Assessment

Some 80% (or 17,000 of 21,000) of eligible communities participate in the NFIP. There are about 2.1 million policies in force with a face value of about $162 billion (U.S. General Accounting Office, 1988). The policies cover about 20 to 25% of properties on defined floodplains, and about 72% of these are properties in coastal (including Great Lake) communities.

Assessed in terms of its role in promoting land-use regulation the NFIP appears to have been successful. Without the program, it is most unlikely that 17,000 communities would have adopted floodplain land-use regulations, especially as many communities had little or no planning of any type before the NFIP (Arnell, 1987; Whilden et al., 1987). Despite this apparent overall success, many of the poorest communities remain unable to participate in the program as they are unable to afford any form of planning authority. The program has been subject to a number of unsuccessful legal challenges on the basis that the land-use controls are unconstitutional.

In terms of reducing losses the program has been less successful. The regulations do little for existing development, and encroachment is continuing for a variety of reasons, including the granting of numerous exemptions. There is some evidence that insurance has encouraged development in high-hazard coastal areas (Arnell, 1987; Cross, 1986). Banks have not been good enforcers of the mortgage provisions. In some cases they do not have the necessary flood insurance maps or have difficulty interpreting

them when they do. In addition, it appears that opportunities for reducing the damage potential of structures following flooding have rarely been taken; about 43% of the insurance payouts have been for repetitive losses (U.S. General Accounting Office, 1988). Another problem concerns areas not covered by the program's definition of flood-prone land but which may nevertheless be flooded. These include the floodplain lying between the 1% and maximum probable floods, and areas prone to mudslides, alluvial fan flooding, and groundwater inundation.

Under the Reagan administration the land-use aspects of the NFIP have been downplayed and attention has been devoted to two major accounting goals. The first is to put the program on a sound actuarial footing by increasing premiums, and the second is to make the scheme self-financing. There has been some concern that in practice these goals may be contradictory; as premiums rise to actuarial levels, people may drop out of the program, leaving an increasing proportion of policy holders in high-risk areas. Yet the program requires a wide spread of risk to remain financially viable, and financial viability is an important issue. For the ten-year period beginning January 1, 1978, the NFIP had an accumulated deficit of $651 million. This deficit represents the excess of insurance payouts plus operating expenses over premium income.

At a very different level, the NFIP is seen as one of the Reagan Administration's most successful private-sector initiatives. Under the "write your own program" private insurance

companies now sell and service flood insurance under their own names. Through arrangements with the Federal Insurance Administration they will not lose money on the insurance.

Despite heroic attempts, the program is not well coordinated and does not appear to have reduced federal disaster-related expenditures, if the insurance scheme subsidies are included. However, it scores high on accountability and openness; the program is enshrined in legislation and has been subject to periodic review.

This discussion highlights the difficulties in assessing programs of this kind. Various aspects of the program have been commented on, but what criteria are most appropriate? Nothing has been said about consumer satisfaction. Although this may be a most desirable measure, no data are available. Equity has been mentioned, and it is almost universally seen as a central measure of program desirability. However, there is little agreement on what constitutes equity. Is it equitable to treat people with the same losses equally, or should relief be related to ability to bear the loss? Tax deductibility of losses may appear equitable, but favors higher income groups.

BRITAIN: AN AD HOC APPROACH

Floodplain management

Central government involvement with flood hazard mitigation has a 500-year history in Britain (Handmer, 1987). For most of the recent period, involvement has been in the form of grants for

engineering works. As in Australia, land-use planning became firmly established during the 1940s, although some controls existed from the nineteenth century because of health legislation and the limited powers possessed by local governments.

Britain has not experienced the recent large flood-related death tolls of the United States. Nevertheless, parts of the country are frequently subject to severe flooding, and two floods in the early 1950s took a heavy toll. These were the Lynmouth flash flood of 1952 and the east coast sea flooding of 1953; thirty-four died or were missing and presumed dead in Lynmouth (Delderfield, 1976), and over 300 in the east coast floods (Pollard, 1978). Both events resulted in major government and unofficial relief operations, with Lynmouth, in particular, receiving substantial international aid. The floods led to upgrading of flood mitigation works, especially for sea flooding on the east coast, including construction of the Thames Barrier to protect London.

At present Britain has a relatively stringent national land-use planning system, but this does not really extend to flood hazards. Local governments are expected to seek advice from the ten regional water authorities on developments likely to be flood-prone. The whole flood-related planning system is advisory. There is no explicit national policy, and there are no national, and few regional, performance standards (Burch, 1987). This is in contrast to engineering works which are assessed individually by water authorities on cost-benefit grounds according

to national standard procedures. Water authorities are also responsible for the provision of flood warning services. (The privatization of many water authority functions in 1989 will affect these arrangements. See Kinnersley, 1988; Parker, 1988).

However, even though the same organization appears to be responsible for many aspects of flood hazard planning, there is little coordination, and the approach is certainly not integrated on paper or in reality. Essentially, the water authorities are staffed by engineers with a construction mission. Even if they had planning powers they would be under increasing pressure from the present central government not to use them.

Redistribution of Disaster Damage

In any case, the water authorities have no role in loss redistribution after a disaster. Flood insurance is automatically included in most British household policies at no extra premium. Comprehensive household contents policies have generally included flood cover since the First World War. This was gradually extended to structures following severe flooding in 1960 (Arnell, 1987). At first sight it may seem that this is an entirely "free enterprise" approach to the problem. However, fear of nationalization and other pressure from government played a major role in prompting extension of cover during the 1960s. Of course, in Thatcher's Britain nothing is less likely than nationalization, but it no doubt suits the government to continue the arrangement, since it reduces pressure to provide disaster relief and

satisfies an ideological commitment to "self reliance."

Not that disaster relief in Britain is a major drain on the national government. Counseling services are provided by local government, and special ad hoc committees may be established to coordinate relief funds, but relief money comes dominantly from public donations. Although the government may make donations to relief funds, it does not specify how the money should be spent. Also, Westminster sometimes compensates local authorities and may occasionally give cash grants to affected households. Note that local authorities have no statutory duty to plan for "peacetime" disasters, although they are required to plan for war.

These limited forms of compensation notwithstanding, government policy has been to refuse restitution for an insurable loss. Instead, the central government may offer disaster relief loans to people who have been flooded. This policy may discriminate against those who do not have or who cannot afford insurance. About one-quarter of the households in Britain do not have contents cover (British Insurance Association, 1983), but this figure varies enormously according to socioeconomic status, as shown by the discussion of the town of Strabane, below. Unlike many other industrialized countries, the British government is reluctant to admit publicly that it necessarily has the ultimate responsibility for disaster losses.

An example of the policy in action is provided by the town of Strabane, Northern Ireland, which was badly flooded when a small levee broke in late 1987. According to newspaper reports

the town is distinguished by the highest male unemployment rate in Western Europe: 44%. Therefore, not surprisingly, two-thirds of the flooded households were uninsured, and relief grants were offered only to those already on "supplementary benefits." Those not on this form of welfare were eligible only for loans covering a proportion of their losses. Fortunately, the district council raised money through a disaster appeal fund. When this was combined with a grant from the EEC (European Economic Community), each flooded family received an average of £226; this amount (about $375) is little compared to an average grant after the 1986 Sydney floods of $3750 ($5000 Australian).

As Table 3 shows, the amount of money raised for disaster victims by public appeals varies greatly. It varies by type and timing of disaster; amount of media attention, including the degree of competition from other news; the marketing skills of the appeal organizers; and public expectations concerning compensation from other sources. The appeal following the Hungerford "massacre" of 15 villagers in a shooting spree, raised money easily. Apart from the appalling nature of the event, it occurred in August, traditionally a quiet month for news. As a result it received constant media attention. Nevertheless, the amount raised, £1.1 million, is paltry compared to the £3 million raised by the appeal following the deaths of eight crew when the Penlee lifeboat sank. In contrast, the appeal for the victims of the Kings Cross underground railway fire had a disappointing start, possibly because the public knew that those who had

TABLE 3

SOME RECENT BRITISH DISASTERS

Event	Key Losses	Amount Raised by Public Appeal (Pounds sterling)
Penlee lifeboat (1981)	lifeboat crew 8 dead	3 million
Bradford football stadium fire (1985)	56 dead	4.25 million
British ferry capsize at Zeebrugge (1987)	195 dead	4 million
Hungerford shooting (1987)	15 dead	1.1 million
"Great British Storm" (1987)	15 million trees; insurance payout of £1,500 million (largest insurance payout ever).	?
IRA bomb at Enniskillen (1987)	11 civilians dead	0.4 million
Fire at Kings Cross Underground Railway Station (1987)	35 dead	0.44 million
Fire on Alpha Piper oil drilling rig (1988)	167 dead	Compensation paid by oil company

Note: Other British disasters occurring since this table was compiled include the sinking of the pleasure boat Marchioness in the Thames River with the loss of 55 lives; the Hillsborough football stadium disaster, 95 dead and 400 injured; Clapham Junction rush-hour train crash, 35 dead (the worst of a number of rail accidents); and the bombing of a Pan Am plane over Lockerbie, 270 dead.

Source: various newspapers; the 1987 storm: Burt and Mansfield, 1988, and Lloyds Insurance of London.

suffered could expect to be compensated. Also media attention was limited, and much of it focused on the problems of the underground rather than the victims.

The European Community has a role in British disaster relief as in other aspects of the country's existence. The role is not large, but may be important for places like Strabane, which are not electorally important and do not attract much media attention. It is conceivable that eventually the Community may attempt to set uniform disaster relief standards for member countries.

Assessment

The approach to loss redistribution discussed above is not simply a feature of Britain under Margaret Thatcher: it has a long history. However, the approach raises some serious issues: equity, the accountability of these essentially private funds that distribute millions of pounds according to secret criteria, and the role of central government.

The first issue is of particular concern. How is it equitable that compensation should depend on media interest or on potential legal liability? The people of Strabane get almost nothing, while the relatives of the Penlee lifeboat crew and Bradford fire victims receive substantial compensation.

Counseling and other support services are well developed at present for victims of the major events listed in Table 3, but, as with financial assistance, these efforts often fail to reach

those affected by smaller, less newsworthy incidents such as severe flooding (Emery, 1987).

Until recently the British approach to disaster management, including loss redistribution, appeared to be based on the premise that the country is not disaster-prone. This attitude has often been expressed to the author. However, if this outlook is not changing, then it probably should be, as the recent disasters listed in Table 3 testify. It is important to note that this list includes only those events receiving international media attention, it does not include numerous significant flood events. Furthermore, since the list was compiled, there have been other, equally serious, transportation and pollution disasters.

The British approach is currently under formal review. A consultation paper was circulated on June 30, 1988, and comments were solicited from about a hundred relevant organizations (U.K. Home Office, 1988). The paper's concern, however, is with the role of central government in the impact and postimpact phases of disaster, rather than with loss redistribution. A further discussion paper dealing with the organizational arrangements for "civil emergencies" was issued in June 1989 (U.K. Home Office, 1989).

CONCLUSIONS

The different approaches to loss redistribution are firmly set in the national or regional contexts in which they operate.

These contexts include beliefs concerning equity, the role of government, and people's right to compensation. At one extreme lie universal government compensation schemes for injuries and losses, however they are sustained, such as the plan now operating in New Zealand. At the other, compensation other than insurance is only available from public appeals and charities and through court action. In the first approach commercial insurers are likely to have a small role; in the second approach they are potentially a major means of loss redistribution. Without government intervention loss redistribution through family and friendship networks is likely to be more important. The question as to whether government action has displaced such networks or is simply part of a larger trend towards increasing dependence on government is unresolved.

It is certain that regardless of statements to the contrary, central governments will always act in the role of insurer (or reinsurer) of last resort for major disasters. Precisely where special disaster relief measures should start however, is unclear. Given an effective welfare system, special government disaster programs are perhaps unnecessary, although it appears that tangible and intangible disaster losses will often exceed the scope of normal welfare programs. In addition, welfare staffing may be inadequate to cope with the extra demand. Nevertheless, the trend in some Australian states is to view disaster assistance as an extension of normal welfare. A parallel trend consists of the attempts to have the insurance industry take a

larger role, both in offering cover and in publicizing the availability of policies.

The current emphases on "user pays" ideology and economic efficiency in many of the industrialized democracies are in keeping with this trend. The latter threatens to overturn earlier concern with accountability and safety standards. Both suggest that disaster victims should not receive special treatment; they should have the same welfare entitlements as anyone else who has suffered comparable losses. If there are inefficiencies the whole welfare system should be examined. A "user-pays" approach would suggest that some groups, in particular industries which have gained some advantage from their hazardous location, should not be entitled to compensation.

At first sight this may appear to go against our concern that loss redistribution should be part of integrated disaster management. Yet, the removal of special assistance privileges may satisfy this requirement. In any case, it would be inequitable and politically and administratively impossible to deny disaster victims normal welfare. Little has been said about consumer satisfaction or expectations concerning disaster welfare. This omission is not because consumer views are unimportant; rather it is due to the lack of information. This is a serious deficiency.

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