to who owns the structure, the landlord or the occupant.²⁶

- 3. Reconstruction on unsafe sites To head off demands for land reform some governments will turn tracts of land over for low income housing reconstruction. Usually, however, this land is of little economic value, and is likely to continue exposing its occupant to risk.²⁷
- 4. State ownership. In general, countries enjoying state ownership of land have been more successful with resettlement than those in which private land ownership prevails, even though the latter frequently possess emergency powers of compulsory land purchase, such powers, however, being rarely used. One example of the use of emergency powers occurred after the 1963 earthquake in Skopje, Yugoslavia. Safe land on the outskirts of the city was scheduled by the government for housing. The ability to requisition land was the reason why 14,000 housing units were erected within eight months of the earthquake.

Policy guidelines

 The land issue must be recognised as an integral part of post-disaster housing programmes. The political and economic nature of the issue may present difficulties, but nevertheless there may be opportunities for land reform, and safe land for resettlement must be made available after a disaster

²⁶ In a number of recent post-disaster operations in Latin America, where in many countries the law holds that the property owner has title to any structures on his land, low-income families have been hit hard by having to pay off the cost of their shelter, while still paying rent on both the land and, eventually, the structure.

²⁷ In one country, land designated for resettlement of refugees was subject to intense flooding. In another, a site chosen lay directly downstream from an impending mud slide. In yet another, some resettlement land was on an unstabilised plateau at the edge of a steep ravine. While the demand for land was met, the people were no better off than they had been before in other equally vulnerable areas.

- 2. The release of safe land for building, designated for low-income families, must be supplied with basic infrastructure—at least water, waste disposal and all weather roads—and must be within reach of employment. It is recognized that this may appear unduly idealistic, since safe land near urban centres will inevitably be very valuable. However, it is essential to recognise that poor families have to live close to centres, since their livelihood may depend on it. They are unlikely to have the time or money for travelling long distances to work.
- 3. The costs of land development cannot be overlooked. It is necessary therefore to incorporate land purchase and development costs within the financing system established for housing reconstruction. Financing systems are described in section 4.4.
- 4. For low-income groups, security of land tenure must be assured in order to encourage the entire grassroots system of self-help and popular participation in development. The evidence clearly indicates that families will put their resources (skills, energy, money) into housing only if they can see some personal return from such investment. Safe house construction by local families requires security of tenure at the outset of building (not at the completion of the loan repayment period). In many countries such provision will require land reforms.

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4.4 HOUSING FINANCE

PRINCIPLE: One of the most important components of a post-disaster shelter programme is its financing system. Outright cash grants are effective in the short term only, and can create a dependancy relationship between survivor and assisting groups. It is far more advantageous for both the individual and the community to participate in the financing of their own shelter programmes. especially permanent reconstruction.

Audience

- Private sectors: Manufacturers, contractors, banks, co-operatives,
- Professionals, Architects/planners/economists
- Policy-making administrators: National (tertiary) level
- Project managers of post-disaster shelter/housing projects: Regional/provincial (secondary) level.

Time phases

- Pre-disaster phase Risk reduction, preparedness
- Phase I Immediate relief period (impact to day 5)
- Phase 2 Rehabilitation period (day 5 to 3 months)
- Phase 3 Reconstruction period (3 months onward)

The need for housing finance

One of the most important components of a postdisaster shelter programme is its financing system, i.e. the means by which the survivor ultimately pays for shelter aid. Unfortunately, it has been one of the components whose importance has been least understood. Some assisting groups, as long as a year after the completion of their project, have not even finalized the financing system. The recipients of aid have often been unaware of their financial obligations, leaving a cloud of uncertainty and anxiety hanging over them. On the other hand, financing programmes that have been well planned have had the positive effects of reinforcing the recipients' self-esteem, furthering local development and contributing towards economic recovery.

The following is an overview and critical evaluation of the most common financing systems or arrangements that have been used for post-disaster shelter and housing programmes:

1. Outright gift. Some shelter programmes solve the question of financing by simply eliminating its attendant charges. The assisting group gives the aid to the recipient who has fulfilled certain, more or less formal, conditions of entitlement, such as proof of being a genuine disaster victim, proof of ownership of the land on which the shelter is to be built, evidence of low income level, etc. Once the aid has been given, the recipient has no further obligation to repay part, or all of the cost of the shelter. This may seem justifiable when the shelter is clearly temporary and erected on land not ultimately destined for housing²⁸.

Advantages

- It eliminates the need to recuperate the money, it may be difficult for an assisting group to do this, especially if it only operates in the disaster area for a short time, or has no staff qualified to direct a financing programme;
- It may conform to the charter or mandate of certain assisting groups who are required to *give* their aid:
- It allows the recipient to spend what money he may have on other necessities;

Disadvantages

- The money may be used inappropriately, thus compromising the reconstruction process;
- It may undermine the vital resource of the survivors' own "coping" mechanisms, including traditional, community self-help;
- It may result in the imposition of housing solutions which do not respond to people's needs and preferences:
- It may weaken local co-operatives, and other institutions, by bypassing them,
- It deprives the donor from recuperating funds for new projects;
- Because construction materials are expensive, and because agencies have limited funds, it limits the number of people it can serve.
- 2. Straightforward purchase This is virtually the opposite of the outright gift, and is seldom the financing mechanism used by assisting groups, especially those which are charities. It is employed by profit-making businesses that see the demand created by the disaster as a marketing opportunity. Its advantage is that it maintains the freedom of the open market, though this could obviously become a disadvantage if the

²⁸ Such was the case of shelters built by the government after the 1970 earthquake in Peru

seller is in a position to exploit survivors with few options. In practice the numbers of survivors who can afford full market prices will probably be very limited.

3. No-cost self-help. Several assisting groups have instituted programmes where they give building materials, and usually furnish supervisory and administrative personnel to an organized group of families who build their own houses. As with the outright gift of a house, the recipients do not repay any money for the costs of materials. This method is viewed as a means of involving the recipient in the programme without straining his meagre or reduced economic resources.

.Advantages

- As with the outright gift, it eliminates the need for an organization and procedure to recuperate money.
- It allows the recipient to spend what money he may have on other necessities:
- By virtue of building the shelter, the recipient will have a greater commitment to the programme than if he had been a passive spectator.

Disadvantages

- To a lesser extent, the disadvantages of the outright gift will tend also to hold true with the no-cost self-help approach;
- The assisting group may feel it has a right to influence the organization and timing of the self-help because it is giving the materials and technical assistance, to the possible detriment of the recipient community.
- The time spent on the construction of the shelter is valuable to the recipient. He may have difficulty in choosing between building a house and providing the family with economic support.
- The successful implementation of a no-cost self-help programme can only be achieved with great care. The design of the programme must respond to traditional patterns of building, to the time available, and to the economic priorities of the victims.
- 4. Loan programmes. Loan programmes may take a variety of forms, and be either a part, or the whole, of an assisting group's shelter programme. Specific loan conditions vary considerably, but they generally require that the recipient be a genuine disaster victim, living in a given locality; that his income falls within a prescribed range: that his employment is secure; that he has prior experience of credit repayment, and that he agrees to the terms of the loan. The lender may also make the additional condition that the new building must conform to minimum standards of safety, or that it be built away from hazardous areas. The non-profit lender is often capable of providing advantageous terms of repayment. Various programmes have allowed subsidies in the form of low interest, no interest, repayment of only a percentage of the principal, long term repayment, or repayment at an affordable proportion of the family's income.
 - (a) Long-term straight loan. The long-term straight loan is perhaps the most commonly conceived form of loan financing. It is typically extended by a bank or lending institution at prevailing or sub-

sidized bank rates. After many major disasters, the World Bank and the Regional Development Banks in Asia and Latin America have made large scale loans to financing institutions within national governments. These institutions in turn offer loans to survivors (individuals or communities) for reconstruction, but may not always offer the complementary assistance of building materials or technical support, which the lowest incomes require as well.

Advantages

- It accommodates survivors who typically do not have cash to spend on building materials right after a disaster, but who can pay the full costs of the materials, plus interest and administrative charges in the long-term;
- It removes the stigma and problems of free aid;
- It introduces the discipline of credit, becoming an experience that may facilitate future credit for economic development;
- The lending institution is likely to expand its own experience and capabilities, and perhaps extend its services to the lowest income groups,
- The amount of the loan can be tailored to the need and capability of the recipient;
- The recipient has the freedom to rebuild a house of his own choosing or design, and not be tied to a uniform housing programme;
- The lending institution, will in its own interest, be concerned with the economic well-being of the recipients for at least the life of the loan.

Disadvantages

- The lender may place unduly restrictive conditions on the loan. In rural areas, it is unlikely that credit loan administration facilities will exist.
- The recipient may not have been adequately prepared for the economic burden of repayment. This could occur if he has no experience of credit, does not understand its concept, or is not adequately motivated to make repayments.
- Some people are reluctant to take out loans because they believe that their property will be placed in jeopardy if they do not repay installments on time.
- The costs of loan administration are high and add to the burden of repayment. 29.
- Conservative financing institutions tend to make loans exclusively to middle class, relatively high-income groups, i.e. to people who are a low risk.
- (b) Loan for loan Many lending institutions require a substantial down-payment, for example, 20 per cent of the loan they make. For those without the cash, a loan is therefore an inaccessible form of aid. Assisting groups, particularly voluntary agencies, have therefore made additional loans to cover the down payment, hence the concept "a loan for a loan".
- (c) Guaranteed loan. As previously noted, a disadvantage of many loan programmes is the tendency for lending institutions to make loans

²⁹ In Guatemala, the staff of the OXFAM/World Neighbours housing programme estimated that the loans would cost about 30 per cent to administrate in the first year alone. In the end, the costs of administration would have to be added to the original cost of the programme.

available only to the most credit-worthy individuals. I ending institutions have also been reluctant to venture out of familiar territory, i.e. into marginal, low-income settlements and rural areas. Assisting groups addressing the problem have made guarantees to these lending institutions, enabling them to extend loans to previously disadvantaged populations. This is a particularly effective form of assistance from agencies involved in development programmes continuing beyond the emergency phase of a disaster. The advantage of the guaranteed loan is its cost effectiveness, for it reaches a proportionately large number of people, thus introducing economies of scale.

- (d) Revolving loan. A revolving loan system allows money brought into a disaster-affected community to be used many times over. As the original recipients begin to repay the loan, a new fund is created which can in turn be used to lend to other survivors. This form of aid is most appropriate when the assisting group provides assistance in the form of a grant that does not have to be recovered, as with the traditional loan. The financing system has the multiple advantage of extending the use of the original money to many times the number of the original loan recipients. This money also has the side effect of creating additional employment in the community. It may further assist in the creation of new credit institutions, providing them with a sound base of experience, the funds and financial expertise carrying far into the reconstruction period.
- (c) Material price subsidy and money reflow. This financing system is actually a hybrid of material supply and community economic development, combining the advantages of both, at a period when the disaster-stricken community is most in need of these kinds of external support. Although they are actually two separate financing mechanisms, material price subsidy and money reflow have been successfully linked in several shelter programmes, the money recovered from the initial sale being used to pay disaster survivors for their labour on public works projects. ³⁰.

Advantages

Subsidized prices, as opposed to full prices, make materials available to poorer, and more numerous families:

The programme's benefits are threefold: the survivors receive materials, community projects are built; personal income is generated;

The poorest families, initially unable to purchase materials, can do so later by participating in public works or community projects.

The managerial experience acquired, especially if the executing agency is governmental, may contribute significantly to the long-term recovery and development of the affected region in general.

A materials purchase programme allows the recipient the freedom to use the materials when he chooses

Disadvantages

The only major disadvantage with this approach is that it must inevitably be carried out on a large scale, and therefore requires an extensive administration which may be difficult to staff with enough, and adequately trained, people.

Conclusion

Where there are a number of assisting groups providing shelter programmes, there is likely to be a wide range of financing systems in operation. This variety can itself lead to problems, irrespective of the merits or otherwise of the individual systems being used. 31. The issue of financing is closely interrelated with the total cost, value and desirability of the project. It should also relate to survivors' incomes and ability to pay As obvious as that may seem, it has not often been the case

Policy Guidelines

It is necessary to create a common approach to financing systems among all assisting groups. Some authoritative body, such as the disaster coordinating agency of the national government, should establish a policy to achieve this objective. The policy could take the form of a set of criteria which all shelter programme financing systems must meet. Because of the great diversity of cultural traditions and economic bases, it is not possible here to set forth a model set of criteria. Rather, a set of principles can act as a guide for each country to develop its own criteria:

- 1. All recipients of aid should be required to repay a substantial proportion of the cost of that aid. A nominal repayment of only 5 or 10 per cent may be perceived as a gift. On the other hand, 100 per cent repayment of costs may be too great a burden for families that may have suffered economic losses from the disaster.
- 2 The cost of a shelter should approximate the cost of pre-disaster housing. There may be extenuating factors justifying a somewhat higher cost that may include, for example, structural modifications using additional building materials. The form of the repay-

¹⁰ After the 1976 earthquake in Guatemala, USAID implemented a programme utilizing this approach. Corrugated galvanised iron roofing sheets were bought in large quantities and shipped to Guatemala USAID made agency agreements with local co-operatives for the distribution of the material which was then sold directly to survivors at approximately half the cost, with a limit of 20 sheets per family. The community was asked to identify community projects that needed attention. The money received from the material sales was used to finance these projects, the survivors who formed the labour being paid a daily wage. This, of course, increased the purchasing power of the survivors and accelerated their economic recovery.

These problems are clearly illustrated by the experience at Cholma. Honduras, after Hurricane Fift in 1974. They were exacerbated by the fact that there was also a great range in the quality and user desirability of the housing projects. The cost of the agency built housing ranged from USAS400 to \$2,150. Some families received highly desirable concrete block houses which cost \$1,000, and did not have to pay anything. Others received less desirable \$600 wooden houses and had to pay a portion of the cost, whilst others received \$450 wooden houses, and were required to repay the entire cost. Such inconsistencies led to frustration, confusion and anger on the part of the beneficiaries. For many, there was the uncertainty and insecurity created by an unknown status of payment many months or even years after occupancy. These feelings sometimes leave a bitterness which upsets social patterns in a community for years to come.

- ment should be as similar to traditional debt repayment practices as possible, allowing repayment to reflect income, capacity, and taking place at a familiar location.
- 3. Preparedness plans should identify lending institutions which would co-operate with special post-disaster loan programmes, such as the guaranteed loan or loan-for-loan. These same institutions might also agree to act as loan recuperating agencies in contract with assisting groups who choose not to set up their own loan recovery administration. This would effections.
- tively eliminate the chief argument such groups have for giving away their assistance. Where a reflow programme is anticipated, the mechanism and institution to operate it could also be anticipated.
- 4. It is the responsibility of all assisting groups, and their target communities, to identify the financing systems that serve the best interests of the survivors. Financing and loan mechanisms, in the last analysis, are better than outright gifts: human dignity is preserved; more people benefit from the resource made available, and the ends of development are served.