasks and reduce the time spend on Reactive Tasks?

Your Active Tasks:

Your Reactive Tasks:



PRINCIPLE 8

DELEGATION IS NOT TO BE CONFUSED WITH ABDICATION

AND DELEGATION IS NOT ABOUT GIVING TASKS TO PERFORM, IT IS ABOUT GIVING A RESULT TO ACHIEVE

There are three obstacles to effective delegation:

1. Fear of losing control.
2. Regret at giving up jobs you enjoy.
3. Belief what you can cope with the job yourself.

TEST

- 1. When you delegate do you:
  - interfere with your staff to check if they are doing the job?
  - follow the dumbbell diagram in Management Guideline 2, page 33, 'Tell Sell Involve Delegate', or do you short circuit this to Tell Delegate?
- 2. How effective are you at delegation? Mark yourself, and ask a key person on your staff to whom you regularly delegate to assess your performance on this scale:
  - 5 = Excellent
  - 4 = Very Good
  - 3 = Good
  - 2 = Weak
  - 1 = Very Bad
  - 0 = Hopeless

If the answers average below 3 re-read the guidelines - Attitudes: No 2 Faith and Trust, page 11; Basic Management Guidelines No's 4 Mutual Confidence, page 36, and 5 Participatory Planning, page 37

Having tested yourself against the eight self-management principles, the following score sheets are a summary of Part 1 Attitudes and Part 2 Basic Management Guidelines.

B. Self-Evaluation Test  
Attitudes and Personal Qualities

Ring the appropriate number:

- 5 - Excellent
- 4 - Very Good
- 3 - Good
- 2 - Weak
- 1 - Very Bad
- 0 - Hopeless

1. You can <u>Inspire</u> others and give <u>Encouragement</u> to them.	5	4	3	2	1
2. You have <u>Faith</u> and <u>Trust</u> in those you work with	5	4	3	2	1
3. You display <u>Kindness</u> , <u>Respect</u> and <u>Compassion</u> to others	5	4	3	2	1
4. You are an <u>Impartial</u> person with a concern for <u>Justice</u> in dealing with people	5	4	3	2	1
5. You are a person with high <u>Integrity</u> , you are <u>Honest</u> and <u>Dependable</u>	5	4	3	2	1
6. You act <u>Responsibly</u> and are anxious to become <u>Accountable</u> to those above and below you	5	4	3	2	1
7. You act with <u>Courage</u> and <u>Confidence</u> , and you display <u>Persistence</u> in pursuing a task	5	4	3	2	1
8. You are an <u>Adaptable</u> and <u>Flexible</u> person	5	4	3	2	1
9. You are <u>Creative</u> and <u>Imaginative</u> in your work	5	4	3	2	1
10. You are <u>Patient</u> and manage to remain <u>Calm</u> in a crisis situation	5	4	3	2	1
11. You pay careful attention to your <u>Health</u>	5	4	3	2	1
12. You have a good sense of <u>Humour</u> and use it with sensitivity to others	5	4	3	2	1
13. You are <u>Open</u> , <u>Teachable</u> and <u>Humble</u>	5	4	3	2	1

C. Self-Evaluation Test:  
Basic Management Guidelines

[Please note. The eleven topics are a mixture of skills, qualities, approaches and capabilities. Whilst some relate to individuals others are concerned with organisations. Therefore, when you score you may be relating this to yourself or your organisation.]

Ring the appropriate number

- 5 - Excellent
- 4 - Very Good
- 3 - Good
- 2 - Weak
- 1 - Very Bad
- 0 - Hopeless

1. Assess your <u>Leadership</u> ability	5	4	3	2	1
2. How good are you as a <u>Manager</u> of people, resources and tasks	5	4	3	2	1
3. Are you able to clarify <u>Aims</u> and take them seriously	5	4	3	2	1
4. Are you 'good' with people, and is there <u>Mutual Confidence</u> in the way you manage?	5	4	3	2	1
5. Do you encourage <u>Participatory Planning</u> and decision making	5	4	3	2	1
6. Is <u>Authority</u> clearly defined and applied effectively in your organisation	5	4	3	2	1
7. How effective are you as a <u>Co-ordinator</u>	5	4	3	2	1
8. Are the essential <u>Resources</u> available within your organisation for use in a disaster situation, i.e.					
- human power					
- transportation					
- materials and goods					
- cash					
- credit					
- information	5	4	3	2	1
9. Do you have the <u>Knowledge</u> to act, i.e.					
- what to do					
- when					
- where					
- with what resources					
- why					
- to whom and					
- with what likely consequences	5	4	3	2	1

10. Do you or your agency <u>Evaluate, Monitor and Feed back</u> the results?	5	4	3	2	1
11. Do you have an adequate <u>Organisational Structure</u> to enable effective management to occur?	5	4	3	2	1

# Implications from Part 3

The aim was to help each reader learn about their relative strengths and weaknesses in attitudes, skills and management capabilities. In most cases there is likely to be a rather even balance where some topics score highly whilst others are low. Where results are poor the implications may be:

- 1 To build management teams where your major weaknesses are well covered by others.
- 2 To encourage your own organisation's leaders to look at itself to see whether it acts as a facilitator or hindrance to staff development.
- 3 To embark on a self-development programme focussed on your weak spots.
- 4 To re-define your job description to capitalise on your obvious strengths and remove weaker areas from your work.

1. Build Teams	2. The Organisation
3. Self-Development	4. Re-Define Jobs

## PART 4

# Protective Planning

Part 4: PROTECTIVE PLANNING

Introduction

As stated at the outset (page 5 ) the process of protective planning is the product of the Attitudes/Personal Qualities and Management Structures which were tested in Part 3.

From the basis of the earlier discussion this final section aims to take readers through a progressive sequence of eight phases of Protective Planning. At the conclusion of the discussion in this sequence the process of planning will be summarised with five key elements.

# Protective Planning [8 Phase

PROTECTIVE PLANNING IN EIGHT PHASES (See Fig 1 Page 63)

The following model is an example of the essential steps in contingency planning for disasters. The pattern is primarily focussed on fast-impact disaster situations, such as floods, cyclones, earthquakes etc. The pattern would have to be adopted for drought, refugee or technological disaster situations. In addition the model will always need to be adopted to suit local conditions.

## 1. PHASE 1 INSTIGATION

### • NATURE OF PHASE:

This phase is concerned with the ACTIVATION of the plan.

#### ■ 1.1 Disasters as Triggers of Protection

Normally Preparedness or Mitigation planning is initiated after a major disaster that results in an enhanced political concern to avoid a repetition of the tragedy. But such concerns decline rapidly over time so wise officials will need to move rapidly in the immediate post-disaster phase to initiate the planning process.

#### ■ 1.2 Integration of Protective Measures in Development Planning

Disasters result from physical, social, economic and political vulnerability. Therefore, any protective process must avoid isolating the subject from national, regional and local development planning of which it is a key element.

#### ■ 1.3 Pre-conditions for Protective Planning

In order to plan against disaster it is essential to have:

- Political will to make it work
- Cash
- Public awareness and concern
- An agency possessing good leadership to instigate the plan

#### ■ 1.4 Scope of Protective Planning

Protective planning must not be merely regarded as a plan on paper or a loose-leaf manual, it can be far wider than this embracing:

- Laws/codes of practice
- Enabling legislation
- Emergency plans
- Trained staff
- Emergency control centres
- Passive stockpiles of emergency goods
- A communications system

#### ■ 1.5 Type of Government Ministry/Agency/Office to Co-ordinate Protective Planning

Of the various models that have been used in disaster-prone countries ie:

Model 1: A co-ordinating office within the Prime Minister, Cabinet or Presidents office.



The first model has been found to be most effective. There are several reasons for its success:

- It 'outranks' other ministries thus committee members are obligated to attend.
- It facilitates co-ordination which is very difficult in Models 2-3 due to normal rivalries for status and resources of diverse groups.
- It is the centre of political power and influence, - which is very useful when obtaining resources for disaster planning and essential in the management of a major emergency situation.

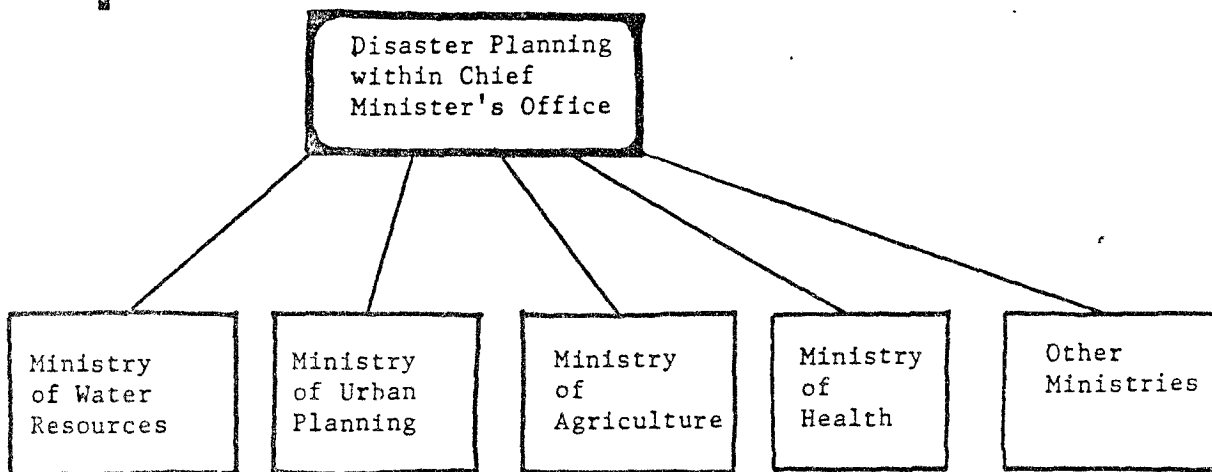
Model 2: A specific Ministry for Disaster Planning

Model 3: A core unit within various ministries for disaster planning.

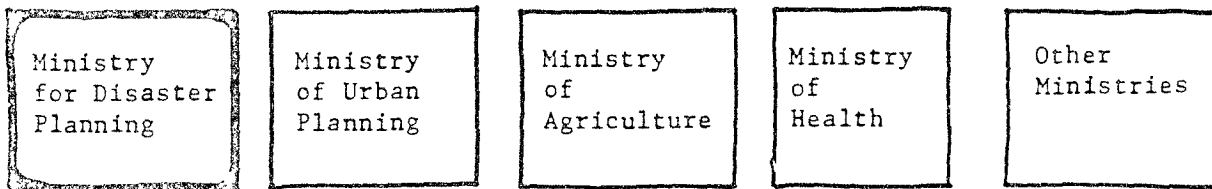
Model 4: A voluntary Disaster Co-ordinating Council.

[see Fig 2

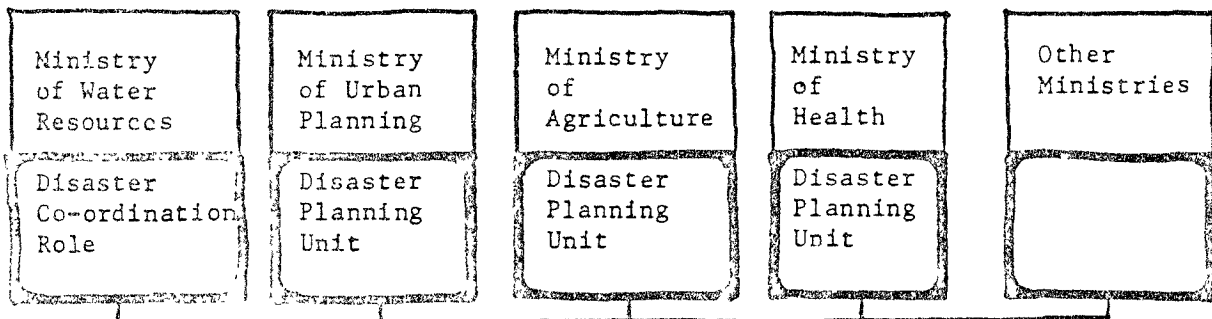
Model 1



Model 2



Model 3



Model 4

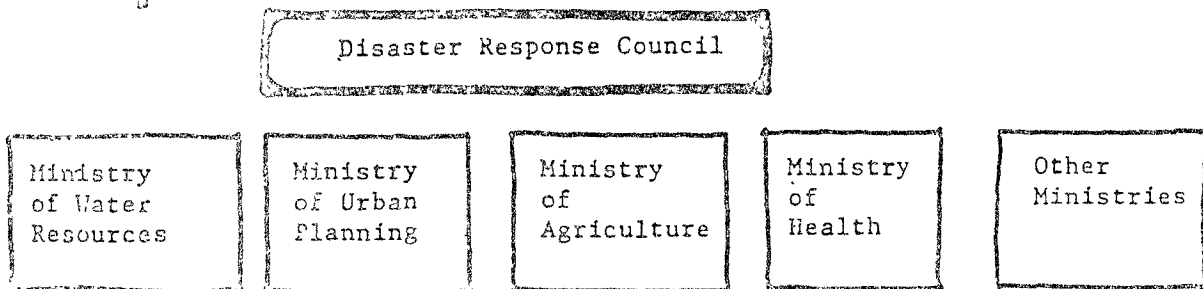


Figure 2. Models of government administration for risk reduction

## 2. PHASE 2 ACHIEVING A BALANCE BETWEEN RISKS AND RESOURCES

Checklist of topics to cover:

### ■ RISK ASSESSMENT OF DISASTERS: HAZARD MAPPING

- Disaster History
- Prediction Techniques
- Vulnerability Analysis Techniques:
  - Physical Vulnerability
  - Human Vulnerability
- Hazard Mapping Techniques
- Environmental Monitoring

### ■ CHARACTERISTICS OF NATURAL DISASTERS:

Characteristics of the following hazards, and reports of their impact:

- Earthquake/Tsunami
- Landslide/Mudslide/Rockfall
- Volcanic Eruption
- High Winds: Tornado/Cyclone (Hurricane, Typhoon)
- Flood
- Avalanche
- Bush, Forest Fire
- Dust Storm
- Drought

### ■ CHARACTERISTICS OF TECHNOLOGICAL DISASTERS:

Characteristics of the following hazards, and reports of their impact:

- Urban and Industrial Fires
- Industrial Accidents
- Chemical Spillages
- Pollution - Atmospheric, Water, Ground
- Transportation of Hazardous Materials

### ■ CHARACTERISTICS OF WARS/CIVIL STRIFE

Wars and Civil Strife, and reports of their impact:

- Damage patterns

### ■ CHARACTERISTICS OF REFUGEE SITUATIONS

- The nature of a Refugee Emergency
- Assessment Techniques

### ■ CHARACTERISTICS OF EPIDEMICS/PANDEMICS

- The Nature of Epidemics
- The Spread of Epidemics

### ■ NATURE OF PHASE 2:

Collection of DATA and its ANALYSIS

This Phase of Planning concerns two processes:

# 2a

2A Risk Assessment and  
2B Resource Assessment

## Risk Assessment

■ Keypoints:

- 1. National governments need to develop their risk assessment capability

Therefore, it is necessary to set up research and development organisations, where these are not already established, to undertake all the necessary stages in risk assessment.

- 2. Data is necessary on hazard and disaster occurrence

Therefore, collect information in a systematic manner on the frequency, magnitude and location of the relevant hazards.

- 3 Data is also necessary on vulnerability

Therefore, collect information in a systematic manner on the vulnerability of communities, buildings and economic activities to the effects of natural hazards and disasters.

- 4 Prediction of future hazards and disasters is a key to effective mitigation planning

Therefore, develop the predictive abilities of the research and development organisations responsible for risk assessment.

- 5 Risk assessment should not be undertaken in isolation from planning and decision-making

Therefore, establish, maintain and develop links between the geoscientists working in risk assessment organisations and the land-use planning and other organisations, so that the results of risk assessment programmes can be useful and used.

(The above keypoints were developed for the UNDRO Manual on Mitigation Planning Publication 1989.)

See Fig 3 for a description of the Interface of Hazards and Vulnerability.

# 2b

## Resource Assessment

Keypoints:

Having established the risks through the dual process of Hazard Mapping and Vulnerability Analysis, it is now essential to assess available resources:

- 1. Inventory of Resources

Resources will include:

- Human Resources (energy; skills; labour; knowledge; experience; leadership; authority; local institutions)

# Hazard Disaster Vulnerability: effect:

# pressure:

# cause:

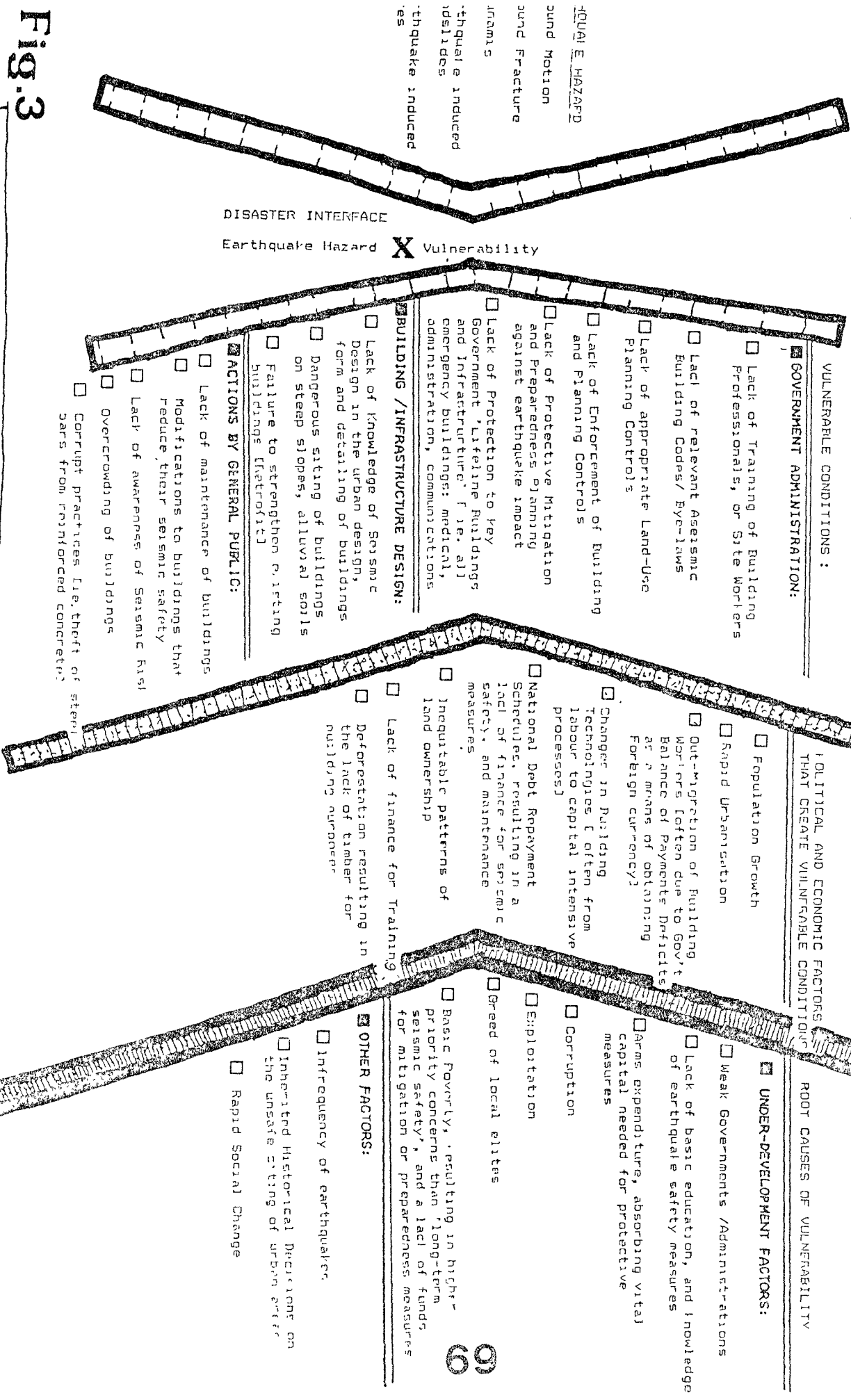


Fig.3

Disasters as the Interface between Hazard and Vulnerability

- Cash and credit facilities
- Enabling legislation (ie to release government resources, vehicles/fuel/staff and to lift normal financial limits)
- goods (either in government stocks or in private sector)

## ■ 2 Access and Logistics

Part of the resource assessment will be to establish:

- where resources are
- in what quantity
- who controls them
- how they can be deployed to another location

## ■ 3 External Sources

When the above keypoints have been completed, it will be possible to identify gaps that will need to be filled from external sources. This process will initially consider in this order:

1. adjacent regions of country
2. neighbouring countries
3. strong well established bilateral/international links
4. UN Red Cross systems
5. General international appeals for help

### 3. PHASE 3 DECISION MAKING

#### ■ NATURE OF PHASE

Decide on a course of action now you are armed with data on Risks and Resources.

Keypoints:

#### ■ 1 Defining an Acceptable Level of Risk

The tasks of Risk and Resource assessment are technical and administrative, now the process moves into the political arena as officials decide on a minimum level of protection they can afford.

#### 4. ■ 2 Exit Routes

Phase 4 may be used where politicians and leaders decide that disaster protection is not a viable option and that other risks (ie lack of health/education/employment) are more pressing concerns requiring government action.

#### ■ 3 Standards of Protection

Officials can protect against a 2, 5, 10 or 100 year flood level, or against a 4.0-8.0 Richter scale earthquake. The definition of the standard is often a political decision and will relate to economic levels and their other priority concerns.

#### ■ 4 Lifelines

Certain facilities will need higher levels of protection. These are normally termed 'lifelines', ie:

- Buildings of public assembly ie Schools/Mosques/Churches/Cinemas
- Key emergency resources ie Medical/Police/Administrative/Telephone/Water/Radio-TV links
- Cultural monuments/resources ie libraries/museums/important historical buildings.

## 5. PHASE 5 DETAILED PROTECTIVE PLANNING

### ■ NATURE OF PHASE:

Plan in both the long and short term for the mitigation of future disasters, and in anticipation of disasters.

### 5a. Mitigation Planning

Checklist of topics to cover:

- Guides, Handbooks and Manuals
- Links between Mitigation and Development
- Elements in a Mitigation Plan: (Fast-impact disasters)
  - Structural and Non-structural Mitigation Measures
  - Retrofit Measures
  - Protective Emergency Structures (cyclone shelters/mounds)
  - Research and development of Safe Buildings/infrastructure
  - Lifeline Engineering
  - Lifeline Resources for enhanced standards of Protection
  - Building Codes/Bye-laws
  - Land-Use Planning Controls
- Elements in a Mitigation Plan: (Drought/Famine situations)
  - Early-warning advance indicators
  - Water Harvesting Techniques
  - Development of animal camps for livestock protection
  - Food Security Systems including Food Storage
- Elements in a Mitigation Plan: (Technological hazards)
  - On, and off-site Protection Plans for Hazardous Industrial Plant
  - Warning Systems
- Elements in all Mitigation Plans:
  - Co-ordination and Financing Preventive Measures
  - Public Awareness/Perception of Risk
  - Cash Grants/Subsidies/Insurance Protection
  - Training and Education for Protection against Disaster
- Mitigation Planning

Keypoints:

(The following section is drawn from the UNDRO Guidelines on Mitigation Published in 1989)

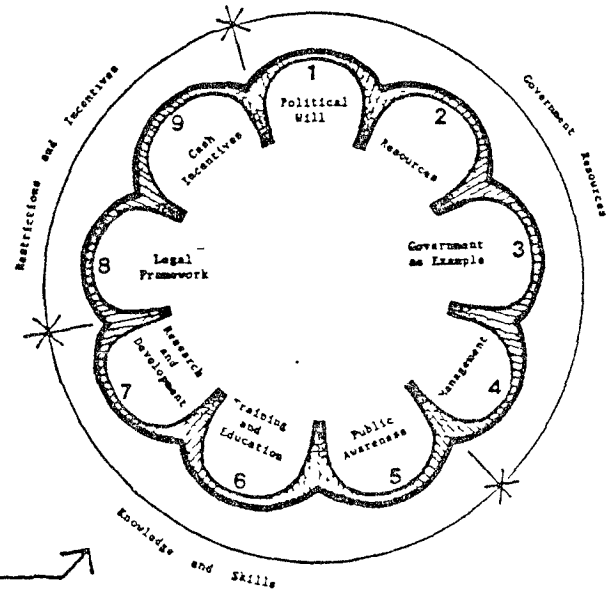


## IMPLEMENTATION: REQUIREMENTS AND MECHANISMS

The plan of a castle symbolises a balanced strategy for risk reduction. Each bastion represents one of the necessary vital elements to protect lives and property. This castle metaphor is useful for two reasons: first, the implementation strategy has to be as strong as possible to resist the powerful and extreme forces that are uniquely experienced in a disaster. Secondly, just as many castles have collapsed by internal neglect rather than external pressures, the strategy has to be strong enough to withstand public and political apathy that inevitably prevails in the long period between the stimulus of major disasters.

The following are nine crucial requirements and mechanisms for effective implementation: they are the bastions of the castle.

Fig 4 Castle Implementation Symbol  
Governmental resources



1. **Political will and commitment.** Without strong pressure from the centres of political power in a given country to introduce, develop and maintain disaster protection measures, then all other activities are likely to be at best token responses. Political will is most likely to originate from the major failure of measures to counter a disaster. Therefore responsible and concerned officials may need to draft their proposals down to the last detail and await the inevitable disaster, which will serve as a catalyst and lead to positive and rapid action without the delay in plan formulation at that stage.
2. **Resources.** No disaster mitigation strategy can succeed without some resources, however modest, and the allocation of these resources from other competing government or private sources requires power to be exercised in favour of disaster mitigation rather than those other functions of government.

Such effective management may grow out of the annual task of preparing the national budget. For the expenditure of modest sums of money on a continual basis, there are major potential benefits in lives that can be saved and property protected. This is both the aim and output of a balanced risk reduction strategy.

3. **Government Models.** An excellent way to communicate the need for safe environments is for governments to provide an example of safe practice so that all the buildings or services they construct and maintain are built to high safety standards. This will have two effects, firstly the designers, builders and engineers who construct in a safe manner will learn from this experience. Secondly, the physical environment will become progressively safer in key areas where protection is of paramount importance.

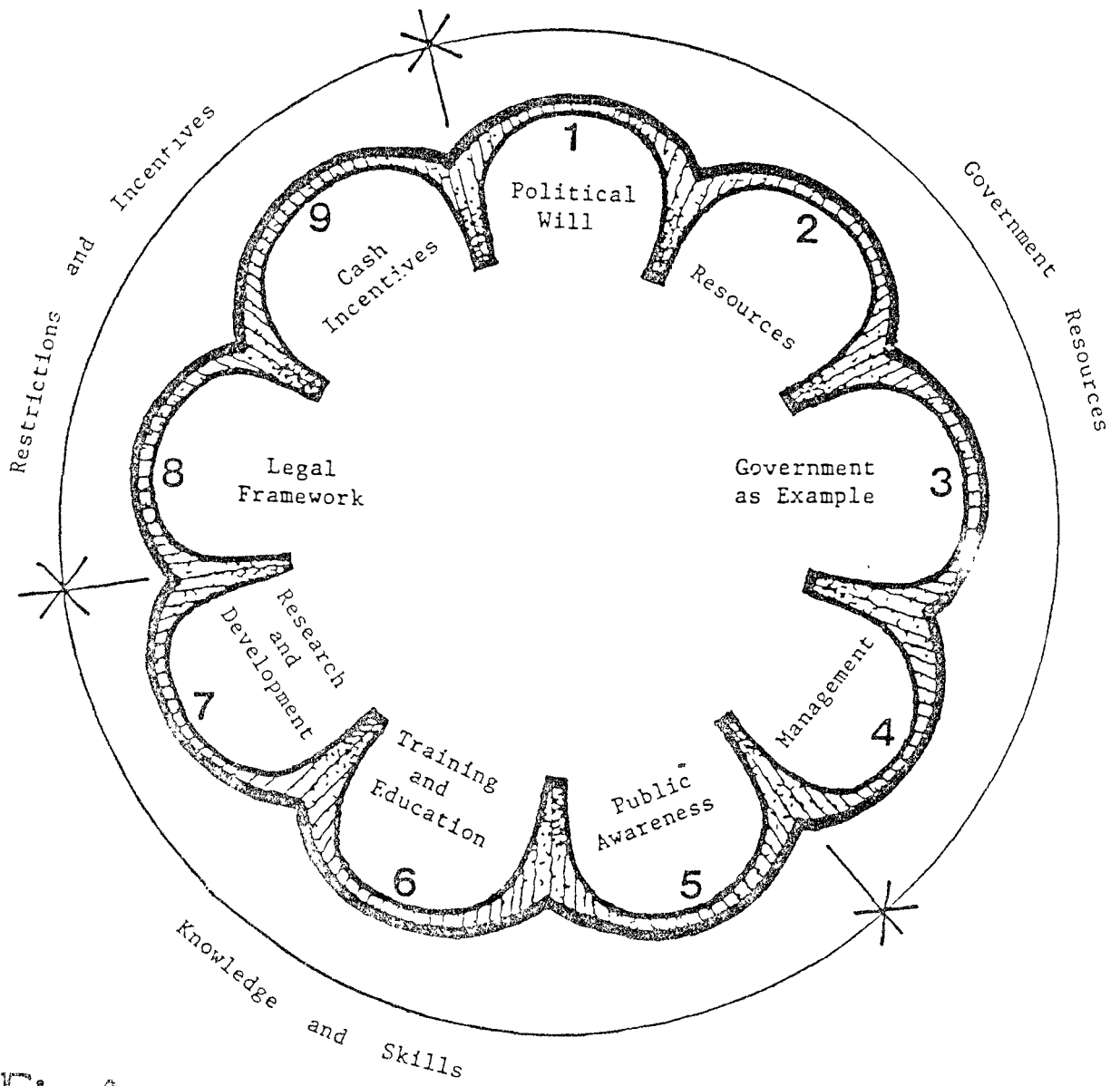


Fig.4

well understood, but it remains unusual for any government, ministry, agency or even officials to have the overall responsibility for co-ordinating risk reduction actions. Laws can be drafted by one sector of a government which bear no relationship to how they will be implemented by another, for example how they are financed or taught. Such laws may even prescribe safety measures which have still to be developed by yet another government agency.

Therefore effective implementation of disaster mitigation requires strong management, to integrate all elements into a cohesive pattern. Disaster mitigation also requires foresight. Without this leadership and skills at many different levels of government, and in the private sector, implementation will be slow and patchy.

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#### Knowledge and skills.

5. Public awareness. Via their taxes the public pays for risk reduction measures, and many will be involved directly or indirectly in their implementation, particularly their maintenance. Therefore the public needs to be informed about the nature of hazards, their vulnerability, and about safety measures. Also the 'motor' that drives a risk reduction strategy, and puts continual pressure on governments, is a heightened public awareness of the issues and opportunities for protective action.

At the specific level of preparedness planning the public will be directly involved in local community level safety precautions. Implementation of effective disaster mitigation is also likely to require developing new programmes or new works. This will require many different skills, from those of the disaster relief agency to those of the scientist and engineer.

6. Training and education. After a disaster strikes, a long term education programme is likely to be necessary to prevent the recurrence of similar disasters in the future. Therefore if buildings have failed in an earthquake, or crops have been lost through flood impact, then it will be necessary to educate architects or agriculturalists in techniques to resist these processes. Builders and farmers need to be trained how to apply improved hazard resistant techniques.

New laws requiring innovative measures will always imply that someone is trained to use them. Therefore this education element in disaster mitigation is vital, yet because of its low political profile it remains the most neglected of all the mitigation measures.

7. Research and development. Implementation will be effective and efficient if it builds on a continuing programme of research and development in all aspects of disaster mitigation, including risk assessment, planning, the effectiveness of alternative measures and the performance of mitigation planning itself.
- 

#### Restrictions and incentives

8. Legal framework. Laws represent restrictions for governments and communities but they are essential for disaster mitigation implementation for two reasons: first, they establish safety standards, and secondly, they constitute a vital element in public education.

However there are persistent problems in their introduction and use. Often they are hastily drafted and enacted after a disaster to express political concern. To achieve haste they may be based on an inappropriate model that relates to a totally different culture or economic situation. Thus, the California Seismic Design Code has formed the basis for earthquake safety codes throughout Latin America, in many highly inappropriate situations.

A further problem concerns law enforcement. Many poor countries simply cannot afford to set up an adequate system to enforce laws - and consequently legal controls lose their essential public respect.

The final problem concerns the relevance of laws to the poor. Frequently standards of building that require additional expenditure are enshrined in laws which are totally irrelevant to poor families. World Bank statistics indicate that just under 50% of the world's population of 5,000 million currently survive on an annual average income of \$270 or less: to them the costs of disaster mitigation are an awesome burden.

9. Cash incentives. As a contrast to the 'stick' of legal constraints, cash incentives provide a 'carrot' that can offer inducements for individual families, entire communities or large companies to adopt disaster resistance.

Incentives can include cash grants or low interest loans to family units to make their homes more resistant to high winds. Or they can extend to an entire community who may use a 'community incentive grant' to raise the ground floor level of their homes to make them flood resistant.

Reduced insurance premiums can be used to encourage middle-income families to build above flood plains, and tax incentives can be offered to the private sector to comply with hazard resistant building codes in the design of office buildings, factories etc.

# 5b

## Establishing a series of Performance Standards in Preparedness Planning

Checklist of topics to cover:

### ■ DISASTER PREPAREDNESS (for Natural, Technological, War and Refugee Situations)

- Guides, Handbooks and Manuals
- Statistics
- Agency/government reports on preparedness planning
- Country Profiles relative to disaster planning
- Development of Emergency Organisations
- Examples of Preparedness Plans:
  - International level
  - National Plans
  - Regional Plans
  - Local, Community Based Plans
  - Agency Plans
- Elements in Preparedness:
  - Allocation of Roles/Tasks
  - Emergency Housing and Refugee Camp Planning
  - Evacuation Planning
  - Warning Systems
  - Stockpiling and Procurement of Goods
  - Inventory of Available Resources
  - Communication Systems
  - Information Systems, Media Management
  - Training and Education
  - Simulations and Drills
  - Public Awareness Programmes
  - Safety Measures for Life and Personal Property
  - Safety Measures for Public Property
  - Protection of Refugees and Displaced Persons
  - Human Behaviour in Disaster/Refugee Situations
  - Organisational Behaviour in Disaster/Refugee Situations
  - Economic Aspects
  - Legal Aspects
  - The Role of the Media

### ■ TECHNIQUES FOR THE DEVELOPMENT OF SKILLS FOR DISASTER/REFUGEE PREPAREDNESS

- Leadership
- Management
- Crisis Management
- Delegation
- Co-ordination
- Assessing Needs
- Risk Assessment:
  - Hazard Mapping
  - Vulnerability Assessment
- Assessing Resources
- Authority
- Accountability
- Budgetary Control and Financial Management
- Forward Planning
- Development of an Agency Preparedness Plan
- Developing Simulation Exercises

- Report Writing
  - Writing a Project Proposal
  - Public Speaking
  - Chairing a meeting
  - Handling the Media
- 
- Staff Development
  - Organising a Training Programme
  - Monitoring and Evaluation
  - Building an 'Agency Memory'

## *Performance Targets*

- 1. Establish Emergency/Disaster Planning Group and define National Priorities.
- 2. Name National Disaster Coordinator.
- 3. Define Roles/Functions of key agencies in Emergency/Disaster Management and a system for regular review.
- 4. Review legal arrangements for disaster action.
- 5. Provide National Coordinator with adequate support including named Emergency Coordinators/Liaison Officers with key Ministries, Emergency Services, Utilities.
- 6. Review and catalogue past disaster events and list credible emergency events.
- 7. Establish procedures for coping with the major disaster threats and test by simulations.
- 8. Develop list of key resources (Persons, Facilities, Equipment, Supplies, etc.).
- 9. Identify and map (where possible) areas with special problems (eg. flood prone areas, landslide prone areas).
- 10. Develop Emergency Shelter Policy and Programme (covering selection, management, training staff, etc.).
- 11. Review system for local mobilisation and counter disaster action in case of isolation.
- 12. Develop and maintain an emergency telecommunication system to ensure the coordination of Emergency Operations involving emergency services (Security, Health, Fire, Public Utilities); the private and voluntary sector (Amateur/CB Operators).
- 13. Develop strategies for loss reduction in the public and private sector focussing on key areas such as critical facilities, housing, agriculture, tourism, ports and shipping, etc.
- 14. Develop a Damage Assessment System/Procedures to facilitate rapid and effective post impact action.
- 15. Establish /Equip a suitable Emergency Operations Centre capable of handling emergency telecommunications and facilitating coordination of emergency response involving many services.
- 16. Implement a comprehensive Disaster Public Awareness, Information and Education Programme involving Government Information Houses, the Mass Media, Schools, Voluntary Agencies, etc.
- 17. Establish a three year programme for training of persons to support Emergency Management Action.
- 18. Establish a three year programme and task force to review loss reduction measures involving the Physical Planning, Town Planning, Building Inspection, Geological Research, Housing Agencies and Vocational Training Institutes as well as professional organizations (Engineers, Architects, etc.).
- 19. Name Emergency Coordinators for key sectors such as Health, Public Works, etc., to support National Disaster Action.
- 20. Identify ongoing (Bilateral/Multilateral) technical Cooperation Programmes which can facilitate development of National Disaster Programme Objectives.

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# 6. PHASE 6 CHECKLIST: PROTECTIVE PLANNING

## ■ NATURE OF PHASE:

At this stage it is important to 'take stock' and verify that all essential tasks or Disaster Protection have been planned for:

Keypoints:

2a

### ■ Hazards must be known:

- A. Potential hazards must be identified, and have been located.
- B. Incidence of Hazard occurrence must be calculated.
- C. Secondary risks must be identified.

3

### ■ Vulnerabilities must be known:

- A. Who and what is at risk must be determined.
- B. Likely damage and disruption must be assessed.
- C. Human needs must be anticipated.

5a

### ■ Risks are known, as a product of hazards/vulnerability:

#### ■ Prevention and Mitigation measures must be in place:

- A. Structural mitigation measures must be
- B. Non-structural mitigation measures required must be instituted.
- C. A budget must be known to cover protection costs.

5b

#### ■ The Preparedness System must be in readiness:

- A. All parties should be in a state of readiness.
- B. A focal point for preparedness must exist.
- C. A management system for emergency response must be in place.
- D. Plans must exist and planning occur regularly.
- E. Training and practices must be routine.
- F. Effective warning systems must be on alert.
- G. Authorities and the public must be fully informed.

(Adapted by Ian Davis from list by Everett Ressler)



# 7.

## PHASE 7 TESTING THE PLAN

### ■ NATURE OF PHASE:

To see if the plan works in practice.

# 7a

## Testing the Plan in a Disaster Situation

Checklist of topics to cover:

### ■ EMERGENCY MANAGEMENT

- Assessment of Damage
- Assessment of Survivors needs
- Search and Rescue
- Emergency Operations Centres (EOC's)
- Basic Needs:
  - Shelter and Refugee Camp Planning
  - Water
  - Food
  - Management of severe Nutritional Emergencies
  - Medical Care/Health Management
  - Management of Mass Casualties
  - Epidemiological Considerations
  - First Aid
  - Sanitation
  - Psychological Care
- Crisis Management
- Logistics and Supply
- Evacuation
- Communications
- Operational Procedures for Emergency Staff
- Insurance
- Monitoring, Reporting Techniques and Evaluation of Emergency Provision

### ■ RECOVERY/RECONSTRUCTION MANAGEMENT

- Reconstruction Strategies:
  - Planning Process, definition of priorities
  - Repairs
  - Temporary Housing
  - Relocation Options
  - Resettlement
  - Housing Reconstruction
  - Economic Recovery
- Infrastructure repair:
  - Communications
  - Water Supply
  - Sanitation
  - Roads/Bridges etc
- Agricultural recovery
- Human, Organisational Recovery
- Institution and Leadership building
- Repatriation of Refugees

Keypoints:

- 1. If preparedness exists, follow the plan and modify it during the recovery period.
- 2. If preparedness does not exist, and there is no contingency plan, then use the disaster to rapidly formulate a plan of action.
- 3 List necessary actions, place in priority order, ie:
  - (1) Any further risks to survivors to address (ie fire after earthquake, structural damage).
  - (2) Care of wounded. If resources are limited apply 'triage':

Severely injured but capable of recovery	Severely injured - will probably die	Minor Injuries
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- (3) Search and rescue.
- (4) Assessment of needs and damage.
- (5) Regrouping.

(Please note the above are all parallel activities which ideally should take place concurrently).

- 4 To summarise:
  - (1) Reduce further risks to people/property.
  - (2) Care for injured.
  - (3) Search/rescue.
  - (4) Commence assessment.
  - (5) Assist population to regroup.
  - (6) Meet needs that cannot be satisfied by the survivors.

## 7b

### ■ Testing the Plan in a Simulation Exercise

Simulations can vary from a desk top exercise where participants 'role-play' a disaster scenario to a major drill where emergency vehicles are called to the scene of an accident, hospital wards are cleared for casualties etc. Both have their place, obviously the 'drills' are costly and disruptive exercises whilst the former have a minimal cost.

- 1. All plans are incomplete until tested and validated by those involved.
- 2. As has been stated simulations tackle the problem of co-ordination by practice. Without such exercises co-ordination may remain a dormant issue waiting to emerge as a major problem within the pressure of a disaster situation.
- 3. Generally speaking the best simulations are based on carefully researched details from actual events in a similar disaster to the one being anticipated. Simulations based on abstract countries/towns/events can be counterproductive due to two factors:
  - (a) They may be too highly coloured with too many problems, extreme aid conditions etc.

(b) Participants have to believe in what they are doing, credibility of the scenario is essential.

If a past 'real situation' is followed then a very useful post-script can be for the leaders of the exercise to inform the participants what actually transpired.

# 8.

## PHASE 8 CONSOLIDATE THE LESSONS FROM THE TEST OF THE PLAN

■ Involve the entire team in detailed post-action briefings. Where major changes are needed these need to be very carefully weighed before drastic changes are introduced on the basis of a single experience.

Feedback lessons to all stages of the plan sequence (see dotted lines in diagram on Fig 1). For example changes may be found to be needed in the risk-assessment process, the decision making process etc.

# Planning

## ■ SUMMARY OF KEY ISSUES IN THE PROTECTIVE PLAN

Having completed the discussion in the eight phases of Protective Planning the following post-script aims to summarise five key elements in this planning process:

- A PROTECTION PLAN should be developed as a prerequisite to emergency management.

*"Let Pharaoh appoint commissioners over the land to take a fifth of the harvest of Egypt during the seven years of abundance. They should collect all the food of these good years that are coming and store up the corn to be kept in the cities for food. This should be held in reserve to be used during the seven years of famine that will come upon Egypt so that the country may not be ruined by the famine."*

Genesis 41 vs 34-36, (c.1700BC)

*"Preparedness Plans are never finite static objects reminiscent of an architects plan for a new building - painstakingly produced, normally just used once, then rest within a plan chest with no valid function to serve. In contrast Preparedness, once started, is a dynamic process that should never stop as long as risks remain. Effective preparedness plans are continually modified from learning experiences, and constitute a key element in a society's protection."*

Ian Davis

## ■ Essential Components

Protection plans need to be:

- flexible
- a balance of risks against resources
- up-to-date
- realistic
- linked to normal development plans
- well-rehearsed
- a linkage of long-term measures (mitigation) and short-term anticipatory actions (preparedness)

## ■ Linkages

On the principle that 'no chain is stronger than its weakest link' it is essential to look very hard at all the links in the plan since experience would indicate that it is at these points that breakdowns are most likely to occur.



## ■ 'Fail-Safe' Mechanisms

All the key elements in the protection system must be in duplicate so that the risk of failure is minimised (i.e. double radio coverage, all chiefs to have deputies, etc.)



(To help remember this fundamental principle of duplication of key elements, consider your own body: two ears, hands, arms, feet, kidneys, lungs, etc, and a double respiratory system of nose and mouth.)

■ Supervision of the Plan

It is essential that in any agency preparedness plan one individual is in charge of developing, maintaining and monitoring the plan as it is applied in an emergency situation.

■ Human-based Protection

Plans must be flexible, built around people, and not assume that people will fit into pre-determined slots. Therefore Preparedness and Mitigation needs to be responsive to continually changing needs.

# APPENDICES

## ■ APPENDIX 1

### ■ Guidelines for Writing up your Experiences in the Management or Observation of Disaster Relief or Reconstruction Assistance

Alan J Taylor

[These Guidelines were written in 1982 and have been useful in all the workshops organised by the Disaster Management Centre. We are indebted to Alan Taylor for his perceptive insights which have been appreciated by numerous workshop participants.]

Disaster relief and reconstruction aid organisations are beginning to recognise the importance of training in the highly complex business of decision-making for emergency response. Yet although the activity in itself is well established, study and documentation of the process is not. To advance our collective stock of knowledge in this area, to help you to crystallise some of your own thoughts and experience, and to help in our mutual training effort, you have been asked to prepare a document for use in a forthcoming training course or seminar. These notes are intended to help you in the process.

#### ■ Form of the Document

The document may take the form of a descriptive report, an evaluation study or a commentary on some aspect of disaster preparedness, relief or reconstruction. Generally, your report should focus on the work of the organisation with which you are associated for disaster purposes (for example, as an employee, volunteer or committee member). However, if you are lucky enough to be able to take a more Olympian view, you may compare and contrast the experiences of different organisations, or perhaps the same organisation reacting at different times or in different places.

If you have had first-hand experience of a disaster - either as a victim or as an organiser of aid - draw on your personal knowledge as much as you are able. One moment of direct experience is worth more than a decade of conjecture.

In so far as it is practicable try to write up the material which you have so that it can be shared with people who work for organisations other than your own. In other words, try to bring out the essential truth of the events or circumstances which you describe, but do so in a way which ought not to threaten those whose status appears to make them responsible for the events which you report. In general, omit the names of individuals. If necessary, you may invent fictitious names to give human personality to your report.

#### ■ Select Your Topic

Large scale disasters have an impact on many aspects of human experience. You are not expected to cover them all. In the first instance you should choose one sector to write about. For example, this may be any of the following:

- Emergency rescue
- Agriculture
- Nutrition and the distribution of food
- Medical needs, supplies and services
- Shelter and housing
- Environmental sanitation
- Clothing and other material resource aid
- Public information
- Social welfare
- Etc.



Alternatively, you might choose a theme which would run across several of these sectors, for example:

- Materials handling and logistics
- Financial control
- Personnel recruitment and management
- Use of volunteers
- Communications
- Co-ordination with other agencies (including government)
- Technology and its appropriateness
- Media coverage and treatment
- Political dimensions
- Etc.

Do not be afraid to tackle more than one area, but try to do so systematically rather than jumping from one topic to another.

### ■ Select Your Viewpoint

Our knowledge and interpretation of what goes on in a disaster varies according to what position we occupy. When writing your report be careful to mention from whose point of view the observations come, e.g. are you reporting views from a donor government far away from the site of the disaster; from a private voluntary organisation (PVO) based overseas; from a local (national) government; from a local PVO; from the community leaders; or from the more humble victims of a disaster? You will often find that a comparison of views on the same topic but from different quarters is very illuminating.

### ■ Establish a Context

Unless you are sure that your fellow course or seminar participants will all come from the same organisation as your own, you will need to paint in some institutional background. What kind of organisation are you writing about? What are its stated goals and objectives (and, if different - its real ones); and where do the characters or events in your report fit into the organisational tradition?

Similarly, an outline of the disaster phenomenon itself (cyclone, earthquake, flood, drought, etc) will be necessary in order to understand why certain things were done and when. Remember to include all important information which a stranger to the place, time and people will require in order to understand the points which you make in your report.

### ■ Select a Problem Question(s) or Issue(s) to be Raised

A straight narrative description of events can be made much more interesting and more educational if you can arrange the material which you have so that it poses a question or several inter-relating questions. It is not necessary that you provide a definite answer to the question asked, merely that the information which you present gives some indication of the direction in which lessons for the future may lie.

Examples of the kind of question which can help structure your report are as follows:

- What was done and why? Often, the obvious answer (e.g. that 'the need existed') does not constitute the full story.
- Where were which decisions made? (How much influence, power or choice, for example, did the victims have?)
- When were important decisions made and why were they made at that time (not earlier or later, etc)?
- What else might have been done but was not? (It may be useful to compare organisations for ideas on what else could have been done.)

- Of the options which were not pursued; which ones were considered and rejected - and why; and which ones were not even considered - and why?
- Did decision makers have enough or the right kind of information at their disposal to be able to make decisions which were appropriate?
- What results were achieved by the action embarked upon?
- What unintended consequences followed from the actions?
- What do those (people/institutions) who were responsible for making the decisions know of the results of their efforts? Is this different from what the victims or other observers know?
- What assumptions were underlying the decisions or plans of action as they emerged? Which of these assumptions were proven sound and which false?
- What conclusions can be drawn on the basis of the experience? These should benefit others in a similar position, i.e. the same organisation at some future time, or in another organisation now or in the future.

Three short Annexes are attached which set out some more precise questions in each of three sectors. However, it must be pointed out that these were prepared for the purpose of encouraging discussion of a specific disaster which took place in a specific place. In relation to your own disaster experience, these questions may or may not be relevant. In any case, you are probably far better equipped to ask your own questions now that hindsight has suggested some answers.

ANNEX 1: SHELTER AND HOUSING

- What types of assistance were provided by helping agencies in (a) the provision of emergency shelter, and (b) for the construction of more permanent houses? Were whole housing units provided, or materials only, or technical advice, or credit, or land, or all the necessary components?
- Did the housing assistance which was provided conform to local and traditional patterns? If not, how are the differences explained?
- Who designed the houses constructed after the disaster and who built them? How do the answers to these questions compare with the procedures by which houses are normally designed and built in the area? If there are differences between normal procedures and those used after the disaster, how are the differences explained?
- Were distinctions made by (a) the victims themselves, and (b) the helping agencies, as between temporary and permanent housing? What results were obtained?
- Was housing aid given away free to beneficiaries or were charges made for the materials and services provided?
- Was education in disaster resistant construction techniques offered by helping agencies? What is known of the effectiveness of this education?
- To what extent were local materials employed in post-disaster housing, and to what extent were materials imported? If materials were imported, why was this done?
- How were houses laid out (in relation to one another) in post-disaster reconstruction projects? Did the layouts used correspond with traditional patterns for the dwellings?
- Did the existence of different types of housing in any one village, or between villages, cause any problems for the communities served?
- What proportion of the post-disaster housing construction was undertaken by the victims themselves, and what proportion by the helping agencies?
- Did the housing organised by the agencies make provision for water supply and/or sanitation facilities?
- To what extent did the intended beneficiaries have the opportunity to participate in decision-making about the type, size, materials, siting and timing of construction of the dwellings provided with the assistance of the agencies?
- What professional advice did helping agencies have in planning and managing their housing programmes?
- How were the size of housing aid programmes decided upon? How was the need for housing assessed?
- Did the helping agencies which were concerned with housing have previous experience in this field? For any which did not, what special problems were encountered?

ANNEX 2: THE SOCIAL ASPECTS OF FEEDING AND OTHER MATERIAL RESOURCES  
DISTRIBUTION PROGRAMMES

- What kinds of feeding programmes were undertaken by helping agencies after the disaster? Why and how was it decided to embark on these programmes?
- How did the victims feed themselves or obtain food after the disaster? In what way did the disaster prevent people from doing this in the normal way?
- How were feeding programmes organised? What improvements could have been made in the methods employed?
- How were the food rations distributed? Did people queue? Were alternative systems tried, and with what results?
- What were the objectives of the feeding programmes? What was the target group?
- Is anything known of the nutritional state of the recipients before and/or after the food was distributed?
- Was provision of water to victims considered as important as the provision of food? If not, why not?
- Was food aid distributed as dry rations or cooked? If both methods were used, what were the advantages and limitations of each?
- What foods were found to be appropriate as aid?
- To what groups were goods distributed? How was it decided that some groups should receive material help and not others?
- Is there any evidence that animosities were produced between those individuals and/or groups which received help and those who did not?
- What was the balance of benefits against any negative social impacts which might have been obtained from the distribution of material resources?
- What social groups were especially badly affected by the disaster? What provision was made within the community to care for such people (e.g. the old, the infirm, widows, orphans, the mentally ill, etc) and what provision was made by the helping organisations?
- Did the help given by outside organisations to especially disadvantaged groups correspond with local customs and/or the best interests of the victims?
- What is known of the psychological needs of the victims? Was any assistance provided by relief agencies and/or others in the field of post-disaster mental health?
- Is anything known about the effect of the introduction of food aid on the local farm economy?
- Was there a need for clothing and/or blankets among the victims? Did relief agencies distribute these commodities? Which type of commodity was most relevant to the needs and which was not?
- How equitably were relief commodities distributed (a) between affected communities and (b) among individual victims?

- Was money distributed by the Government and/ r by other helping agencies? How was this done? What problems were encountered, and what were the benefits obtained? How were decisions made as to who should receive help in cash?
- What was done by helping agencies in relation to orphans? What were the advantages and limitations attached to each of the different policies pursued?

### ■ ANNEXE 3: RESCUE AND MEDICAL

- How did the relief organisations know what the nature and magnitude of the post-disaster problems were? Of whom did they rely for their information and/or an assessment of the situation?
- How did news of the need for help get through to the outside world?
- When did the helping agencies arrive on the scene? How did this timing relate to the emergence or existence of the needs addressed?
- What criteria were used to assess the medical need and to decide in which cases help should be given and when not?
- Was the physical rescue of victims necessary? If so, who did this and when?
- Did the medical help reach the remote areas?
- What kind of injuries and/or sickness were reported by victims to medical personnel? When did these manifest themselves?
- How did people manage in areas where no medical assistance was given?
- What medical assistance was provided?
- Did different kinds of helping organisations provide different kinds of medical aid?
- What kind of organisation was best equipped to provide what kind of assistance?
- Did mortality and morbidity patterns (numbers of people dying or getting sick from various causes) change after the disaster compared with the patterns existing before?
- During the period after the disaster, did mortality and morbidity patterns change? If so, how?
- Which type of medical personnel were most useful after the disaster, and which were less appropriate?
- Were foreign medical personnel used in relief operations? If so, was their presence of value? What extra difficulties or limitations did foreign personnel suffer over those encountered by nationals or very local personnel?
- What medical procedures or practices were employed in the post-disaster period (e.g. immunization, distribution of medicines, surgery, counselling, etc)? What was known of the efficacy or worth of such procedures in post-disaster situations?
- What were the decisions made (in which organisation or at what level within the organisation) that certain procedures (e.g. immunization) should be embarked upon?
- What attention was given to preventative health measures after the disaster?
- Was epidemiological surveillance organised after the disaster to monitor the incidence of disease?
- Were any comparisons made of the costs and benefits to be obtained from alternative courses of medical and/or preventive action?
- Was there adequate water for drinking immediately after the disaster for humans and for animals?

- What efforts were directed towards reestablishing the communities' supply of potable water? How successful were these efforts? When were the benefits obtained?
- How did the special health provisions after the disaster compare with the type and level of health provision which existed before? Did the difference, if any, have any effect on the management of the on-going health service or on the level of expectations among the local population?
- Did the arrival, purchase and/or delivery of medical supplies correspond with the need?
- How were dead bodies disposed of? How best was this done?
- Was there a need for first aid after the disaster? To what extent was this need met, and by whom? Did any unmet needs in first aid result in avoidable deaths?
- Of what value were the local village health centres for the purposes of giving first aid?
- What was the relationship between any mobile medical team and the local hospitals? Did they complement one another or conflict in any way?
- Was the need for potable water seen as a priority early enough?

## ■ APPENDIX 2

### ■ OBJECTIVES OF WORKSHOPS ON DISASTER MANAGEMENT

The aims have been grouped into a series of seven related themes, which are regarded as of equal importance:

1. Impart and develop management skills
2. Practice disaster management
3. Develop technical knowledge
4. Organise training programmes in disaster management
5. Develop awareness of key issues
6. Share experiences and build confidence
7. Challenge established viewpoints, and question assumptions.

#### 1.

##### IMPART AND DEVELOP MANAGEMENT SKILLS

- ⊙ The development of creative, innovatory solutions
- ⊙ Role-casting operations for various assisting groups:
  - international donors
  - military
  - governments
  - assisting groups
  - community leaders
  - families of victims
  - experts

Understanding the effective roles, relationships and conflicts of these various groups.

- ⊙ Decision Making:
  - defining priorities for action
  - understanding the short, medium and long-term implications of decisions
  - exploring alternative courses of action, and their probable consequences
  - taking effective decisions in conditions where there is a starvation of information.
- ⊙ Methods of developing an integrated, multi-disciplinary approach to relief or long-term assistance
- ⊙ Methods of developing flexible, bottom-up decentralised patterns of management



- ④ Evaluation and monitoring skills to review the effectiveness of programmes, and feed this information back with rapid improvements in the system
- ④ Co-ordination skills
- ④ Cost- Benefit analysis as a decision making tool for mitigation planning
- ④ Establishing participatory systems of management with accountable relationships to disaster victims
- ④ Information gathering
- ④ Develop confidence to help in managerial tasks
- ④ Preparation of disaster plans, and provide advice in developing appropriate programme ideas
- ④ Practice public speaking, chairmanship, reporting skills and the presentation of ideas
- ④ Gain knowledge in various concepts and techniques in the management of various types of fast-impact emergencies and long-onset disasters

#### SUMMARY

To learn or expand a wide range of management skills for effective and appropriate relief, preparedness and mitigation.

## 2.

#### PRACTICE DISASTER MANAGEMENT

- ④ By means of simulation exercises/gaming situations, that test:
  - crisis management
  - decision making
  - ability to handle logistics
  - role playing
  - goal setting

These exercises also aid in the understanding of diverse positions/ attitudes of various groups, and they also display the diversity of various courses of action, and their possible consequences.

- ④ To test and challenge leadership skills
- ④ To test abilities in writing, chairmanship, and commentating on others work.

#### SUMMARY

To practice disaster management skills

### 3. DEVELOP TECHNICAL KNOWLEDGE

- To obtain knowledge of the 'state of the act' in:
  - a) the sectors of disaster response - mitigation, preparedness, relief, recovery and reconstruction
  - b) Key sectors - shelter/housing provision  
food/nutrition  
water/sanitation  
health  
logistics  
refugee management
  - c) assessment techniques to measure damage and needs
- to 'have knowledge of knowledge' i.e. where to find vital information very rapidly on a given topic, - 'who knows what where and in what form does it exist'?
- to start building up a mini-library of technical managerial knowledge
- to understand some of the linkages between sectors of knowledge i.e. Building, Public Health etc.

#### SUMMARY

To acquire technical skills for specific tasks, or to become aware of the likely sources of knowledge.

### 4. ORGANISE TRAINING PROGRAMMES IN DISASTER MANAGEMENT

- how to run training programmes:
  - defining objectives
  - timing
  - selection procedures
  - linkages to existing programmes
  - modes of learning
  - locations
  - who to teach
- to understand the basic distinction between two forms of knowledge sharing:  
'cookbook'(training) and 'nutritional guide' (education)
  - who needs which, when and why?
- To devise a variety of types of training programmes i.e.
  - raising public awareness
  - training staff within agency
  - community based education
  - volunteer training programmes
  - introduce training within government agencies at central, provincial and district levels

## SUMMARY

To institutionalise Disaster Management by means of Training and Education Programmes.

# 5.

## DEVELOP AWARENESS OF KEY ISSUES

### 5.1 Management Theory

- To strengthen the theoretical framework for better planning and project evaluation
- To become familiar with disaster management concepts, theory and literature
- To understand which management principles relate to the specific field of Disaster Management

### 5.2 Development of Attitudes

- To understand personal strengths and weaknesses in order to build individual capabilities and strengthen deficient areas
- To understand moral /ethical issues and dilemmas in disaster planning. How to work for equitable, just solutions. How to give positive discrimination for acutely disadvantaged groups - i.e. unmarried mothers/elderly/handicapped/small children/prejudiced ethnic minority groups.

### 5.3 The linkage between Disaster and the Development Process

- The incorporation of mitigation concepts into development programming
- Development of a community - based Disaster Management approach
- To better understand the link between fast- impact disasters and on-going disaster situations such as squatter settlements
- To explore the links (or contradictions) between relief and developmental attitudes and approaches.

### 5.4 To expand awareness of key issues

- of the complexity of various aspects of disasters and development:-
- of diverse viewpoints from the standpoints of the victim, manager of aid; donor; government etc.
- of constraints on decision making:
  - ie - political constraints
  - time pressures/opportunities
  - management in crisis situations
  - legal/social aspects
- of the relationship of disasters to vulnerable conditions within a given society

- of the links between mitigation, preparedness, relief and recovery
- of sources of goods and information
- of the transfer of techniques from disaster management to other development contexts
- of the linkages and transfer of knowledge between refugee and natural disaster management

#### SUMMARY

To raise awareness of the theory of Disaster Management, to understand the Development Context, to develop attitudes, and to expand knowledge of key issues.

### 6.

#### SHARE EXPERIENCES AND BUILD CONFIDENCE

- of similar, or different disaster operations that expand ranges of perception. These varied experiences will compare similarities and dissimilarities.
- to establish a network of contacts to maintain an information exchange after the workshop
- to identify common problems, constraints and opportunities
- to recognise applicable/adaptable solutions, understanding local differences and limitations
- to test experiences and ideas with colleagues in the same field - to extract generalisations and to correct false preconceptions
- to expand the range of perceptions to include previously unconsidered issues and possibilities
- overall, to encourage each other and build our self-confidence. This is a challenging field full of problems and we all need to support each other in our various tasks.

#### SUMMARY

To share experiences from diverse contexts in order to discern any patterns in disaster impact or response.

### 7.

#### TO CHALLENGE ESTABLISHED VIEWPOINTS AND QUESTION ASSUMPTIONS

- that the management of disasters is remote from normal management of development projects
- that the relief phase is the most effective period to provide assistance
- of the effectiveness of established military style management systems, with a top-down 'centralised' system of control
- that relief or recovery actions can be studied or implemented in isolation of preparedness or mitigation issues

- that disaster assistance agencies are primarily and normally focussed on their object of concern rather than on their own survival against competition from other agencies, ministries, consultancies, academic bodies and governments.

### SUMMARY

To challenge the value, accountability and effectiveness of any management policy, approach or system, and administrative structure. To explore ways to measure the effectiveness of any system or structure in meeting the short and long-term needs of disaster victims (or potential victims).

### SUMMARY OF WORKSHOP OBJECTIVES

- 1. IMPART AND DEVELOP MANAGEMENT SKILLS
  - to learn or expand a wide range of management skills for effective and appropriate relief, preparedness and mitigation
- 2. PRACTICE DISASTER MANAGEMENT
  - to practice disaster management skills
- 3. DEVELOP TECHNICAL KNOWLEDGE
  - to acquire technical skills for specific tasks, or to become aware of the likely sources of knowledge
- 4. ORGANISE TRAINING PROGRAMMES IN DISASTER MANAGEMENT
  - to institutionalise disaster management by means of training and education programmes, aimed at all levels of the system
- 5. DEVELOP AWARENESS OF KEY ISSUES
  - to raise awareness of the theory of Disaster Management, to understand the Development Context, to develop attitudes, and to expand knowledge of key issues
- 6. SHARE EXPERIENCES AND BUILD CONFIDENCE
  - to share experiences from diverse contexts in order to discern any patterns in disaster impact or response
- 7. TO CHALLENGE ESTABLISHED VIEWPOINTS AND QUESTION ASSUMPTIONS
  - to challenge the value, accountability and effectiveness of any management policy, approach or system, and administrative structure. To explore ways to measure the effectiveness of any system or structure in meeting the short and long-term needs of disaster victims (or potential victims).

# Disasters and Vulnerability

## GLOSSARY OF TERMS

Study of Disasters and Vulnerability is in a state of rapid advance and many traditional concepts are being challenged. Allied to these concepts there are definitions which are also being re-defined as perceptions expand. The following terms and meanings have been used by the authors throughout this book. They are grouped under four broad headings:

- A. Natural phenomena
- B. Disaster Definitions and Planning Phases
- C. Risk Assessment
- D. Social and Economic Vulnerability/Recoverability

A.

### NATURAL PHENOMENA

- **CYCLONE, HURRICANE, TYPHOON**  
Words used in various geographical areas to describe the same climatic phenomena: A weather system consisting of an area of low pressure, often known as a 'low' or a depression. High velocity winds blow anticlockwise in the northern hemisphere and clockwise in the southern hemisphere.
- **EARTHQUAKE**  
Convulsion of earth's surface caused by volcanic activity or faults in the earth's crust.
- **EPIDEMIC**  
A disease that spreads rapidly through a community.
- **FAMINE**  
A general state of prolonged decline in food intake per capita giving rise to a syndrome, which ultimately leads to death rates above the observed normal level.
- **FLOODS**  
Coastal or riverine floods. The latter may be slow-rising or flash floods caused by sudden storms.
- **LANDSLIDE**  
Mass movement or sliding of hillsides caused by a variety of factors: heavy rains, earthquake ground shaking and geological forces.
- **PANDEMIC**  
Infectious disease of world-wide distribution.
- **SEISMIC**  
Pertaining to earthquake activities.
- **SEISMICITY**  
The distribution of earthquakes in space and time. A general term for the number of earthquakes in a unit of time, or for relative earthquake activity.
- **SURGE**  
Coastal flooding that accompanies a cyclone.

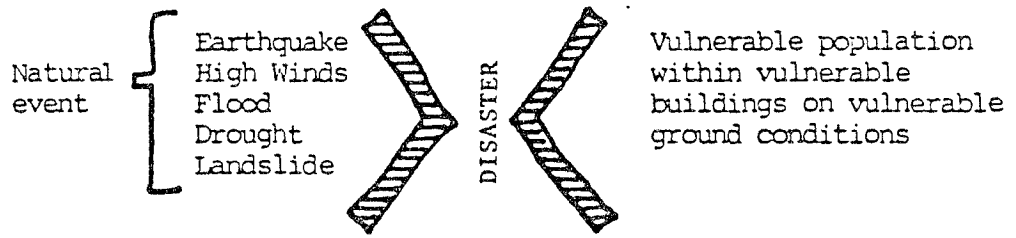
- TSUNAMI  
Japanese word that literally means 'wave in the harbour'. A seawave produced by displacements at an ocean floor as a result of earthquake, landslide or volcanic activity.
- VOLCANO  
Hill or mountain, often conical in form, composed partly or wholly of discharged matter.

B.

DISASTER DEFINITIONS AND PLANNING PHASES

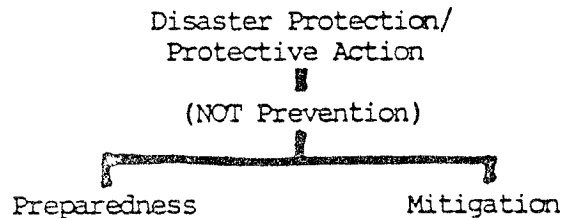
(Note: Main disaster phases are marked \*)

- DISASTER PREPAREDNESS \*  
The reduction of disaster impact by anticipatory action.
- DISASTER  
The product of the impact of a natural event upon a vulnerable population to cause disruption, damage and casualties beyond the unaided capacity of locally mobilised resources.



- DISASTER MANAGEMENT  
The efficient use of resources to co-ordinate the processes of relief, recovery and reconstruction.
- RELIEF \*  
(or Emergency Phase of Disaster Recovery)  
The satisfaction of immediate and basic needs (food, clothing, shelter, medical care and emotional security) for disaster survivors. In the case of fast-impact disasters (floods, earthquakes, landslides, cyclones) this process will be directed at saving lives and alleviating further suffering, and will occur in the immediate days and weeks after the disaster. In the case of long-onset disasters (droughts, famines, social displacement) the relief period may continue to exist for a continuous period over months or even years.
- ACCOUNTABILITY  
The structuring of Disaster Assistance programmes to increase control and participation by persons in the affected community.
- COPING MECHANISMS  
The means by which individuals and societies, unassisted from external sources, meet relief and recovery needs, and adjust to future disaster risk.
- RECOVERY  
The replacement of resources and the social relations required to use them (i.e. access) that may have been destroyed or disrupted by a disaster.

- REHABILITATION  
Actions taken in the weeks or months following a disaster to restore basic services to enable the population to return to pre-disaster conditions.
- RECONSTRUCTION \*  
The specific type of planning which a disaster makes possible, providing an opportunity to introduce new modes of organising a community and reducing its vulnerability to hazard. This may entail administrative/management reforms, increasing social justice, altering systems of livelihood, enhancing community participation in planning and administration and introducing mitigation measures to improve the safety of the environment against a repetition of the disaster.
- DISASTER PROTECTION/PROTECTIVE ACTION  
This term embraces both definitions of preparedness and risk reduction. This is a better overall term than:
- DISASTER PREVENTION  
The term is meaningless since it has highly misleading resource implications that falsely imply that both infinite risks can be addressed with infinite resources. Therefore the term is not *advised*.
- MITIGATION \*  
Actions taken to reduce the risk to lives and property and disruption from a natural hazard, either by reducing vulnerability or modifying the hazard (possible in case of floods, but not earthquakes).



C. RISK ASSESSMENT

- RISK  
The probability that a disaster will occur (high risk/low risk indicates the degree of probability that a disaster will occur).
- RISK ASSESSMENT  
The quantification of risk by means of Hazard Mapping and Vulnerability Analysis.
- NATURAL HAZARD  
A potential bio/climatic/geological process which when experienced in proximity to vulnerable populations or their property may cause disasters.



- HAZARD MAPPING  
The process to establish geographically where certain phenomena are likely to pose a threat to people or their property. In addition to identifying the location of hazards, they also need to be mapped in terms of their severity of impact and frequency of occurrence.
- DISASTER PRONENESS  
Statistically likelihood in terms of magnitude and frequency of a given place experiencing a given hazard.
- VULNERABILITY ANALYSIS  
The process used to identify the vulnerable conditions that will result in a disaster when they meet a natural phenomena. Vulnerability analysis will firstly involve the study of societies at risk, exploring such issues as social density, incomes, gender, home-ownership patterns and occupations. Secondly, it will involve the examination of physical factors of property at risk - crops, buildings, infrastructure, economic assets, etc.
- VULNERABILITY (HUMAN)  
The inability to withstand, protect oneself from, or recover rapidly from a potentially damaging event, and is determined by on-going and deep-seated patterns of power in society as a whole.
- VULNERABILITY (PHYSICAL PROPERTY)  
Property (buildings, economic assets, livestock, crops, etc) that are at risk of damage or loss from the impact of a potentially damaging event.
- VULNERABLE GROUPS OF PEOPLE  
Typical vulnerable people may be characterised by:
  - their gender (women being more vulnerable than men);
  - their relations with production (wage labourers are more vulnerable than peasants and self-employed are more vulnerable than salaried employees);
  - their age;
  - their social status (those with low social status being unable to mobilise support and resources from others in a disaster);
  - their occupations (fishermen are more at risk from cyclones than inland farmers).
- VULNERABILITY (Expanded definition)  
The degree to which an individual, family, community, class or region is at risk from suffering a sudden and serious misfortune following an extreme natural event, and the degree to which the individual/family, etc, can recover from the impact of that event. So, vulnerable is a hypothetical and predictive term, which can only be 'proved' by observing the impact of the natural event upon the unit in question, when it occurs. Vulnerability is an ongoing condition, and often is the specific result of social processes of domination and deprivation, which increase the likely severity of impact of the natural event. It can be measured by indicators, which have been causally related to the actual impact of a disaster in the past, which can then be

interpolated between the known impact and future hypothetical disasters.

- **RISK MANAGEMENT**

The efficient use of resources to reduce the probability that a disaster will occur by either reducing vulnerability or modifying the hazard. (In the case of certain types of hazard - such as flood or landslide - actions can be taken to modify their impact. However, as yet no actions can be taken to reduce earthquakes or high winds hazards).

**D.** SOCIAL AND ECONOMIC VULNERABILITY/RECOVERABILITY

- **ACCESS PROFILE**

An individual's or household's degree of access across the range of income opportunities\*. Those who possess access qualifications for a large number of income opportunities usually have a wide choice, and choose those with high payoffs. They also have flexibility in securing a livelihood under generally adverse economic conditions, command considerable resources, have reserves of food, and can be said to have a well-provided profile. On the other hand, those whose access profiles are limited, usually have little choice in income opportunities, have to seek the most over-subscribed and least paying income opportunities, and are most vulnerable in adverse circumstances.

\* **Income Opportunities**

An opportunity, when taken up, which provides income in kind or in cash.

- **ACCESS QUALIFICATION**

A set of resources and the social relations involved in their productive use which are required by a person, family, or other unit to take up an income opportunity. Some income opportunities have high access qualifications (such as capital, rare skills, costly physical infrastructure), which bar most people from taking them up, but these are often those with with highest pay-offs.

- **ACCESS (TO RESOURCES)**

The ability of an individual, family, group, class, or community to use resources which are directly required to secure a livelihood. Since most resources are not ubiquitous in geographical space, access may have also have a spatial dimension. Access to those resources is always predicated upon social and economic relations, such as the social relations of production, gender, status, and age.

- **RESOURCE**

Goods or services which are useful to people, and here used to include other physical objects used in production (such as tools, irrigation, water fertiliser, draught animals). Resources are always defined in a society at a point in time by the prevailing forces and relations of production, and by cultural perceptions. They are accessible to individuals only when they possess the necessary access qualifications to use that resource in securing

a livelihood.

- LIVELIHOOD

A bundle of income opportunities which in different combinations provides goods for direct consumption or the money for the satisfaction of needs. It goes beyond the conventional definitions of 'employment', or the single resource orientation of agricultural economics, which would focus on the income generating activity of the household head.

- SUSTAINABLE LIVELIHOOD

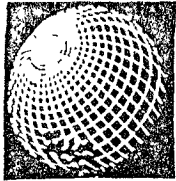
A livelihood is regarded as being sustainable when it can be maintained and continued in a very similar manner over a considerable time. This implies a high level of continuity where future generations will operate an economic system that is broadly similar to what currently exists. It also assumes that livelihoods are part of a system that does not suffer any significant loss in its facilities to continue and reproduce itself for subsequent generations by having to damage environmental conditions by having to damage environmental resources (i.e. it is able to avoid abuse of soil, water sources, forests, etc). It also is able to maintain its economic and social reproduction in the face of fluctuations in the business cycle and changes in social institutions, etc.

- RECOVERABILITY

The ability to recover after a disaster. The term is usually negatively correlated with vulnerability, and can be a contributory factor after or between disasters to the more general condition of vulnerability. It is subject to the degree of access to immediate relief (e.g. first-aid and shelter in the case of an earthquake), longer-term reconstruction of the means to secure a livelihood (replacement of tools, animals, and capital), and to social networks (of employment, trading, etc), which may have been disrupted by the disaster.

- 'RATCHET EFFECT'

An effect in which a person's means to secure a livelihood is so impaired by a disaster that they are made more vulnerable to a future disaster. Thus it is the cumulative effect of low recoverability. As with the previous action of a ratchet in a tool or clock, movement back to a previous state is impossible, because of a deterioration of their access position, brought about by the inability to recover assets sold in distress, continuing ill-health, loss of able-bodied family members, or loss of property sustained in the disaster.



**DISASTER  
MANAGEMENT  
CENTRE**

■ THE CONTEXT OF DISASTER MANAGEMENT - CHECKLIST OF TOPICS

In order to assist students and workshop participants in understanding the broad and highly complex fields of Disaster and Refugee Management, the following list has been prepared. This attempts to look at the subject from the standpoint of the Manager involved in Pre or Post- Disaster Planning.

■ PART 1. RISK ASSESSMENT OF DISASTERS:

■ 1.1 HAZARD MAPPING

- Disaster History
- Prediction Techniques
- Vulnerability Analysis Techniques:
  - Physical Vulnerability
  - Human Vulnerability
- Hazard Mapping Techniques
- Environmental Monitoring

■ 1.2 CHARACTERISTICS OF NATURAL DISASTERS:

Characteristics of the following Hazards, and reports of their impact:

- Earthquake /Tsunami
- Landslide /Mudslide /Rockfall
- Volcanic Eruption
- High Winds: Tornado / Cyclone [ Hurricane, Typhoon]
- Flood
- Avalanche
- Bush, Forest Fire
- Dust Storm
- Drought

■ 1.3 CHARACTERISTICS OF TECHNOLOGICAL DISASTERS:

Characteristics of the following Hazards, and reports of their impact:

- Urban and Industrial Fires
- Industrial Accidents
- Chemical Spillages
- Pollution - Atmospheric, Water, Ground
- Transportation of Hazardous Materials

■ 1.4 CHARACTERISTICS OF WARS /CIVIL STRIFE

Wars and Civil Strife, and reports of their impact:

- Damage patterns

■ 1.5 CHARACTERISTICS OF REFUGEE SITUATIONS

- The nature of a Refugee Emergency
- Assessment Techniques

■ 1.6 CHARACTERISTICS OF EPIDEMICS /PANDEMICS

- The Nature of Epidemics
  - The Spread of Epidemics
- 

#### ■ PART 2 DISASTER MITIGATION:

- Guides, Handbooks and Manuals
  - Links between Mitigation and Development
  - Elements in a Mitigation Plan: [ Fast-impact disasters ]
    - Structural and Non-Structural Mitigation Measures
    - Retrofit Measures
    - Protective Emergency Structures [ cyclone shelters/ Mounds ]
    - Research and Development of Safe Buildings/ Infrastructure
    - Lifeline Engineering
    - Lifeline Resources for enhanced standards of Protection
    - Building Codes /Bye-Laws
    - Land-Use Planning Controls
  - Elements in a Mitigation Plan: [ Drought /Famine situations ]
    - Early- Warning advance indicators
    - Water Harvesting Techniques
    - Development of animal camps for livestock protection
    - Food Security Systems including Food Storage
  - Elements in a Mitigation Plan: [ Technological Hazards ]
    - On, and Off-Site Protection Plans for Hazardous Industrial Plant
    - Warning Systems
  - Elements in all Mitigation Plans:
    - Co-ordination and Financing Preventive Measures
    - Public Awareness /Perception of Risk
    - Cash Grants /Subsidies / Insurance Protection
    - Training and Education for Protection against Disaster
- 

#### ■ PART 3. DISASTER PREPAREDNESS [ for Natural, Technological, War and Refugee Situations ]

- Guides, Handbooks and Manuals
- Statistics
- Agency /Government Reports on Preparedness Planning
- Country Profiles relative to Disaster Planning
- Development of Emergency Organisations
- Examples of Preparedness Plans:
  - International Level
  - National Plans
  - Regional Plans
  - Local, Community Based Plans
  - Agency Plans
- Elements in Preparedness:
  - Allocation of Roles /Tasks
  - Emergency Housing and Refugee Camp Planning
  - Evacuation Planning
  - Warning Systems

- Stockpiling and Procurement of Goods
  - Inventory of Available Resources
  - Communication Systems
  - Information Systems, Media Management
  - Training and Education
  - Simulations and Drills
  - Public Awareness Programmes
  - Safety Measures for Life and Personal Property
  - Safety Measures for Public Property
  - Protection of Refugees and Displaced Persons
- 

#### ■ PART 4. EMERGENCY MANAGEMENT:

- Assessment of Damage
  - Assessment of Survivors needs
  - Search and Rescue
  - Emergency Operations Centres [ EOC's ]
  - Basic Needs:
    - Shelter and Refugee Camp Planning
    - Water
    - Food
    - Management of severe Nutritional Emergencies
    - Medical Care /Health Management
    - Management of Mass Casualties
    - Epidemiological Considerations
    - First Aid
    - Sanitation
    - Psychological Care
  - Crisis Management
  - Logistics and Supply
  - Evacuation
  - Communications
  - Operational Procedures for Emergency Staff
  - Insurance
  - Monitoring, Reporting Techniques and Evaluation of Emergency Provision
- 

#### ■ PART 5. RECOVERY/ RECONSTRUCTION MANAGEMENT

- Reconstruction Strategies:
  - Planning Process, definition of priorities
  - Repairs
  - Temporary Housing
  - Relocation Options
  - Resettlement
  - Housing Reconstruction
  - Economic Recovery
- Infrastructure repair:
  - Communications
  - Water Supply
  - Sanitation
  - Roads /Bridges etc
- Agriculture recovery
- Human, Organisational Recovery
- Institution and Leadership Building

- Repatriation of Refugees
  - Monitoring of progress
  - Evaluation techniques
- 

#### ■ PART 6. GENERAL CONSIDERATIONS

- Disaster Research
  - Research Methodology
  - Human Behaviour in Disaster /Refugee Situations
  - Organisational Behaviour in Disaster /Refugee Situations
  - National Disaster Systems
  - International Disaster Systems
  - Economic Aspects
  - Legal Aspects
  - The Role of the Media
  - Links between Disasters and Development
- 

#### ■ PART 7. DEVELOPMENT OF SKILLS FOR DISASTER /REFUGEE MANAGEMENT

- Leadership
- Management
- Crisis Management
- Delegation
- Co-ordination
- Assessing Needs
- Risk Assessment:
  - Hazard Mapping
  - Vulnerability Assessment
- Assessing Resources
- Authority
- Accountability
- Budgetary Control and Financial Management
- Forward Planning
- Development of an Agency Preparedness Plan
- Developing Simulation Exercises
- Development of Communication Skills:
  - Report Writing
  - Writing a Project Proposal
  - Public Speaking
  - Chairing a Meeting
  - Handling the Media
- Staff Development
- Organising a Training Programme
- Monitoring and Evaluation
- Building an 'Agency Memory'

NAME : \_\_\_\_\_

INTERESTS OF PARTICIPANTS:

	NO INTEREST →	MARGINAL INTEREST	USEFUL INTEREST	VITAL INTEREST
<b>HAZARD TYPES :</b>				
[natural]				
volcanic eruption				
earthquake				
high winds				
floods				
landslide				
bushfire/forest fire				
[man-made]				
pollution control				
war/civil strife				
refugee situations				
technological				
building fires				
<b>ACTIVITY :</b>				
risk assessment				
planning/management				
implementation				
training				
assessment of damage				
assessment of needs				
monitoring/evaluation				
<b>DISASTER PHASE :</b>				
relief/rehabilitation				
reconstruction				
mitigation				
preparedness				
<b>SECTOR :</b>				
government [centre]				
government [provincial]				
academic				
non-govt organisation				
private sector				
media				
<b>LEVEL :</b>				
political decision-making				
senior administrator				
mid-level administrator				
local administrator				
community level				

Place tick in relevent section

Where topic is of major importance in your work (i.e. higher than vital) place \* in vital interest column



**SKILLS AND KNOWLEDGE**

	MARGINAL	USEFUL	VITAL
<b>GENERAL KNOWLEDGE</b>			
-of disasters			
-of management			
-of training			
-of the linkages between disasters and development			
<b>DETAILED KNOWLEDGE</b>			
-of specific hazards [specify which].....			
.....			
.....			
-of specific management techniques [specify which].....			
.....			
.....			
<b>IMPROVED SKILLS</b>			
writing			
public speaking			
analysis of problems			
chairmanship			
evaluation			
undertaking a survey			
assessment of needs			
assessment of damage			
organisation of a training programme			
developing a preparedness plan			
developing a mitigation plan			
simple cost-benefit skills			

## ■ INTRODUCTIONS TO REFUGEE EMERGENCIES, DISASTERS AND DISASTER ASSISTANCE

B E Harrell-Bond, Imposing Aid (Emergency Assistance to Refugees), Oxford University Press, 1986.

Anders Wijkman and Lloyd Timberlake, Natural Disasters (Acts of God or Acts of Man?), International Institute for Environment and Development, 1984.

Frederick C Cuny, Disasters and Development, Oxford University Press, 1983.

Randolph C Kent, Anatomy of Disaster Relief (The International Network in Action), Pinter Publishers Ltd, 1987.

## ■ BROAD OVERVIEW OF DEVELOPMENT ISSUES

World Commission on Environment and Development, Our Common Future, Oxford University Press, 1987.

Department of the Environment (on behalf of UK Government), Our Common Future (A Perspective by the United Kingdom on the Report of the World Commission on Environment and Development), July 1988.

## ■ THE SURVIVORS VIEW - 'OUTLOOK FROM THE VILLAGE'

4 Hazel Johnson and Henry Bernstein (Eds), Third World Lives of Struggle, Heinemann Educational Books in association with The Open University, 1982.

Betsy Hartmann, James Boyce, A quiet Volience (View from a Bangladesh Village), Zed Press, 1983.

## ■ HANDBOOKS/MANUALS

UNHCR, Handbook for Emergencies, Geneva, December 1982.

Brian Pratt, Jo Boyden (Eds), The Field Directors' Handbook (An OXFAM Manual for Development Workers), Oxford University Press, 1985.

Ron Ockwell, Assisting in Emergencies (A resource handbook for UNICEF Field Staff), United Nations Children's Fund, May 1986.

Sir Bernard M Feilden, Between Two Earthquakes (Cultural Property in Seismic Zones), ICCROM and the Getty Conservation Institute, 1987.

P Oakley and C Garforth, Guide to Extension Training, Food and Agriculture Organization of the United Nations, Rome 1985.

Training Section, UNICEF, Emergency Management Training Package, UNICEF, March 1988.

## ■ BASIC HEALTH BOOKS

Murray Dickson, Where There is No Dentist, The Hesperian Foundation, 1983.

David Werner, Where There is No Doctor, MacMillan, 1979.

Stephanie Simmonds, Patrick Vaughan and S William Gunn (Eds), Refugee Community Health Care, Oxford University Press, 1983.

Pan American Health Organization, Emergency Health Management after Natural Disaster, Pan American Health Organization, 1981.

■ Slide Sets and Commentaries Available from Pan American Health Organisation

Address: Pan American Health Organisation  
Emergency Preparedness Unit (DED)  
525 Twenty-Third Street, NW  
Washington DC 20037  
USA

■ Emergency Management of Environmental Health and Water Supply.

1. General Overview A Case for Prepared.
2. Planning Techniques.
3. Vulnerability Analysis.
4. Preventive Measures.
5. Preparing for Floods.
6. Preparing for Earthquakes.
7. Preparing for Hurricanes.
8. Camps Temporary Settlements and Shelters.
9. Water Quality in Emergencies.

**EVALUATION OF WORKSHOP ON RISK REDUCTION AND RECOVERY MANAGEMENT**

19 June - 8 July 1988

Insert name (leave blank if you wish)

.....

Date: .....

Evaluating System:

- 5 = Excellent
- 4 = Very Good
- 3 = Good
- 2 = Moderately interesting/worthwhile
- 1 = Not very good
- 0 = Useless for my needs

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1. What is your overall assessment of the workshop? .....  
(Use number code 0-5)

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2. What is your assessment of the overall structure and programming of the Workshop? .....  
(Use number code 0-5)

If improvements can be made to the emphasis, structure or programming, please indicate.  
(If you need more space use the blank sheet at the end of this form - State question no.)

.....  
 .....  
 .....  
 .....  
 .....

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3. What is your assessment of the leadership? .....  
(Use number code 0-5)

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4. Are the materials you have been given of practical use to your work (ie book lists, handouts etc) .....  
(Use number code 0-5)

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5. What were your expectations of the Workshop before you came - list up to 4 items and score whether these expectations have been fulfilled.  
(Use number code 0-5)

.....  
 .....

.....!.....  
.....

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6. There were a number of themes being covered in the programme please indicate in the space provided (Use number code 0-5) how well they have been covered.

Social/Cultural activities .....  
Management Techniques .....  
Teaching Learning Techniques .....  
Technical Presentations on Disaster Planning .....

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7. Please evaluate the different teaching methods used in terms of their usefulness to you: (Use number code 0-5)

Visits for example - Thames Barrier .....  
Individual writing tasks .....  
Group exercises (ie with E Lohman) .....  
Group sessions .....  
Lectures .....  
Reading Workshop Books/Materials .....  
Management Capsules .....

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8. How effective was the balance between:

Individual work & group work .....  
Lectures & Group Discussion  
(Being talked to) (Talking to each other) .....  
Practical & Theoretical .....  
Working & Relaxing .....

---

9. Please rate the following: (Use number code 0-5)

Venue .....  
Timing .....  
Atmosphere .....

10. Are there any things you found were missing from the workshop.  
List any ideas.

.....  
.....  
.....  
.....  
.....  
.....

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11. Was the Workshop (tick one line)

Too small .....  
Correct size .....  
Too large .....

---

12. In your view was the duration of the Workshop (tick  
one line)

Too short .....  
Correct length .....  
Too long .....

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13. Is there any further way we could assist you in your  
work?

.....  
.....  
.....  
.....

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14. How would you assess your own performance in the Workshop?  
(Consider: books read, contributions to the discussions,  
general commitment, group tasks, pre-workshop tasks)  
(Use number code 0-5) .....

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15. Was the content and emphasis of the Workshop directly  
applicable to your work? (Use number code 0-5) .....

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■ 16. Anything missed on this evaluation form? Please list below:

.....  
.....  
.....  
.....  
.....

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■ 17. General Comments:

keeping the O-TJ assessment method. If you were not present for any session, please indicate you were absent (A).

Day 1:

Introduction to Workshop - Ian Davis . . . . .

How we can learn during the workshop - David Jacques . . . . .

Video Film - Disasters (including simulation exercise) . . . . .

3 Day Workshop with Ernst Lohman - Infraplan Holland:

Lectures by Ernst Lohman . . . . .

Group Exercises in Flood or Earthquake Mitigation . . . . .

Visit to Blenheim Palace/Joint Meal in Woodstock . . . . .

Visit to Merton College with Matthew Kempshall  
(Tower/Library etc) . . . . .

Visit to London:

Lloyds of London/Docklands/Thames Barrier/  
Greenwich/Theatre . . . . .

2 Day Workshop on Flood Management in the United  
Kingdom with Middlesex Polytechnic Flood Hazard  
Research Centre:

Lecture on Integrated Flood Management by Denis Parker . . . . .

Video Film Maidenhead Flood Study . . . . .

Flood Warnings, Jeremy Neal . . . . .

Emergency Planning and Flood Impact, Colin Green . . . . .

Computer Demonstration . . . . .

Guided Tour of Maidenhead Flood Problems, Edmund  
Penning-Rowse . . . . .

Thames Flooding, John Gardener of Thames Water Authority . . . . .

Day 10:

How to Handle Stress and Crisis Management, Nick  
Isbister . . . . .

The South East England Hurricane of 1987, Derek Elsom . . . . .

2 Day Workshop on Earthquake Planning, Imperial College  
Department of Civil Engineering and Engineering  
Seismology

Introduction to Earthquakes, Professor N N Ambraseys . . . . .

Demonstration of Shaking Table . . . . .