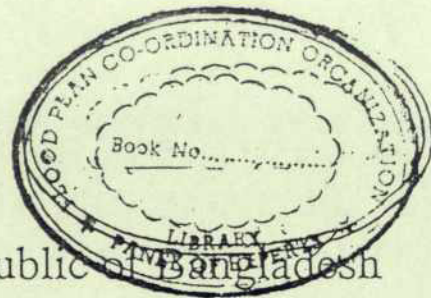


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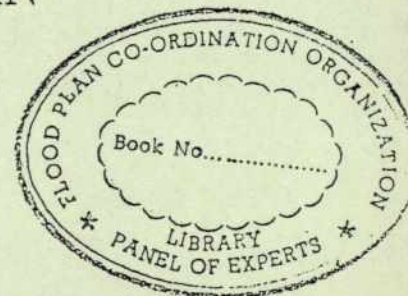
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Ministry of Irrigation, Water Development and Flood Control
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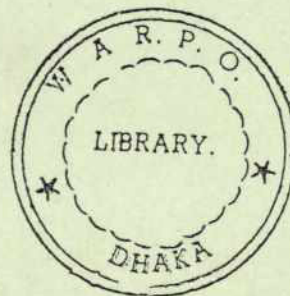
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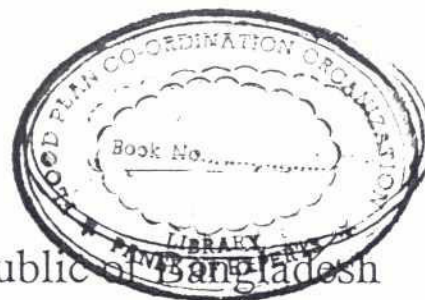
FINAL REPORT



November 1992

Prepared by
HIFAB International and
Multidisciplinary Action Research Centre (MARC)

Sponsored by
Swedish International Development Agency (SIDA)



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EXECUTIVE SUMMARY

1. INTRODUCTION AND OBJECTIVES

Projects under the Flood Action Plan (FAP) may involve substantial land acquisition, causing economic hardship, physical displacement and emotional stress to many, while providing economic benefits to others. The Study on Land Acquisition and Resettlement, one of 15 supporting studies under the FAP, aimed to find out how these hardships and sufferings could be minimized. The five main objectives of the Study were :

- to assess the social and economic impacts of land acquisition on families whose land was acquired for the construction of water sector projects in the past;
- to assess how land acquisition procedures and methods of payment may be streamlined to benefit households whose land is acquired in the future;
- to identify ways in which displaced families can be resettled so that their economic viability can be assured;
- to develop criteria and approaches for use in the design of Action Plan projects so as to minimize the land acquired and to facilitate rehabilitation of displaced families; and
- to develop criteria, guidelines and procedures for land acquisition and resettlement in Action Plan projects.

2. METHODOLOGY

The Study was divided into five components each addressing one of its main objectives and requiring a different methodology or approach, but linked to each other by a common analytical framework.

2.1 The Analytical Framework

Land acquisition involves four broad processes : project identification, land acquisition, project implementation, and adjudication of grievances, which bring about the interfaces between the people, the technocracy, the bureaucracy and the judiciary, and give rise to a variety of problems. The implementation of a water sector project leads to various impacts on individuals, economic sectors and the environment, beneficial or detrimental and not confined only to those who lost land or live inside the embankment. To cope with the adverse impacts and take advantage of the beneficial ones, there are various types of responses from the government, the NGOs and the people themselves.

Households were divided into eleven broad categories based on land and homestead locations in relation to embankments in order to analyze the impacts more clearly.

2.2 Methodologies for Various Components

To ascertain household experiences of land acquisition and assess its socio-economic impacts, a sample survey was carried out involving 3858 households, of whom 1407 were affected, in 26 villages at six BWDB project sites, namely

- Kurigram Irrigation Project
- Brahmaputra Right Embankment Project
- Monu River Project
- Dhaka City Flood Protection Project
- Kalidaskhali Arpara Project and
- Meghna Dhonagoda Irrigation Project.

Sites were selected on ecological and economic considerations. Questionnaires were used for a household census, an enquiry on land acquisition experiences and a detailed enquiry on land acquisition impacts and resettlement experiences, using successively smaller subsets of the earlier samples. Community consultations were held on important issues. Additionally, a quick survey was carried out at the Jamuna Multipurpose Bridge Project site in Tangail on 50 households regarding their land acquisition and resettlement experiences.

The juridical and administrative procedures of land acquisition were reviewed by a scrutiny of laws, rules, manuals, executive orders, and various other documents, interviews of DCs and land acquisition officials, and visits to the Directorate of Land Records and Survey and selected offices of sub-registrars. The socio-economic survey also provided some valuable inputs.

Resettlement and rehabilitation experiences at government and NGO levels were reviewed through a survey of three NGO and two government programmes and their beneficiaries at selected sites. To review the engineering design and planning aspects detailed discussions were held with relevant experts and selected sites visited.

3. SUMMARY OF FINDINGS

3.1 Legal Framework

Land acquisition in Bangladesh is covered under two pieces of legislation: the Acquisition and Requisition of Immovable Property Ordinance of 1982 and the Act for Emergency Acquisition of Property (Act IX) of 1989. The 1989 Act resulted in speedier acquisition of land, although its efficacy in disbursing final compensation was still untested at the time of the survey and its appropriateness for all FAP projects questionable.

institutional weaknesses The existing legal framework has no clearly stated fundamental principles, does not cover public participation/consultation and resettlement issues, and leaves room for improving procedural

29
guidelines for different stages of land acquisition, including principles for setting up an appropriate administrative framework. In particular, the prescribed method of valuation of acquired land by reference to sales records of last 12 months from the sub-registrar's office has been a major factor in causing dissatisfaction and malpractices over compensation issues and needs a thorough and careful review. *Record
office
disposal
malpractice
free*

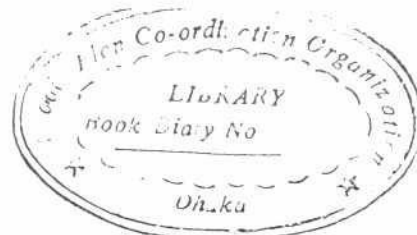
The 1989 Act runs out in 1994 and needs to be extended or the two legislations amalgamated into one single act, as advocated by most DCs who were interviewed.

3.2 Administrative Framework

The basic administrative framework for land acquisition consists of

- a Requiring Body (BWDB in case of FAP projects) to ensure planning and approval of projects, line up funds, identify land to be acquired and enlist/estimate the people to be displaced and initiate the proposal for land acquisition;
- an Acquiring Body, comprising the Ministry of Land, the offices of Commissioners, DCs, AC Land at Thanas and Tahsildars to maintain title records, administer revenue collection, and execute land acquisition through notification, determination and disbursement of compensation and effecting legal transfer of land to the Requiring Body;
- the offices of Inspector General of Registration, District Registrars and Thana level Sub-Registrars under the Ministry of Justice, basically recording all land transfers;
- the Directorate of Land Records and Surveys under the Ministry of Land, maintaining and updating Records of Rights (RoR);
- the Land Allocation Committees at district (DLAC), division (DLAC) and central (CLAC) levels to ensure the judicious use of land while approving land acquisition proposals;
- the Thana level functionaries of several Ministries, eg Agriculture, Forests, PWD, Roads and Highways, to ascertain prices of buildings, crops, trees etc on land to be acquired.
- an Arbitrator, a judicial officer not below the rank of Sub-Judge, and an Appellate Tribunal with one or more persons who are or have been District Judges, both appointed by the government, to deal with grievances in respect of compensation award.

There is bureaucratic proliferation which is one of the main causes of procedural delay. This is further aggravated by the existing land record system which provide very poor information on either land ownership or land prices. Consequently, the entire



system is subject to severe manipulations and fraudulent practices by different interest groups.

3.3 Public Consultation Experiences

According to the socio-economic survey the consultation experiences of households affected by land acquisition were found to be poor :

- only 3 percent remembered the alignment of embankments being discussed
- about a quarter agreed that the project was discussed
- about 61 percent received a proper notice of acquisition.

There was a demand for free and frank discussion of the entire project and land acquisition issues involving participation of government functionaries and local leaders including chairmen/members of Upazila Parishad, school teachers and village elderlies.

3.4 Compensation and Arbitration Experiences

The households affected by land acquisition found the compensation process to be administratively harassing, financially extortionate and economically unsatisfactory. Delays in receiving final compensation was a rule, and 2 of 5 affected households reported non-receipt of final compensation. Most households (87 percent) incurred extra legal expenditure, usually ranging between 1 to 5 thousand takas, but exceeding 10,000 takas in 1 of 9 cases.

the house
of 11
dislike There was universal dissatisfaction with land valuation, affected households estimating an undervaluation of 73 percent on average. Even when compensation was fixed at above market prices, the initial satisfaction soon evaporated with galloping land price inflation.

Compensation money was used in a variety of ways. About 12 percent was spent on land and 16 percent on house construction/repair. Consumption accounted for 22 percent while 36 percent was invested in business, cattle, money lending and bank deposits.

On average 40 percent affected households sought arbitration, a lengthy process taking about 9 notices, 3 hearings and 2 1/2 years of waiting for a verdict and over 4 years for final compensation.

3.5 Impact on Household Assets

According to the household survey in 26 villages around six embankment projects

- 38 percent households lost land;

- 32
- 4 percent lost homestead;
 - 18 percent lost crops;
 - 2 percent lost trees; and
 - a very small fraction (0.2 percent) lost businesses,

as a result of land acquisition.

Of the total land in adjoining villages about 15 percent was lost to acquisition which showed no class bias; proportionately more of the large land owners lost land, while the small landowners, if affected, lost proportionately more land.

Special category of losers :

About 33 percent households in adjoining villages had their homestead on the riverside, experiencing depreciation in land value and increased vulnerability from floods and erosion. They were often forced to squat on the embankments, 18 percent of them being squatters compared to 10 percent from the countryside. When physical relocation was involved, women and children carried heavier burdens of workload and income losses initially, but gained from new income opportunities with time.

3.6/ Impact on Employment, Income and Quality of Life

Negative employment impacts were mostly in the self-employment sector involving farmers and sharecroppers losing operational farms, fishermen losing fishing grounds and/or easier access to rivers, boatmen losing river routes/passengers and dislocated women losing markets for domestic products.

Positive employment effects included direct ones during embankment construction in which 7 percent households participated, mostly marginal land-owners (0.06 - 0.50 acre) rather than the landless (0 - 0.05 acre). Biases were observed in employing local workers, particularly women, in construction. Indirect employment opportunities unfolded over time in transport, petty trade, industries and service sectors.

Overall, the average income of affected households showed little change on project completion, but subsequently reported an increase of 13 percent above pre-project levels.

Considerable site-wise variation was observed in the income effect, Moulvibazar and Mirpur showing declines (28 percent and 24 percent respectively) while Sirajganj showed the largest gain (84 percent). No marked class bias was reported, the biggest gainers being the subsistence farmsize households (105 percent increase) followed by the functionally landless groups (21 percent increase). The highest decline was in the bottom (landless) category followed by the top (5.0+ acres), reporting 12 and 8 percent declines respectively.

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Within the household the long term gain in income accrued entirely to members other than the head; they gained 148 percent as compared to a 10 percent loss by the heads.

The affected households on average showed marginal improvements in the quality of life after the project in terms of housing, water supply and sanitation, although households who had to move homestead, faced short-term hardships.

3.7/ Resettlement and Rehabilitation

Resettlement on a large scale is not likely to be needed in FAP projects because

- land acquisition is usually along a linear strip; and
- displaced persons prefer self-managed resettlement within the existing communities or others of their own choice.

However, there are always some households requiring special assistance in resettlement. The largest group requiring temporary resettlement are those on the riverside and in the Char lands, who squat on embankments during the monsoons and cut embankments when threatened.

Experiences of large scale resettlement programmes :

Large scale resettlement efforts have generally been marked by failure. The political crisis in Chittagong Hill Tracts is a living reminder of the failure to resettle the tribal people uprooted by the Kaptai Dam project. The more recent and elaborate efforts at the Jamuna Bridge site are also likely to be a partial failure. The main reasons behind these failures are

- ✓ planning inadequacy, eg in Kaptai Dam the level of inundation was grossly miscalculated;
- ✓ lack of consultation with the displacees regarding their concerns and preferences;
- ✓ measures not being taken in time; at Jamuna Multipurpose Bridge Project (JMBP), for example, land was acquired before the resettlement programme was in place; so more than half of the displacees have already resettled themselves.

Experiences of small scale resettlement and rehabilitation :

A review of the resettlement and rehabilitation experiences of three NGOs, namely BRAC, Proshika MUK and Nijera Kori, and two governmental organizations (GOs), namely Guchchhagram and BRDB revealed that

- Poor households need empowerment to retain their assets, particularly if it is a free gift of land from the Government.

- 28
- Such empowerment has to be both economic as well as socio-political. Economic empowerment derives from income generation, while the essential ingredients in socio-political empowerment are awareness about rights and obligations and group/class solidarity.
 - A well implemented project creates ample economic opportunities, laying the foundation of economic empowerment. Nevertheless, the poor and handicapped still need the help of a facilitator to access these facilities by overcoming prejudices based on classes, genders and regionalism and to fight against extortionist forces.
 - When a project is not an immediate success, space is created for an organization experienced in income generating activities to play a role.

Comparison of GOs and NGOs in facilitating resettlement :

Both GOs and NGOs have successful performances to their credit as seen in the case studies on 5 organizations. The NGOs however appear to have an edge because of their greater flexibility and emphasis on conscientization of the target group.

NGOs however tend to create a new form of dependency and are generally not too concerned about the goal of self-reliance or 'graduation' for their 'target groups'. While NGOs create dependencies involving credit, inputs and markets, some GOs are seen to create a relief mentality and other remnants of semi-feudalism.

3.8 Planning and Design of Embankments

Land acquisition or resettlement issues are not adequately addressed in the design and planning of an embankment, in which public participation is virtually absent. A tentative alignment of the embankment is made during the feasibility study based mainly on hydrological analysis. No analysis is done of the costs and benefits of alternate alignment options, in terms of impacts on people, resources, economy and society on both sides of the embankment.

With a decreasing use of borrowpits for earthfill, minimization of land to be acquired for embankments can primarily be achieved through a reduction in its base width and by ensuring its stability, whereby retired embankments are avoided. Room for improving design to reduce the base width is minimal and dependent on detailed information on soils and their use in appropriate engineering design techniques. Embankment failures result primarily from faulty construction, inadequate maintenance, public cuts and river erosion.

Involvement of the local communities in maintenance works, including vigilance during critical periods, usually improves maintenance and deters public cuts. The more difficult phenomenon of river erosion calls for river training which has not received

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sufficient consideration in the past.

Multiple uses of embankments open up new avenues for resettlement and rehabilitation. Squatting, perennial or seasonal, local roads and cow grazing are the most common usage of older embankments. There are controversies among experts regarding various uses, particularly about trees and roads on the crest and smaller plants on the berm.

4. MAIN RECOMMENDATIONS

The Study makes ten main recommendations as noted below :

4.01 Minimization of Land to be Acquired

All efforts should be made to minimize land acquisition under the FAP. Measures should include

- minimization of base width of embankments through more accurate planning and use of better earthfill materials;
- improvements in the stability of embankments through better construction and maintenance, involving the local community as appropriate;
- avoidance of borrow pits, particularly on the country side, for only earthfill;
- leaving small scale resettlement to private initiatives;
- linking river training to embankments on erosion prone rivers; and
- avoiding projects with financial and/or technical uncertainties.

4.02 Optimal Alignment of Embankments

The alignment of embankments should be optimized through an accurate assessment of costs and benefits of alternative options, giving due importance to technical safety, dislocation of people and changes in the productivity of land, both inside and outside the embankment. Accurate land records (through sample surveys at the time of the feasibility study pending improvements in the existing land record system), and more importantly, public participation are essential in ensuring such an optimal alignment.

4.03 Compensation to be Fair and Quick

A fair compensation free of harassment should be ensured, for which the following steps are strongly recommended.

- adoption of some fundamental principles, such as 'nobody is worse off' and 'beneficiaries share costs';

- 27
- extension of compensation to other categories such as households on the riverside, sharecroppers, boatmen and fishermen;
 - a realistic determination of compensation ranging from cash value of land lost to rehabilitation opportunities for displaced families;
 - procedural improvements through greater transparency and realization/enforcement of codes, rights, duties and obligations of public functionaries and private citizens in respect of land acquisition procedures.

4.04 Arbitration : Public Representatives and Time Limits

Arbitration should best be avoided by involving public representatives and the affected people in critical decisions that determine land to be acquired and levels of compensation. Public representatives should also be involved in the first semi-judicial level of arbitration when it is unavoidable, before taking recourse to the civil court.

All arbitration procedures, including those involving the judiciary, should have time limits.

4.05 Resettlement : Self-managed and Assisted

Fair and quick compensation is recommended as the best strategy for small scale resettlement need, as experienced in the linear acquisition of land for embankments. In special cases requiring rehabilitation assistance, two options could be offered, namely

- assistance for self managed resettlement, and
- physical resettlement either on Khas land or in a raised linear settlement along the embankment on the countryside.

In case of large scale resettlement, advance planning in consultation with potential displacees is recommended. Resettlement must be well-timed and titles to new homestead should be transferred preferably to both husband and wife with appropriate stipulations on subsequent sale or transfer.

4.06/Economic Rehabilitation : Interventionist and Awareness-raising

A well planned and well implemented project with a high social rate of return should be regarded as the best strategy for the economic rehabilitation of displaced people. Such planning should be participatory, comprehensive and accurate, ensuring economic rehabilitation opportunities in all stages of the project, such as

- jobs in the feasibility study;

- 29
- preferential access, particularly for the females, to construction work;
 - preferential access to berms and borrow pits for productive engagement in agriculture, forestry, fishery and various other economic activities;
 - enhanced employment in agriculture, industries and services, resulting from the project.

Rehabilitation programmes should be both interventionist, eg provision of credit and technology, as well as awareness raising, eg legal aid, non-formal education etc.

4.07 / Improved Funding Arrangements and Mobilization of Local Resources

Shortage of funds for land acquisition should be avoided by making a more realistic assessment of requirement and modifying various existing procedures on the disbursement of allocations under the Annual Development Plan (ADP).

Furthermore, local resources should be mobilized and 'sharing of costs by beneficiaries' gradually introduced as an inseparable constituent of the concept of 'participation'.

4.08 / A New Legal Framework

A new unified Act on Land Acquisition founded on some fundamental principles is recommended in place of the two existing pieces of legislation, retaining their more useful parts while removing gaps and ambiguities. The new Act should be based on informed public debate and provide clear guidelines on administrative structures and arrangements for involving public representatives and other relevant bodies in appropriate roles.

4.09 / Restructuring the Administrative Framework

To implement the measures recommended earlier to improve the land acquisition process and minimize hardships imposed on people, a substantial restructuring of the existing administrative framework will be required. Some specific measures recommended in this regard are

- setting up a Flood Action Plan Authority (FAPA) at the centre and 5 regional FAPAs to ensure a balanced participation of all people and institutions in critical decision making, and thus improve coordination and enhance accountability;
- discarding land acquisition committees (CLAC, DLAC) as dysfunctional for major projects;
- merging land registration offices with the Ministry of Land (see further under 4.10);
- setting up Land Valuation Committees at the District level;

- 2
- experimental introduction of direct land purchase by the Acquiring Body under full legal cover and governmental support;
 - encouraging NGOs to play an effective role in various stages of land acquisition, resettlement and rehabilitation.

4.10 A Modern Land Record System

Modernization of the present land record system is strongly recommended as a measure that will not only improve the land acquisition process significantly, but also lay the foundation for optimal land use in this country. For this two options are available :

- an intermediate measure within the frame of the existing system, by standardizing deed formats, introducing photocopiers and making registration of transfer compulsory within set time limits; and
- a more fundamental reform involving a computerized database, digitized mapping, compulsory registration of land transfer and merging of land registration with land administration offices.

SOME FINDINGS FROM THE HOUSEHOLD SURVEY IN CHARTS

Some of the more important findings of a household survey undertaken by this study at six embankment project sites are presented in ten charts following this page. Information on the survey methodology as well as the full results are in the main text (chapters 1 and 4 respectively). In selecting the findings an attempt has been made to cover the most important aspects of the land acquisition process from the point of view of the affected households.

Chart 1: Land Acquisition Consultation Process: the Household Experience

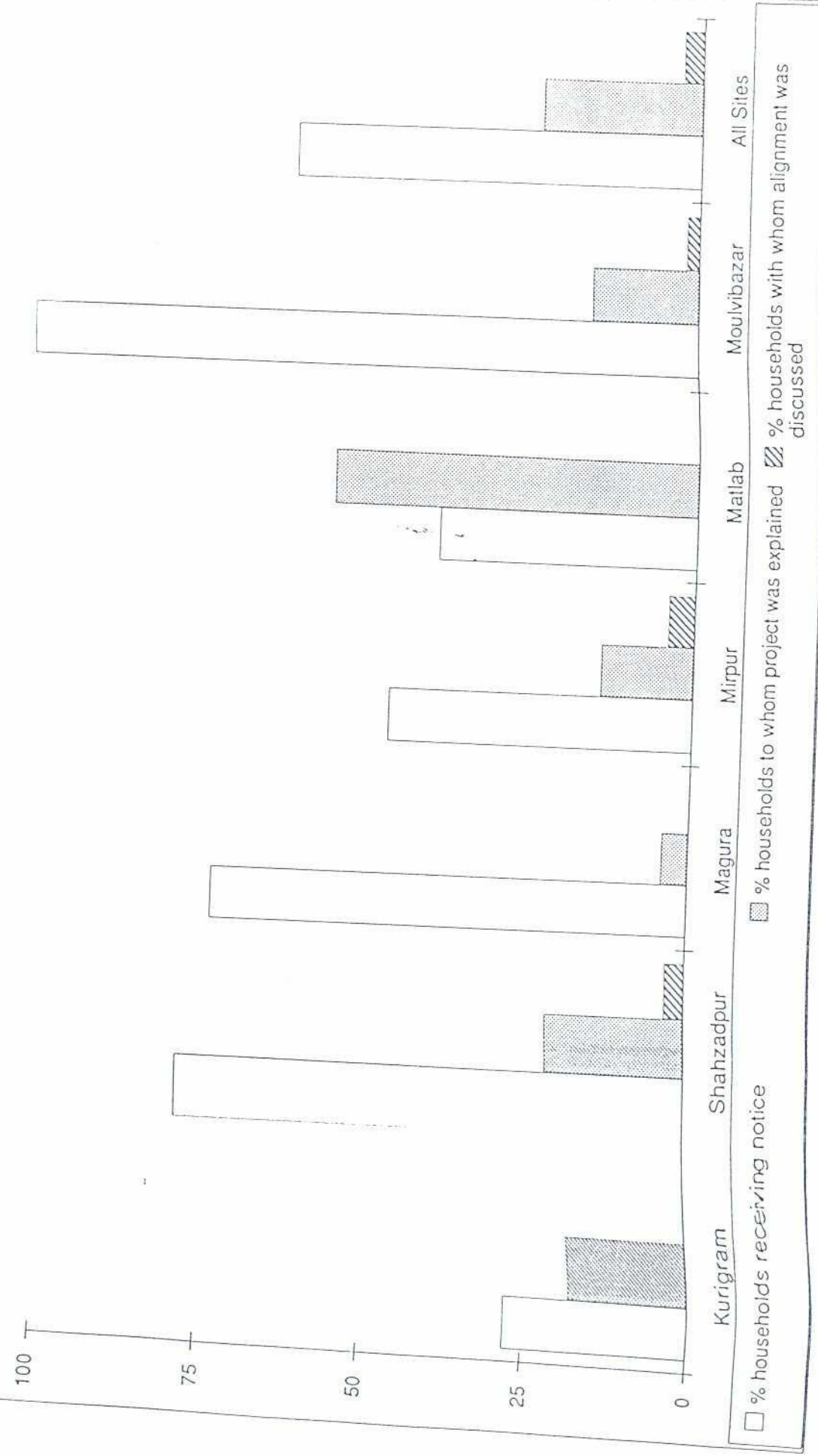


Chart 2: Magnitude of Population Affected by Land Acquisition

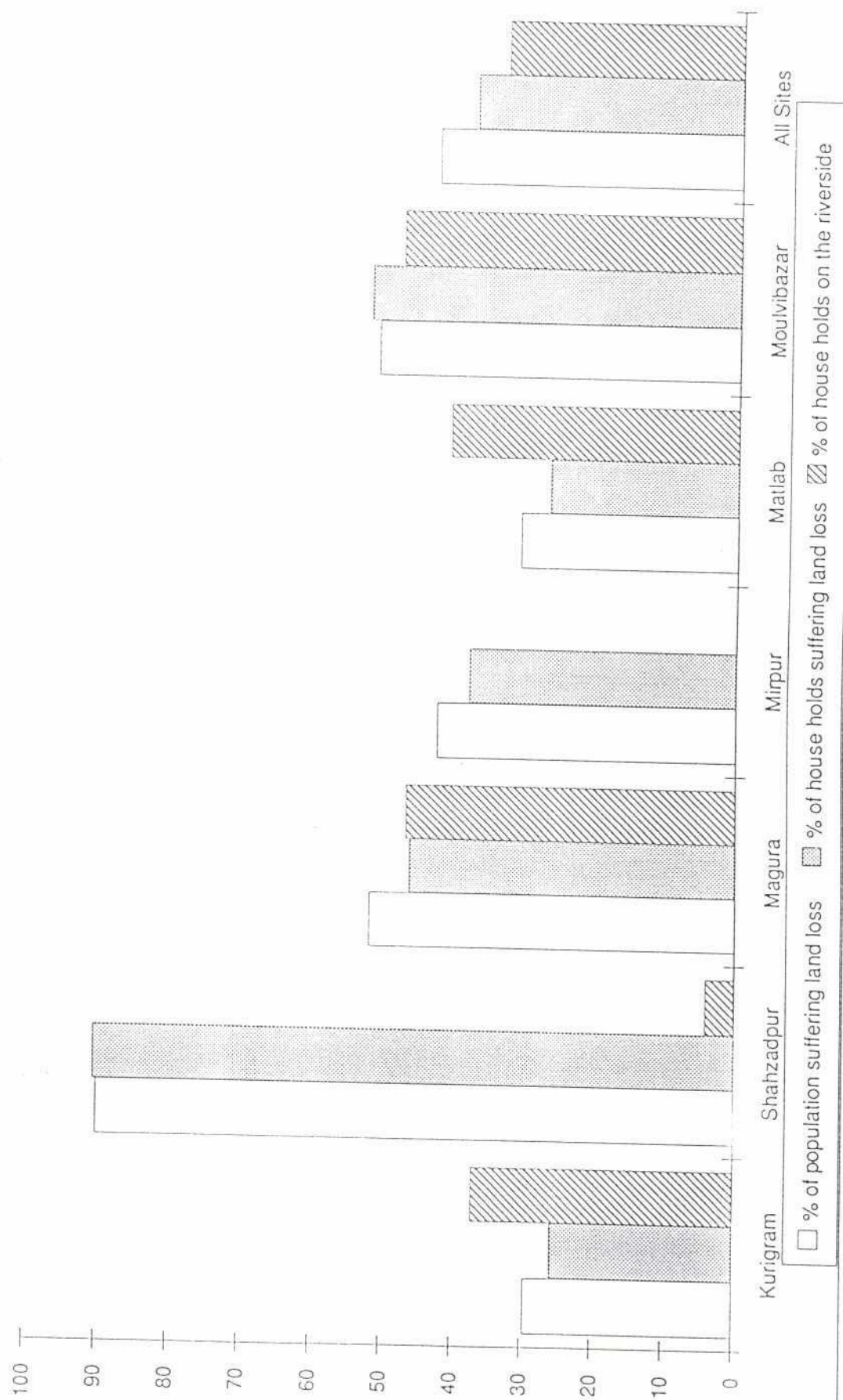


Chart 3: Magnitude of Land Loss by Ownership Categories

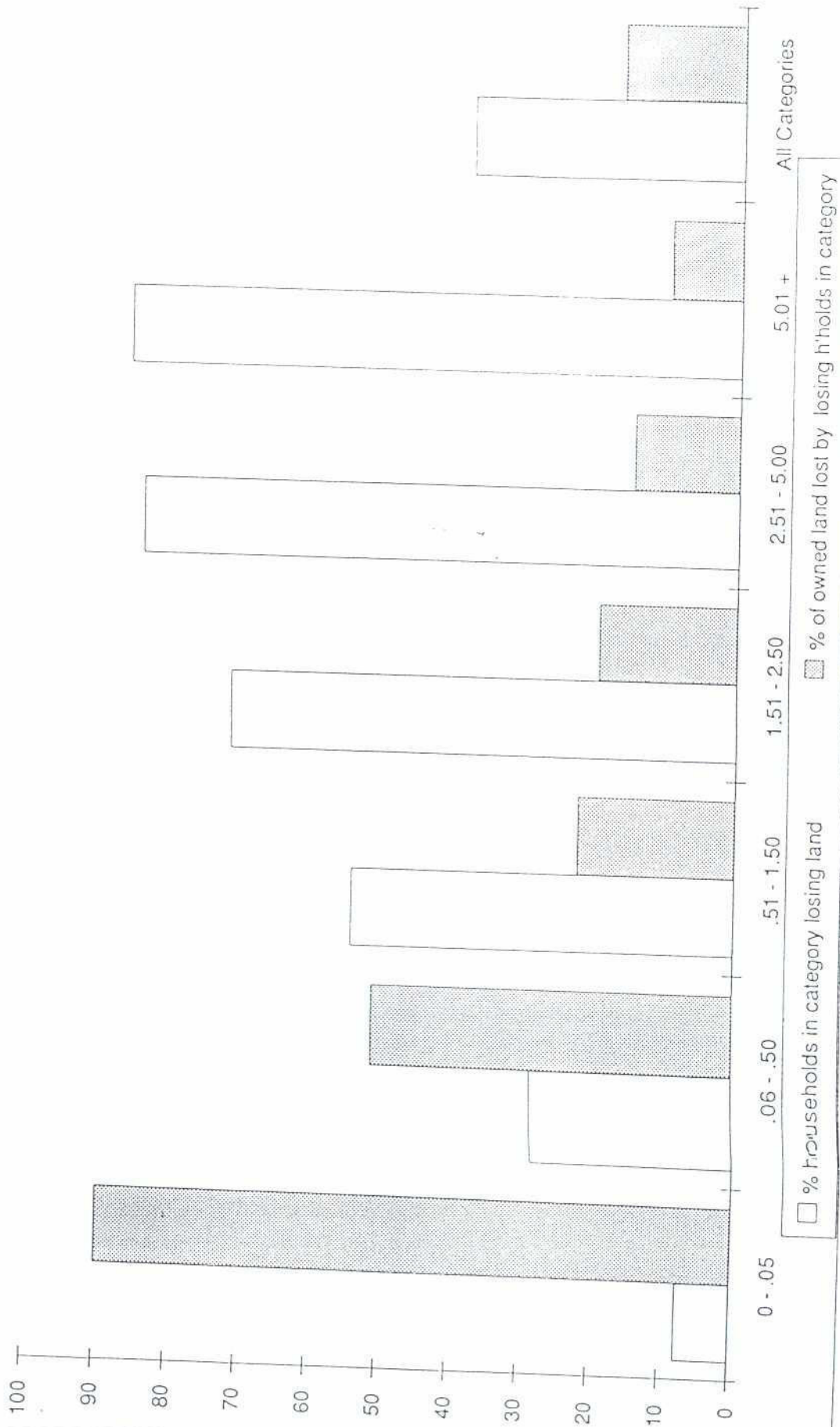


Chart 4: Other Losses from Land Aquisition: Crops, Houses, Trees, Businesses

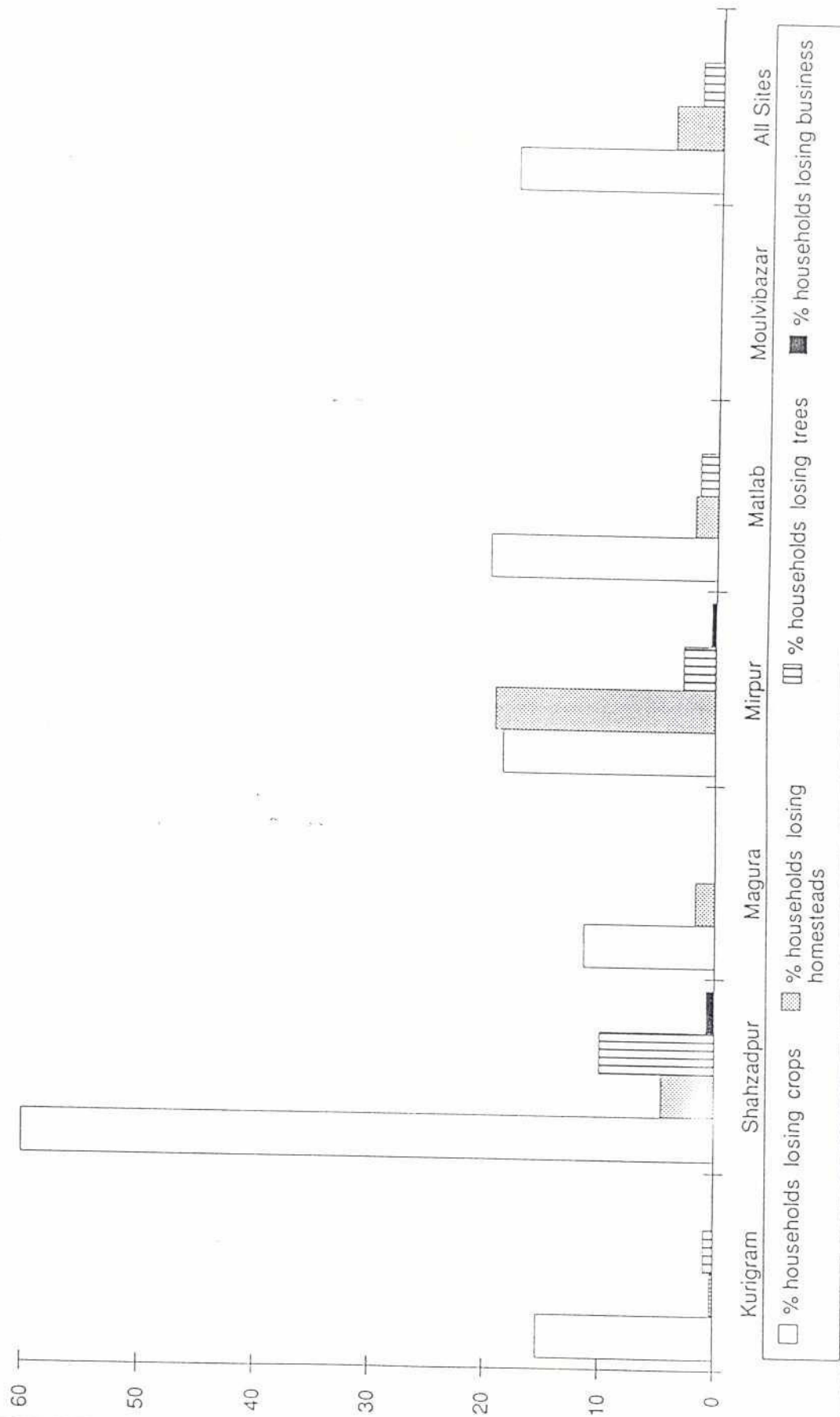


Chart 5: Compensation Delays: Gap Between Notice and Final Compensation

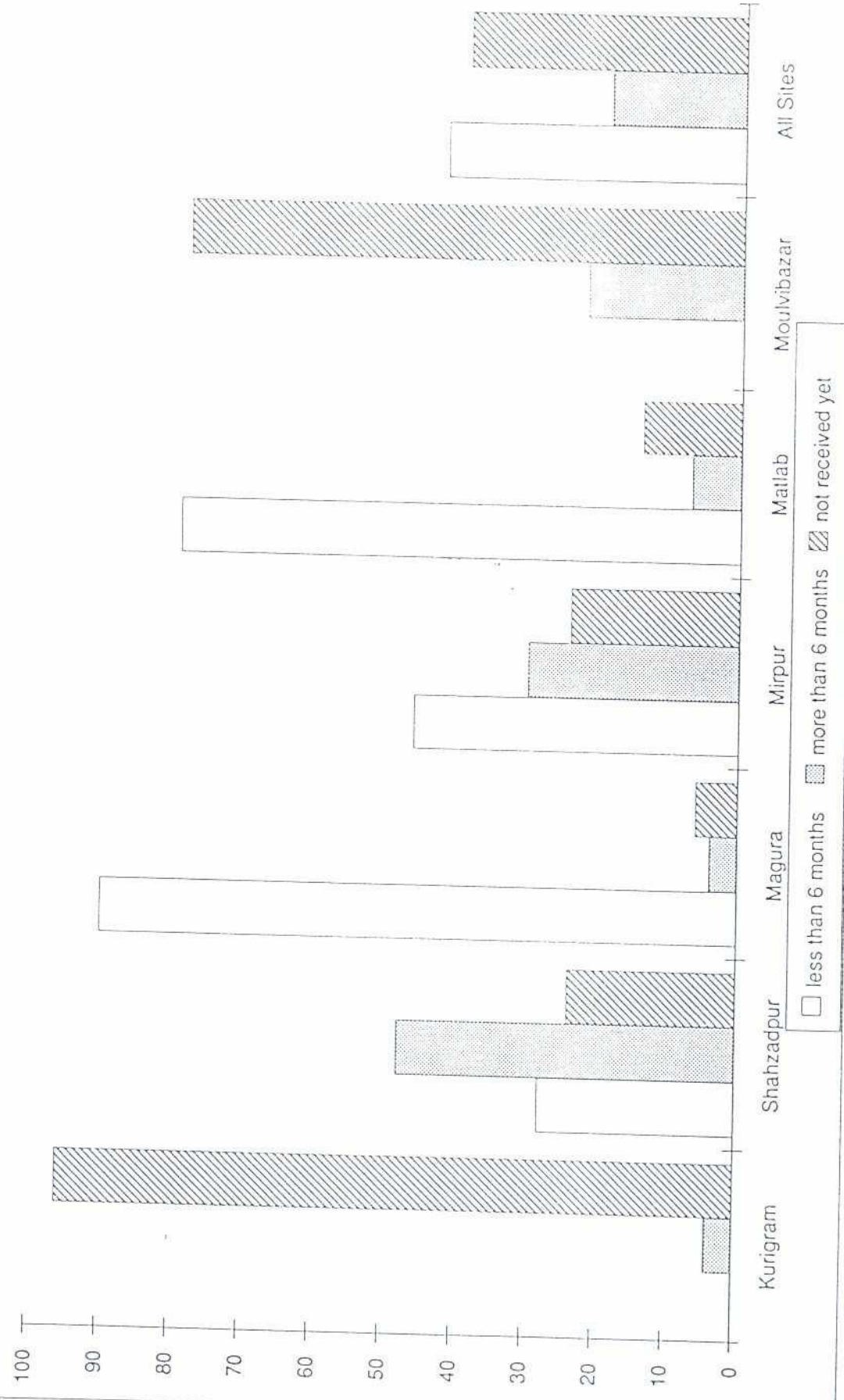


Chart 6: Extra Legal Payments on Compensation & Arbitration Procedures

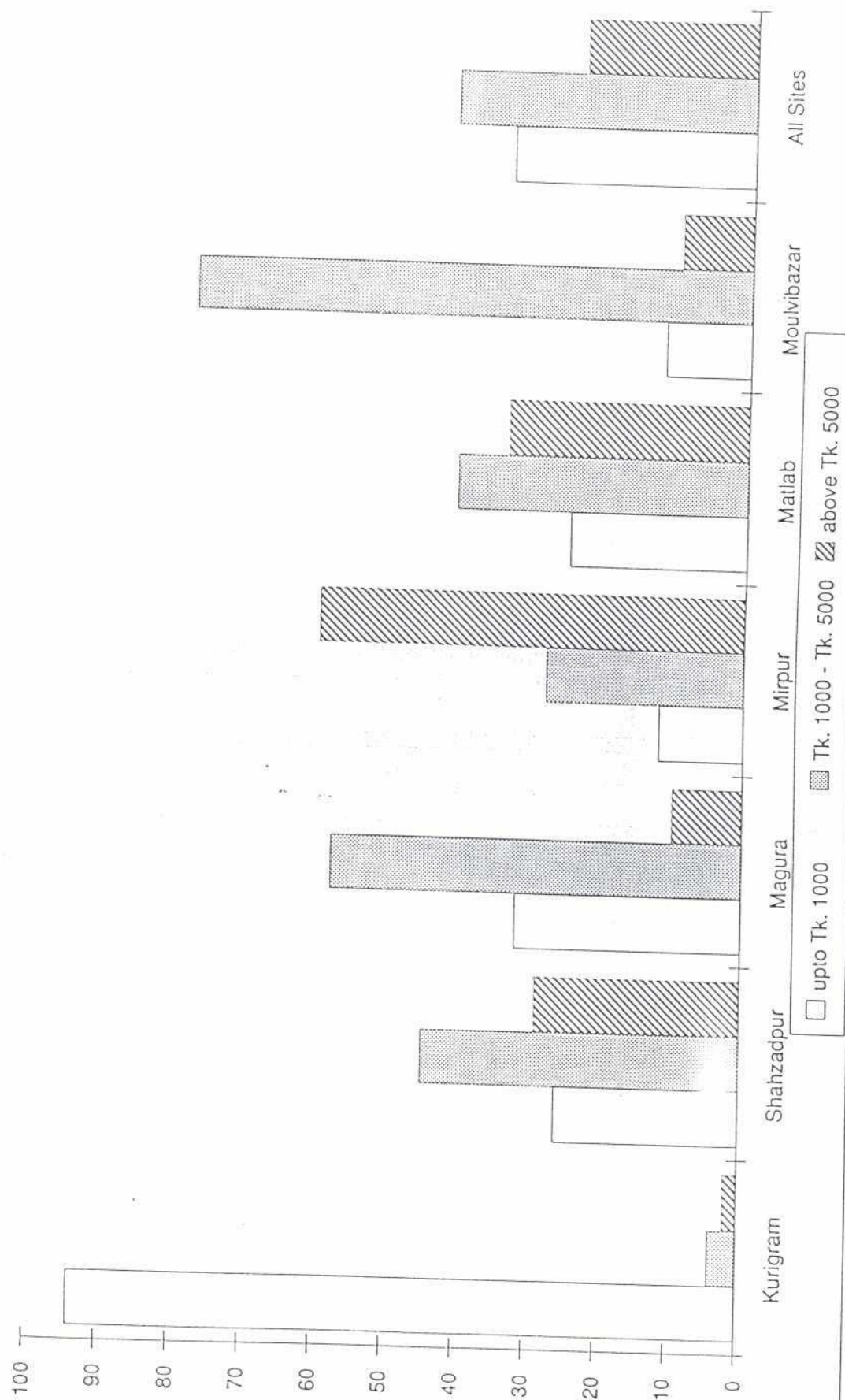


Chart 7: Use of Compensation Money Received by Persons Affected by Land Acquisition

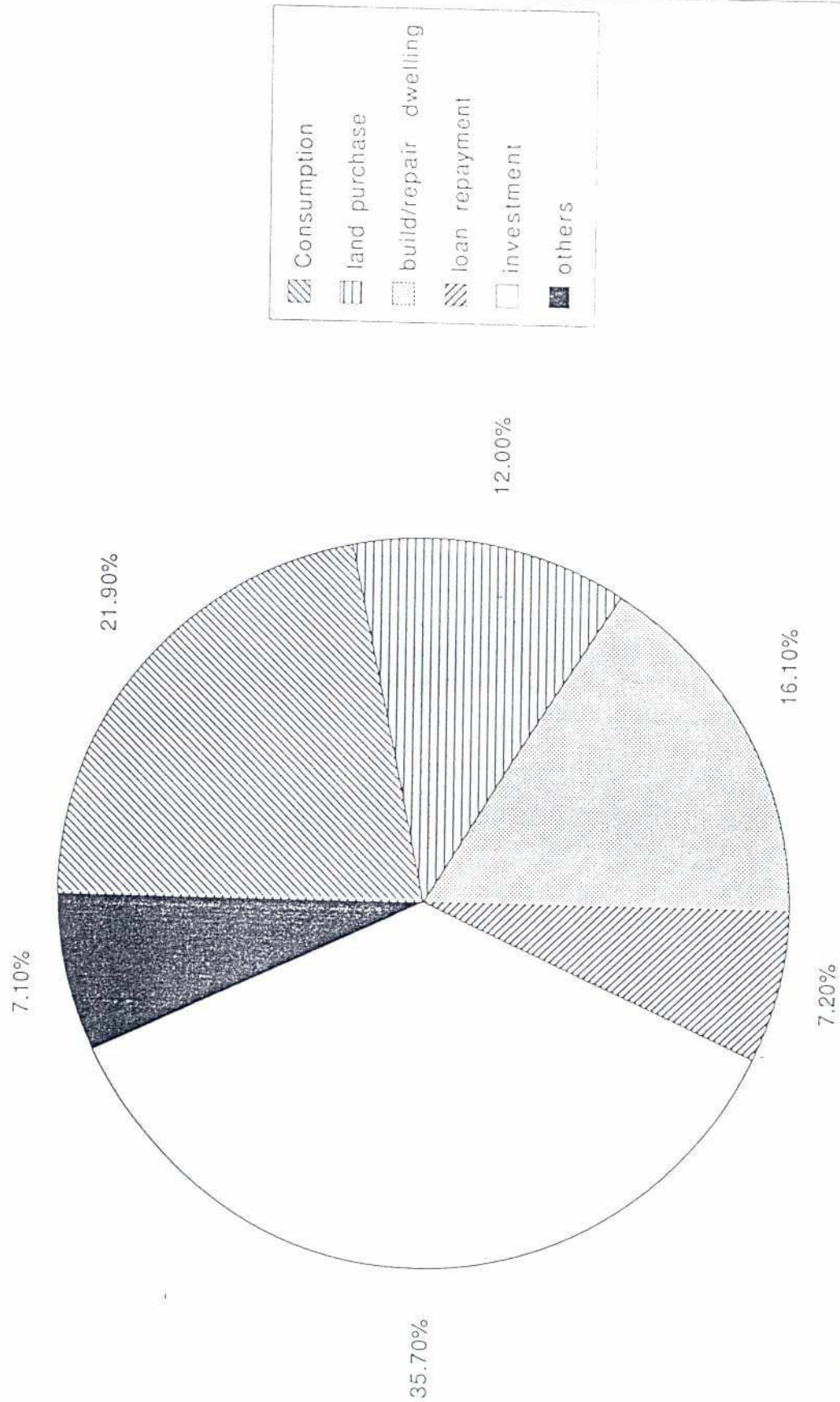


Chart 8: Impact on Land Prices

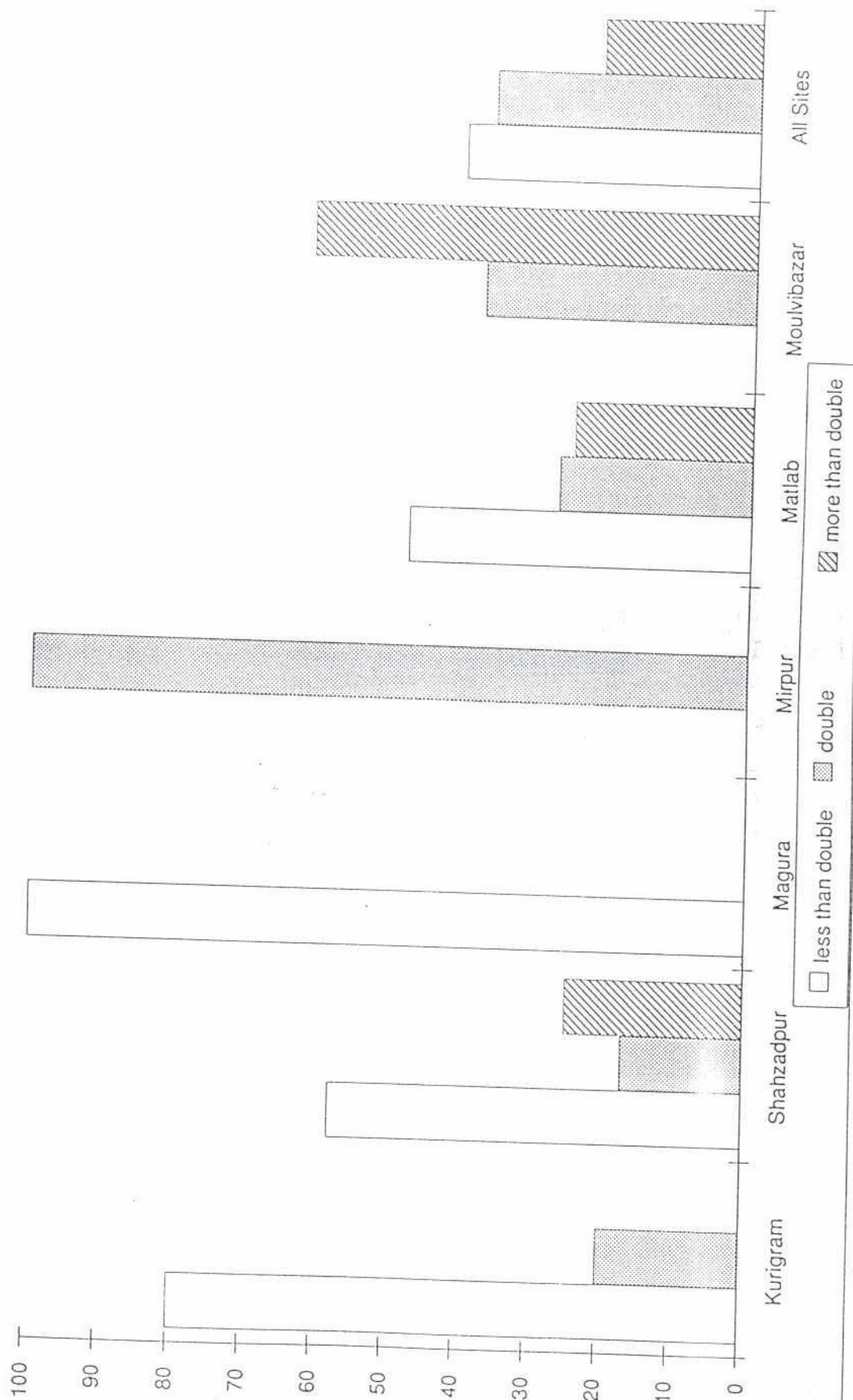


Chart 9: Impact on Household Income : Percentage Changes by Land Ownership

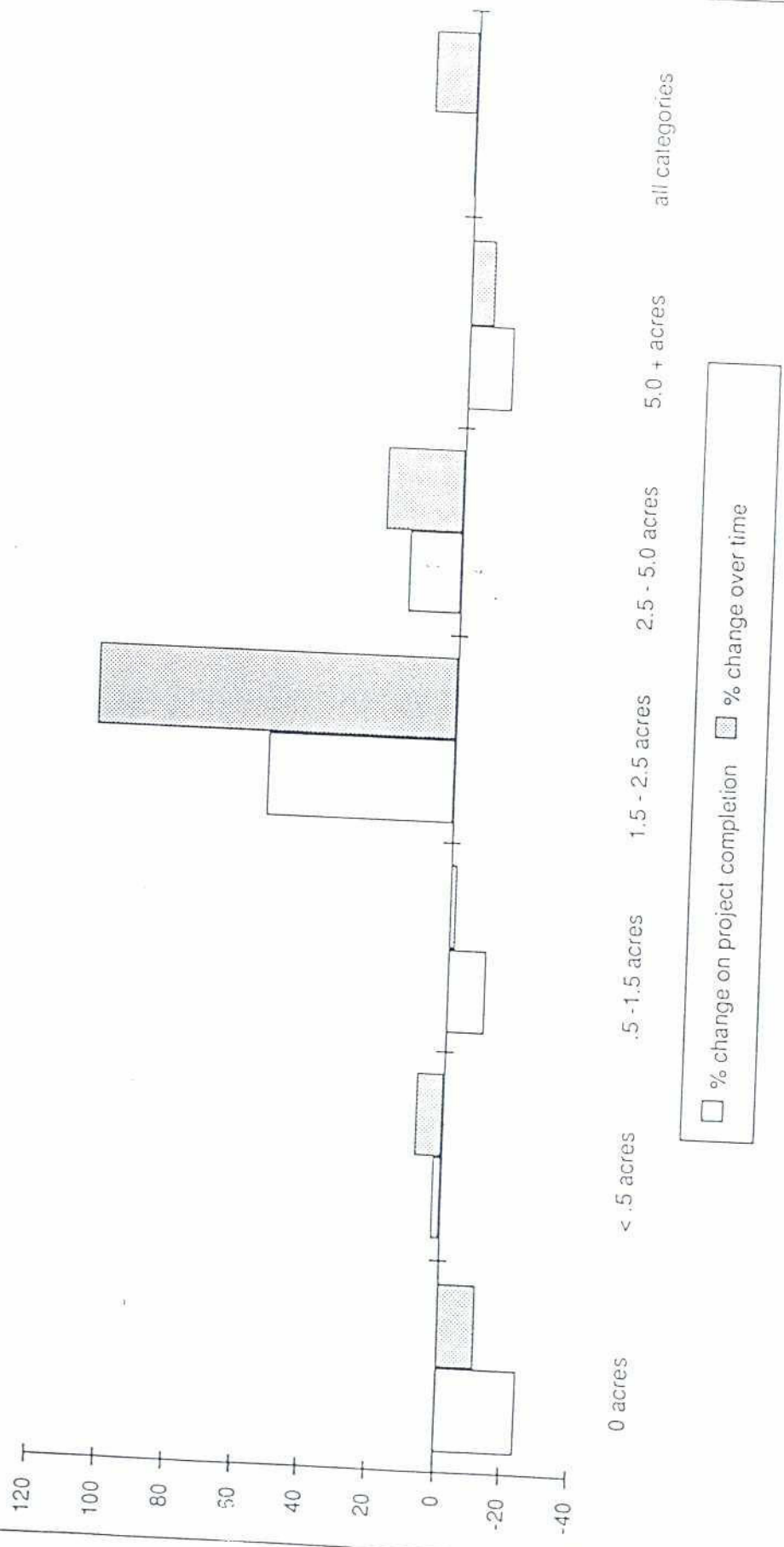
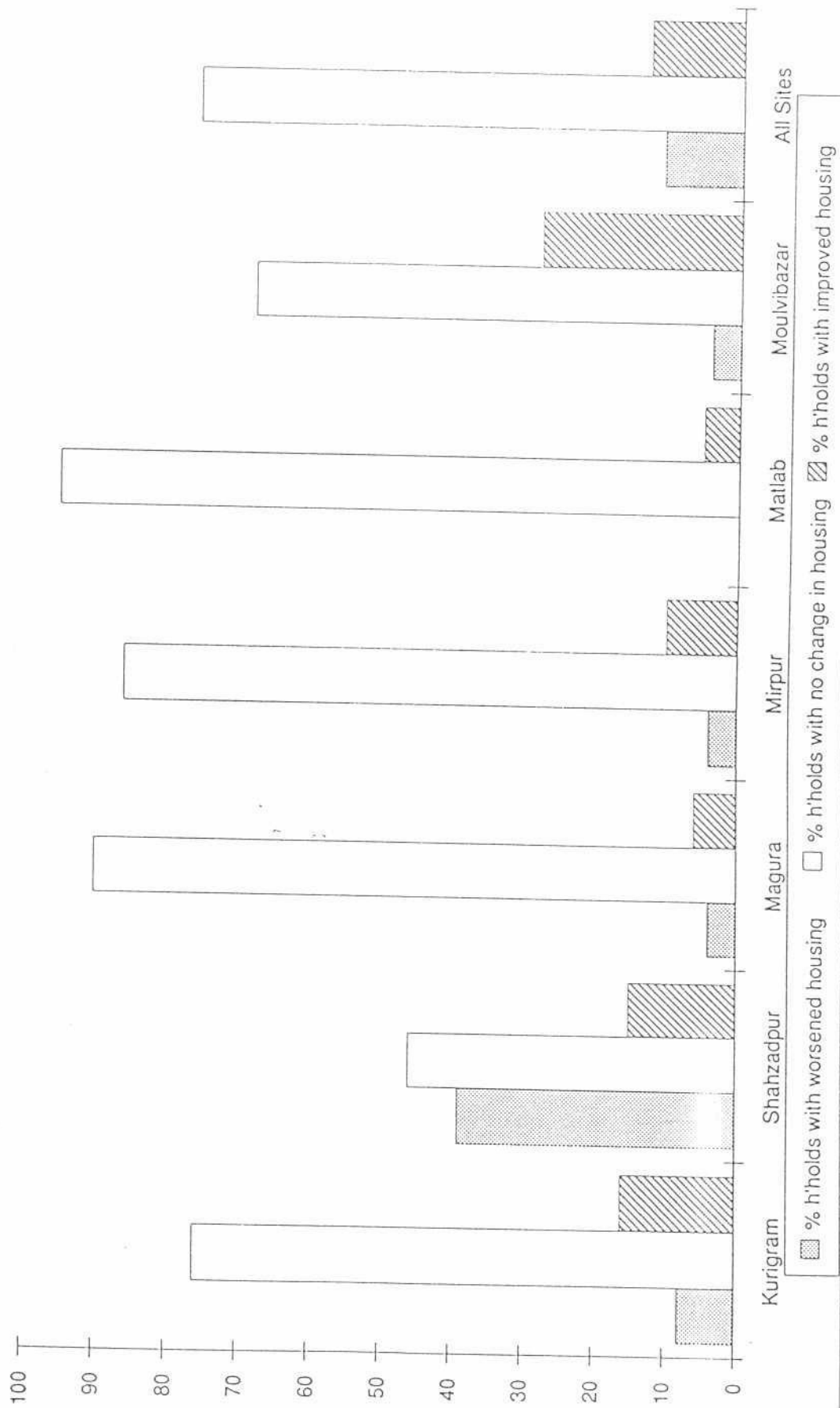


Chart 10: Impact on Living Standard: Housing



Chapter 1

1. INTRODUCTION

1.1 Introduction to the Study

This is the Final Report on a study on Land Acquisition and Resettlement under the Flood Action Plan (FAP).

The study was sponsored by the Ministry of Irrigation, Water Development and Flood Control, Government of Bangladesh, financed by the Swedish International Development Agency (SIDA) and carried out by HIFAB International and Multidisciplinary Action Research Centre (MARC) over the period January 1991 to March 1992.

This study (FAP-15) is one amongst 26 studies under the FAP and falls into the category of supporting studies, of which there are 15.

1.2 The Flood Action Plan

The Flood Action Plan (FAP) is the first phase of a long-term plan for flood control, drainage and river management in Bangladesh. It owes its origin to two most severe floods which the country experienced in the consecutive years of 1987 and 1988. The latter was recorded as the worst ever in history. It caused colossal damages, aroused worldwide sympathy and stimulated efforts from various bilateral and multilateral agencies to find a long term solution to this recurring problem. By June, 1989 the World Bank accepted the role of coordinating these international efforts and in July 1989 held an experts group meeting in Washington to discuss future action.

The concept of the Flood Action Plan as a series of studies over a five year period on project preparation and evaluation, regional studies, and a range of supporting studies, emerged from this meeting.

The proposal was further developed in consultation with the Government of Bangladesh and the Flood Action Plan was given full support by the donors in a G-7 meeting convened by the British government in London in December 1989.

1.3 The Importance of Land Acquisition in Bangladesh

Land acquisition has always been viewed with concern in Bangladesh for three reasons.

First, land is a scarce resource in land poor Bangladesh and any acquisition of agricultural land in particular is seen as a further aggravation of the land use pattern, taking land away from more productive to less productive usage. For poorer households, losing all or most of their land means a quantum

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change in their economic as well as social status.

Second, the people of this country have a deep rooted emotional attachment to land, particularly when it is ancestral. It gives one an identity and a sense of belonging in a society whose agrarian character still continues to be very strong. So, for households which lose their ancestral homestead, it is a great emotional distress.

Third, the process of land acquisition is full of hardships and harassment, including procedural delays, low compensation, bribery and various fraudulent practices. The prospect of land acquisition therefore arouses strong feelings of apprehension and resentment amongst ordinary people.

Since projects under the FAP are likely to involve land acquisition on a significant scale, a supporting study on this subject was considered to be essential in order to clarify the important issues and identify an optimal strategy for land acquisition.

1.4 The Objectives of the Study

The five main objectives of the Study were

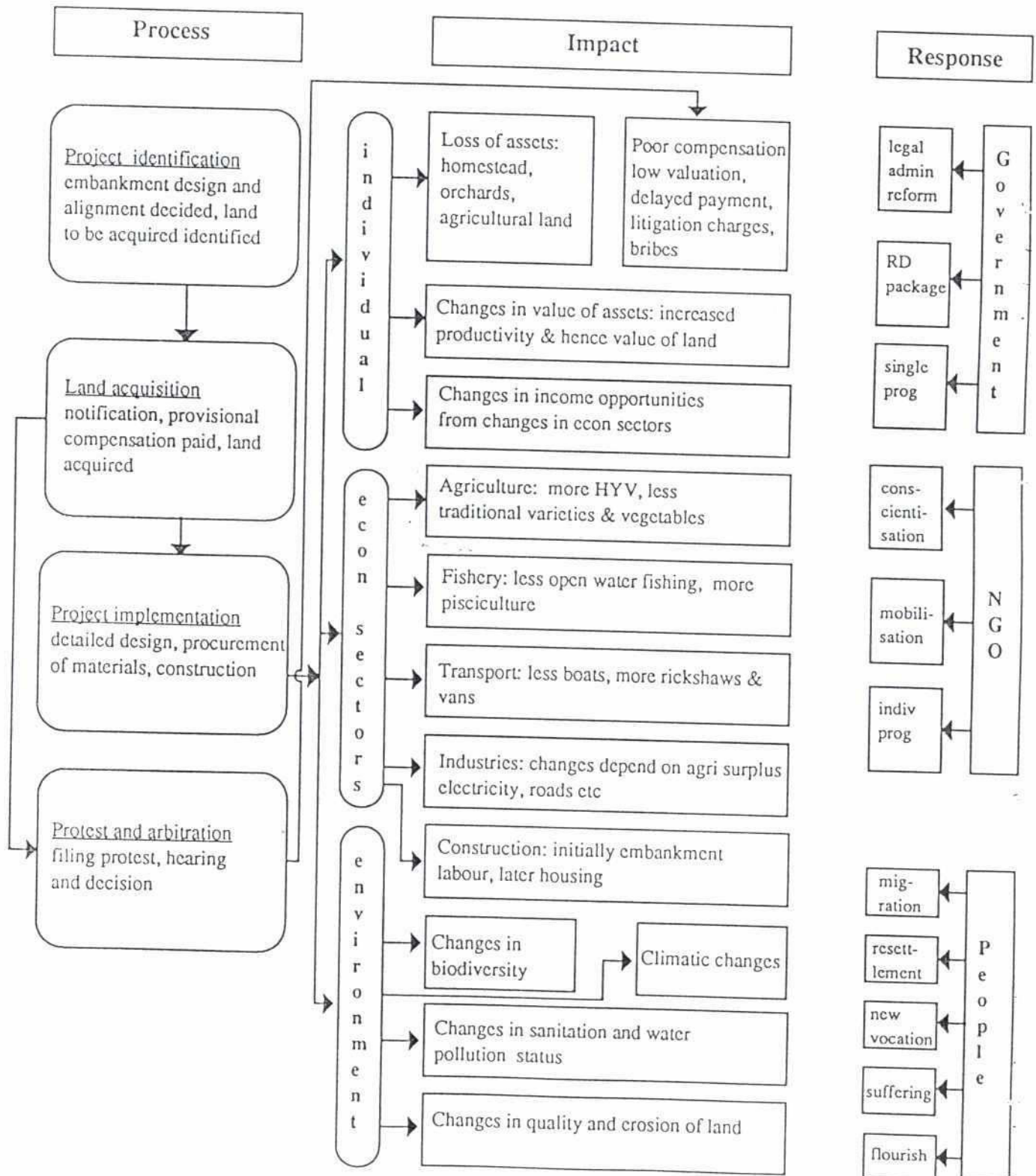
- to assess the social and economic impacts of land acquisition on families whose land was acquired for the construction of water sector projects in the past;
- to assess how land acquisition procedures and methods of payment may be streamlined to benefit households whose land is acquired in the future;
- to identify ways in which displaced families can be resettled so that their economic viability can be assured;
- to develop criteria and approaches for use in the design of Action Plan projects so as to minimize the land acquired and to facilitate rehabilitation of displaced families; and
- to develop criteria, guidelines and procedures for land acquisition and resettlement in Action Plan projects.

It may be noted that the first four objectives are of a substantive nature while the fifth one is procedural and embraces all the areas covered by the substantive objectives.

The Terms of Reference of the Study spells out in greater detail thirteen specific tasks, as shown at Annex-1.

Figure 1.1

An Analytical Framework on Land Acquisition : Impact on People and Economy and Responses from Government, NGOs and People



1.5 Methodology

1.5.1 Analytical Framework

An analytical framework for this study is presented in a diagrammatic form in Figure 1.1 on page 3. Since the subject matter of this study ranges from land acquisition to rehabilitation, the analytical framework has to cover a wide domain which is best divided into three zones as noted below.

First, the overall process of land acquisition is conceived as involving four broad activities or sub-processes, namely project identification, land acquisition, project implementation and adjudication of protests, which bring about interfaces between the people, the technocracy, the bureaucracy and the judiciary.

Second, the implementation of an embankment project leads to various impacts on individuals, economic sectors and the environment. Some of these impacts may be beneficial while others are detrimental. These impacts are not confined only to those who lose land or those who are inside the embankment.

Third, to cope with the adverse impacts and take advantage of the beneficial ones, there would be responses of different types and degrees from the government, the NGOs and the people themselves. Governmental responses would typically consist of various sectoral programmes of delivering services and supplies. The NGOs, on the other hand, would be covering a smaller geographical area but would have a more grass roots approach. The individual response is dependent both on available opportunities as well as individual capabilities in accessing these opportunities. An extreme example of individual response to a distress situation is migration.

Eleven household categories were defined on the basis of the location of their homestead and land in relation to the embankment. These categories are used in clarifying notions and definitions about an embankment's overall impact on households in adjoining villages.

The household taxonomy is shown diagrammatically in Figure 1.2 on page 5.

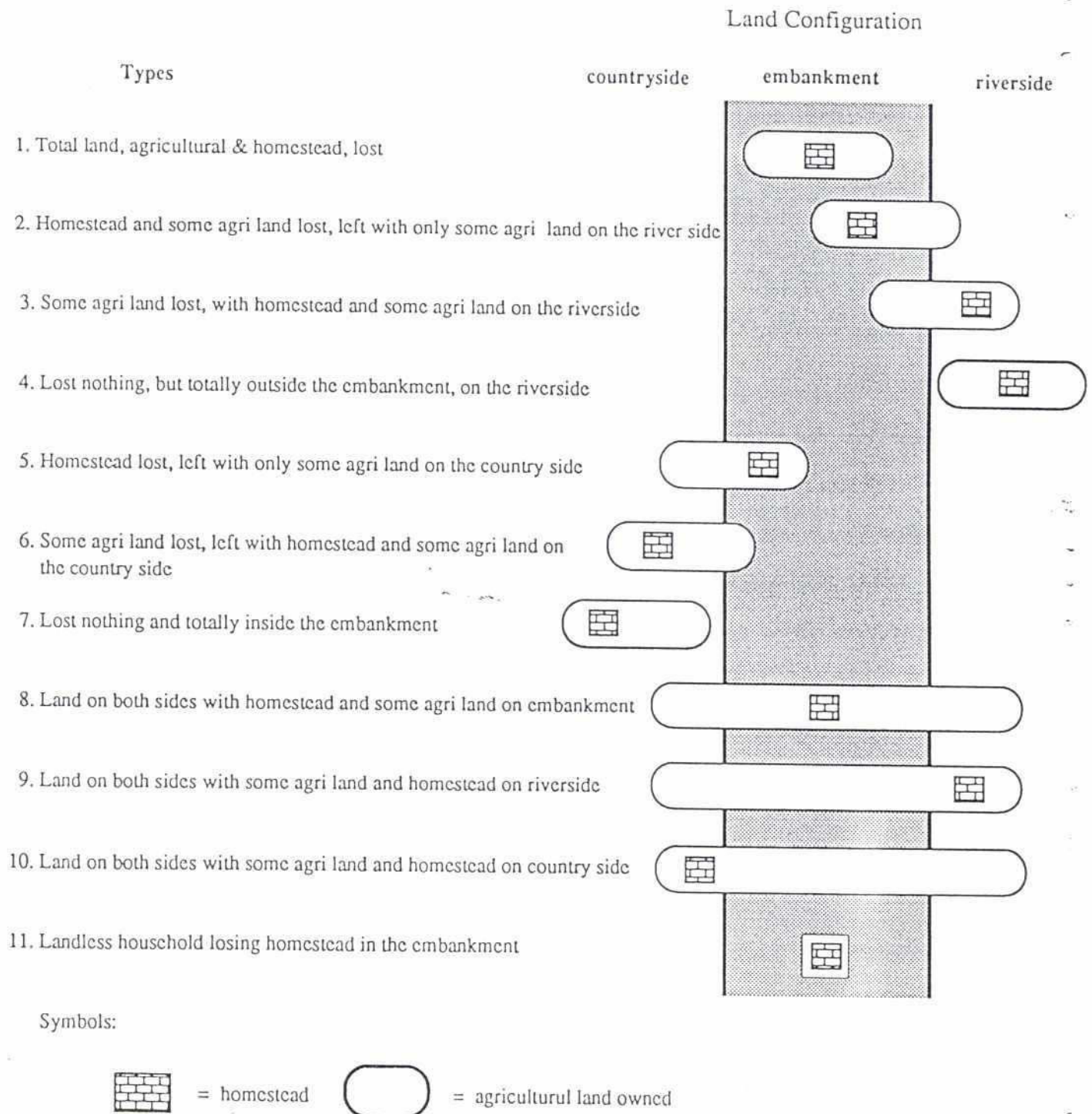
1.5.2 Components of the Study

The Study had multiple objectives and required different approaches in dealing with each of the main objectives. It was therefore divided into six components which addressed the four major substantive objectives (while the fifth one on criteria and guidelines was automatically covered by the substantive components). The six study components were

- a socio-economic survey, addressing the objective of assessing the social and economic impacts of land

Figure 1.2

Typology of Land Owners Effected by Land Acquisition



acquisition;

- a case study on the Jamuna Multipurpose Bridge Project, essentially addressing the same objective as noted under the component above;
- a review of the legal and administrative frameworks of land acquisition, addressing the objective of assessing how acquisition procedures and payment methods may be streamlined;
- a review of land records and registration systems, essentially addressing the same objective as stated under the component above;
- a review of resettlement and rehabilitation efforts, addressing the objective of assessing ways of ensuring economic viability of displaced families;
- a review of the planning and design of embankments, addressing the objective of finding out ways of minimising land acquisition and facilitating rehabilitation.

a. Methodology for the Socio-economic Component

This consisted of the following steps

- a selection of six sample project sites, first by selecting the projects and then selecting a specific segment of it with an adjoining village;
- a household census in the selected villages;
- a survey of affected households in the selected villages;
- an intensive survey of a sample of affected households, and
- community consultation meetings at the selected villages.

The sample design and research instruments/guidelines appropriate for each step are briefly described below.

Selection of Project Sites

The criteria for the selection of sites included the following:

- coverage of ecological, and hence regional variation;
- coverage of different types of embankments, e.g. major rivers, EIP, submersible embankments;
- variation in linkage to national and regional markets, indicative of opportunities for rehabilitation.

Based on the above, and in consultation with the Flood Plan Coordination Organisation (FPCO), the following six projects were selected:

- | | |
|--|----------------------|
| 1. Kurigram Irrigation Project | : North-western zone |
| 2. Brahmaputra Right Embankment Project
(Enayetpur-Shahzadpur area) | : North-western zone |
| 3. Monu River Project | : North-eastern zone |
| 4. Dhaka City Flood Protection Project | : Central zone |
| 5. Kalidaskhali Arpara Project | : South-western zone |
| 6. Meghna Dhonagoda Irrigation Project | : South-eastern zone |

The location of the selected projects are shown on a map (Figure 1.3 page 9).

To select specific sites for the survey, the investigators made reconnaissance trips to the first five projects in the above list. A specific spot on each embankment was selected, after analysing the reconnaissance data, in terms of distance from the project office (at least 5 km), distance from the nearest town (at least 10 km), the distribution of human settlement and agricultural land around the embankment and the depth of flooding prior to the embankment. The BWDB personnel were consulted about the 'typicality' of the selected sites.

Household Census in Selected Villages

After a specific spot was selected in terms of a village touching the embankment, a complete household census was carried out in this village and in other villages along the embankment following a north-west corner principle till about 180-200 'affected' households, that is those whose land had been acquired, were obtained. From the six projects, 26 villages were selected which had a total of 3858 households. A list of the selected villages is at Annex-5. The schedule for household census consisted of 8 quantitative variables on the households, excluding identification.

Survey of Affected Households

The affected households as identified through the household census were interviewed on a number of issues related to their experience of land acquisition, particularly their status in respect of compensation, arbitration and resettlement. The questionnaire used for this survey contained 29 items of quantitative and 1 of qualitative information. The households covered under this survey were 1407 in the six project sites.

Intensive Survey of a Sample of Affected Households

Approximately one quarter of the affected households were chosen to represent the relevant land configuration categories, including those who were on the river side, even if their land was not acquired. The total number of households covered by this survey was 318. The questionnaire used, had approximately 161 items of quantitative and 10 items of qualitative (descriptive) information.

Community Consultation Meetings

The community survey aimed to obtain information which were essential characteristics of the community and were unlikely to be obtained accurately from individuals, such as land prices, number of migrants, project benefit to the community, etc.

The most important economic sectors in the surveyed villages were identified and one knowledgeable person from each was selected as a respondent. In addition, traditional leaders, such as Matbar, UP Chairman/Member, school teacher and Imam, as well as representatives from housewives and students (male and female) were also included as respondents. A meeting was held at some community centre, such as the UP office or a school, and discussions were held as per checklist and in accordance with the given guidelines. A separate meeting was held for women in communities where 'purda' was strong.

b. Methodology for a Case Study on the Jamuna Multipurpose Bridge Project (JMBP)

This case study aimed to gain insights on two aspects of the study :

- the experience of the application of 1989 Act on land acquisition, specially in respect of compensation and socio-economic impacts on women;
- the experience of large scale resettlement efforts in improving the socio-economic condition of the affected households.

The case study methodology included

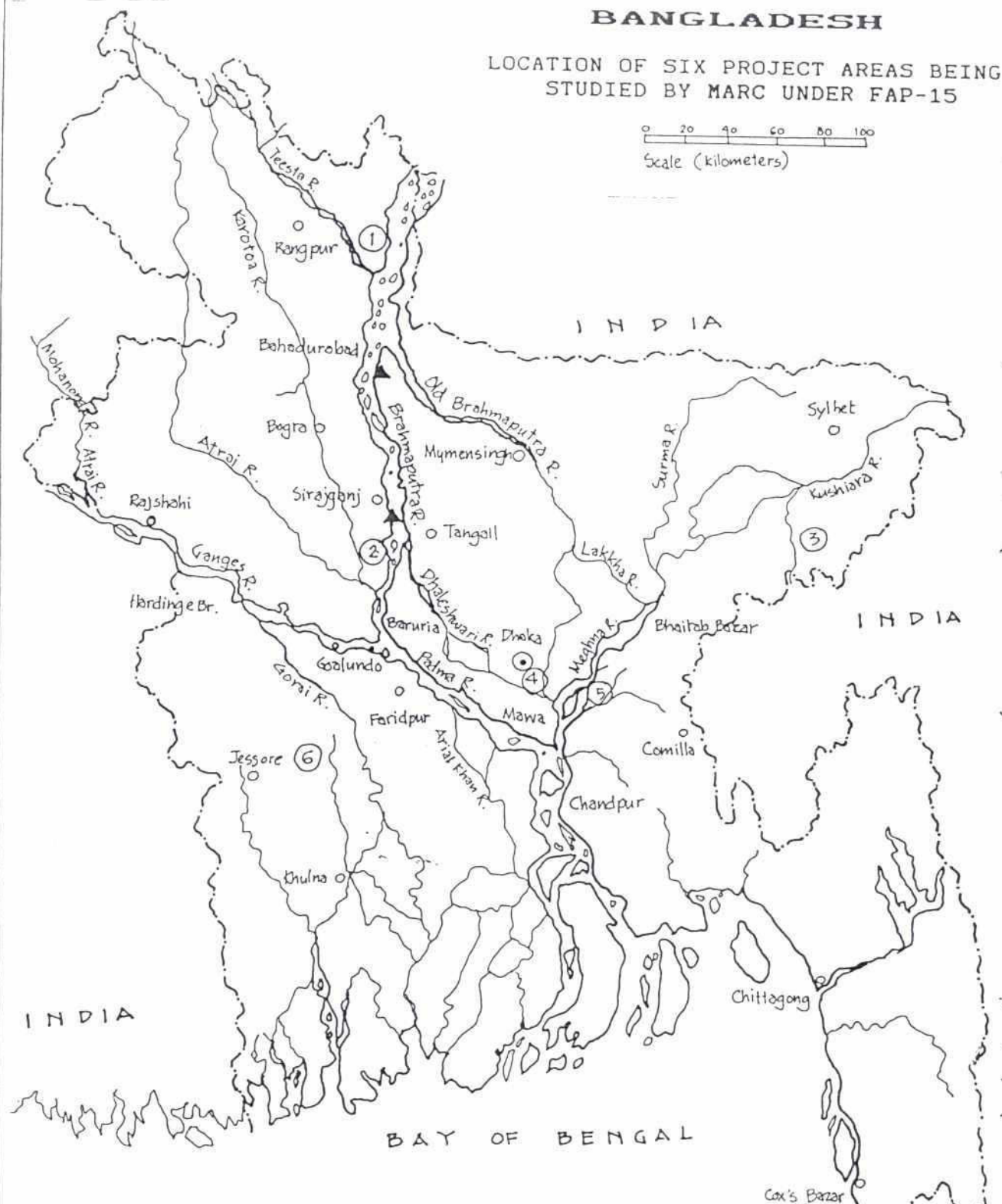
- indepth interviews with women and men from 27 purposively selected households residing in 3 villages of Bhuapur, Tangail; the households represented all the 11 categories mentioned under the analytical framework;
- informal discussions with relevant officials and resource persons;
- community discussions in small homogeneous groups.

Figure 1.3

BANGLADESH

LOCATION OF SIX PROJECT AREAS BEING STUDIED BY MARC UNDER FAP-15

0 20 40 60 80 100
Scale (kilometers)



LEGEND:

--- International boundary

⊙ Capital

○ Principal city

▲ Principal Water level gauge

~ River

MARC STUDY AREAS ○

1. Kurigram Irrigation Project
2. Brahmaputra Right Embankment Project
3. Monu River Project
4. Dhaka City Flood Protection Project
5. Meghna Dhanagoda Irrigation Project
6. Kalidaskhali Arpara Project

c. Methodology for a Review of the Legal and Administrative Frameworks of Land Acquisition

The laws, rules, manuals, executive orders/instructions pertaining to land acquisition procedures were scrutinised and compared. Several land acquisition cases pending at different stages were reviewed to identify reasons for delays. Deputy Commissioners and other land acquisition officials were interviewed in thirteen districts, and from 17 districts their opinions were sought through mailed questionnaires on problems of land acquisition and how to improve it. Field visits were made to offices of land registration at 8 upazilas and 5 districts and the Directorate of Land Registration in Dhaka. Findings from the socio-economic survey were used to get people's view points and experiences.

d. Methodology for a Review of the Land Records and Registration Systems

The methodology for this component of the study consisted of

- discussions with relevant officials in the Ministry of Land, the Directorate of Land Registration and the office of the Inspector General of Registration under the Ministry of Justice;
- visits to the field and observation of the system of registration operating at the sub-registrar's office;
- visits to Land Acquisition offices, and discussions with Deputy Commissioners (DCs), Additional Deputy Commissioners (ADCs), Assistant Commissioners (AC), Land and other functionaries;
- review of documents and reports pertaining to Bangladesh and other countries.

e. Methodology for a Review of Resettlement and Rehabilitation Efforts

Field surveys were carried out at selected sites of three NGOs (BRAC, Proshika MUK, Nijera Kori) and two government (BRDB, Guchchhagram) programmes.

The specific sites under these programmes were selected in consultation with programme organisers on the basis of their preferences. The location of the sites corresponding to the five organizations are listed below :

Organisations	Sites	
	Upazilas	Villages
1. BRAC	Jamalpur Sherpur	Tetulia Nakugaon
2. Proshika MUK	Domar " Debiganj	Athiabari Halhalia Khuthamara
3. Nijera Kori with Ministry of Land	Noakhali sadar	Nobogram
4. PEP, BRDB	Faridpur sadar	Muraridaha
5. Guchchhagram	Mirzapur	Jamurki

A sample of 30 members was selected at each site and interviews were held on the basis of a questionnaire. Informal discussions were also held with them as well as their programme organisers.

Resettlement experiences at Jamuna Bridge site were investigated on the basis of field visits and detailed investigation on some households, as mentioned under the Jamuna Multipurpose Bridge Project case study methodology.

f. Methodology for a Review of Engineering Design and Planning

Discussion meetings were held with key officials of BWDB, FPCO and MPO. The officials of BWDB included those involved with the planning, design and implementation of projects as well as land revenue. Discussions were also held with some consultants of BWDB and FPCO and some officials from the Department of Forest.

In addition field visits were made to three project sites, namely Dhaka City Flood Protection Project, Narayanganj-Narsingdi Project and the Meghna-Dhonagoda Irrigation Project.

Some relevant project reports of BWDB, MPO, the Institute of Flood Control and Research of BUET were utilised for this review.

1.6 Reports/Workshops on the Study

Apart from this Final Report, there have been a number of other reports on this study, as listed below :

- Inception Report, submitted to FPCO in the first week of March 1991;
- Interim Report, submitted to FPCO in the last week of August 1991 which was circulated to the Panel of Experts and Team Leaders of the FAP and selected experts in the water resource sector;

- Summary Interim Report : a short version of the Interim Report was submitted with the full report, and it was widely circulated;
- Summary of Findings and Recommendations: was submitted to FPCO in the first week of February, 1992; it was distributed to all participants at the National Workshop on FAP-15 in February, 1992; this summary was formatted to directly address the TOR point by point;
- Hand-out, a very brief introduction to the Study, highlighting the most important findings and recommendations; it was distributed to the participants of the Second Conference on the FAP in March, 1992;
- Draft Final Report : it was submitted to FPCO in March, 1992.

1.6.1 Workshop/Meetings

A day-long National Workshop was held on 5 February, 1992 at Hotel Sonargaon. The Workshop was inaugurated by Janab M. Majedul Huq, Minister for Irrigation, Water Development and Flood Control (IWDFC) as well as Agriculture. The Inaugural Session was chaired by the Secretary, MoIWDFC.

A presentation on the main issues and findings from this study was made at the Second Conference on the Flood Action Plan, jointly organised by the FPCO and the World Bank, held at the International Conference Centre, Dhaka, during 1-5 March, 1992. This conference was inaugurated by Begum Khaleda Zia, the Prime Minister and the Inaugural Session was chaired by the Minister for Irrigation, Water Development and Flood Control.

Comments made at the National Workshop and the Second Conference on the FAP in respect of the findings and recommendations of FAP-15 were taken into consideration in preparing the Draft Final Report.

Comments from FPCO and BWDB on the Draft Final Report were discussed in a meeting of the Review Committee of FPCO in May, 1992. These were taken into account in preparing the first version of the Final Report, which was submitted to FPCO in July 1992. Subsequently, comments from the Ministry of Land and BWDB were received in September 1992. All these comments were taken into account to produce this final version of the Final Report on FAP-15.

1.7 Lay out of the Report

Chapter 1 introduces the study, including its background, objectives and methodology.

Chapter 2 presents a review of the legal and administrative frameworks of land acquisition and resettlement.

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Chapter 3 deals with the land records and registration systems and their relationship to the process of land acquisition, compensation and arbitration.

Chapter 4 presents findings on the experience of the process of land acquisition and its socio-economic impacts from the view point of the affected households. These are based on a sample survey at six embankment project sites and case studies at the site of the Jamuna Multipurpose Bridge Project.

Chapter 5 reviews the planning and design aspects of embankments in relation to minimization of land acquisition and use of the acquired land for optimal programmes of rehabilitation.

Chapter 6 deals with the issue of resettlement and rehabilitation and reviews the experiences in this regard in some selected programmes of both governmental and non-governmental organizations.

Each chapter contains recommendations and/or conclusions related to the subject matter covered by it. However, there are issues which overlap across the chapters, such as public participation, compensation and resettlement. It was thought expedient, therefore, to present the recommendations under several important issues in the concluding chapter of this report, namely Chapter 7.

Needless to say, for a complete perusal of the recommendations of the Study, the Summary of Findings and Recommendations mentioned earlier should also be referred to.

Chapter 2

2. LAND ACQUISITION LEGISLATION AND PROCEDURES

2.1 Introduction

This chapter contains a detailed review of the legal, administrative and regulatory framework governing acquisition and requisition of property for development purposes in present Bangladesh. It begins with a brief historical background, continues with a more detailed assessment of the current legislation and regulatory framework and concludes with comments and tentative suggestions/recommendations for improvements.

2.2 Historical Background

The right of property has never been considered to be an unrestricted or uncontrolled right. Law has always imposed restrictions on the free use or disposal of property. With the passage of time, the development of public laws related to property has narrowed down the freedom of the owner of property in respect of the use or disposal thereof. The right of property has now-a-days to make a compromise with concepts of human welfare at individual as well as public levels.

The authority of the state to acquire or requisition private property located within its territorial jurisdiction is based on the ancient principles of '*salus populi*' and of '*necessitas publica*'. In Europe and in the USA, the authority of the Sovereign to take away property for public use or public purpose against the consent of the owner is called, '*eminent domain*'.

The term, '*dominium eminens*' is said to have been introduced by Hugo Grotius in 1625 who wrote the following in his treatise, *De Jure Belli et Pacis*:

'The property of the subjects is under the eminent domain of the State, so that the State, or who he acts for, may use and even alienate and destroy such property, not only in the case of extreme necessity, in which even private persons have a right of property over others, but also for ends of public utility, to which ends those who founded the civil society must be supposed to have intended that private ends should give way. But it is to be added that when this is done the State is bound to make good the loss to those who lose their property.'

In the USA, the definition of '*eminent domain*' has, in course of time, been interpreted by the courts as the power of the sovereign to take away property for public use without the owner's consent on payment of fair and adequate compensation. The concept of '*public use*' is being considered as the essential element of the exercise of such powers. And the payment of compensation, though not an essential element of the meaning of

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'eminent domain' is being considered to be an essential element of the valid exercise of such powers.

In the United Kingdom, the sovereign powers of the Parliament are unrestricted and, consequently, no necessity has arisen to depend on any doctrine to explain the sovereign's right to take away land or to affect injuriously some or all of the rights of ownership in land. The phrase, compulsory powers convey to a certain extent the meaning of this term, eminent domain, while 'compensation' is often used in the sense of compensation for land taken for public purpose, and 'expropriation' as taking land for 'public use'.

In olden days the king had extensive prerogative rights, recognized by the common law, to enter upon private property for erecting defence structures, beacons or light houses. In modern times, most prerogative rights of the Crown are regulated by the Statutes. Moreover, the powers conferred by the Parliament have grown wider and more comprehensive than the Crown's prerogative powers.

No owner of land appropriated by a statute for public purpose is entitled to compensation unless and until he can establish a statutory right on the land. It is, however, an invariable practice to provide for the payment of compensation in a statute authorizing compulsory acquisition. And it is an established rule that taking of property without compensation must be expressly provided in the statute.

In England, it is the principle of the Parliament to limit the quantity of land to be taken to such an extent as is actually required or reasonably necessary for a definite purpose. Besides, under the provisions of the Town and County Planning Act of 1947, the local authorities are under an obligation to ensure suitable accommodation to displaced persons, when implementation of development projects necessitates displacement of people living on the land to be acquired.

2.2.1 Earlier Legislations of this Sub-continent

In this sub-continent, the earliest known legislation related to land acquisition is the Land Acquisition Act of 1870 which was followed by the Land Acquisition (Mines) Act, 1885 (being a part of the former). With the promulgation of the more broad-based Land Acquisition Act, 1894 (Act I of 1894), the former Act of 1870 was repealed.

In the Act of 1894, the Collector (now Deputy Commissioner) was entitled to take possession of land to be acquired after the award had been made. However, in case of urgency, the Collector was entitled to take possession of the property even before making the award. The compensation would be determined on the basis of the average value of properties of similar description and similar advantages in the vicinity during the preceding 24 months (based on the amendment provided in Ordinance XII of 1963).

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The word requisition did not find place in the Act of 1894 but there was a provision for temporary occupation and use of waste or arable land needed for any public purpose or for a company for a period not exceeding three years. Payment of compensation would be agreed upon between the Collector and the persons interested in the land.

Though in law a distinction is always made between the terms 'acquisition' and 'requisition', the term 'acquisition' theoretically includes 'requisition'. As it appears from the Oxford Dictionary, the word 'requisition' has been adopted from French. As early as 1837, Carlyle used the word to mean : 'to require anything to be furnished for military purposes'. In the context of property the term has since been amplified to include taking its full ownership, taking its possession, and the acquisition of a right to have it (the property) used in a particular manner without taking possession.

The principle of payment of a just, fair and equitable compensation as a pre-condition for the acquisition of property also became the basis of the provisions of Section 299 of the Government of India Act, 1935. During the Second World War, lands and buildings used to be requisitioned under the provisions of the Defence of India Act, 1939. In the wake of the partition of India in 1947, the law of requisition reappeared in the shape of an Ordinance.

While the Land Acquisition Act of 1894 still remained in force, the East Bengal (Emergency) Requisition of Property Act was promulgated in 1948 (Act XIII of 1948) reproducing the ordinance of 1947 with certain amendments in order to meet the emergency cases of requisition/acquisition in view of the partition of the sub-continent.

Under the provisions of this latter Act, 'requisition' was defined as taking possession of property that would be required for a public purpose or in public interest. It gave the authorities power to deal with such property in such a manner as may appear to be expedient. The nature and amount of property to be requisitioned were left to the discretion of the Deputy Commissioner. Both immovable property and movable property (like cars, microphones etc) could be requisitioned under this Act.

When a property was requisitioned with a view to its permanent acquisition under the Act, the owner of the property was to be paid a provisional compensation in advance, based on a 'rough and ready' estimate. The final compensation would be based on the average market value during the 24 months preceding the date of service of the notice under Sec.5 (1a) of the Land Acquisition Act of 1948. The twenty four months were replaced by five years in 1963 (Ordinance XIII of 1963).

The 1948 (Emergency) Requisition of Property Act was extended from time to time on a triennial basis, the last time in 1981 (vide Ordinance VII of 1981).

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Over the years, the Government has established a series of special laws relating to the acquisition of land of a particular nature or for a particular purpose. The East Bengal Acquisition of Waste Land Act was promulgated in 1950 with a view to regulate the acquisition of waste land for any public purpose. The compensation was fixed at Taka ten per acre in respect of non-productive land. In case of acquisition of land which generated some income, the recipient of this income would be entitled to a compensation equivalent to five times the net annual income or, alternatively, ten times the annual rent paid by the occupancy raiyats for a similar area of cultivated land in the locality which the Collector might select as being appropriate for the purpose, whichever was greater.

Land acquisition in Dhaka Metropolitan Area was governed by the Town Improvement Act, 1953 (Act XII of 1953). Under the provisions of this Act, the Board of Trustees of the Dhaka Improvement Trust (now RAJUK) was authorized to acquire land under the condition of prior approval of the Government (Sec. 79). Land acquisition would take place in accordance with the provisions laid down in the Land Acquisition Act of 1894.

Separate legislation was also applied in respect of land acquisition in Chittagong and Khulna. For Chittagong, there was a Chittagong Development Authority Ordinance (Ordinance II of 1959) and for Khulna, a Khulna Development Authority Ordinance (Ordinance II of 1961). In both the Ordinances land acquisition would follow the provisions of the East Bengal Emergency Requisition of Property Act of 1948.

2.3 Salient Features of the Current Legislation

2.3.1 Acquisition and Requisition of Immovable Property Ordinance of 1894

The Land Acquisition Act of 1894 and the East Bengal (Emergency) Requisition of Property Act of 1948 have been replaced with the promulgation of the comprehensive Acquisition and Requisition of Immovable Property Ordinance (Ordinance II of 1982). The full Ordinance is enclosed at Annex 2. This Ordinance is (with a few exceptions which will be discussed later) governing all cases of acquisition and requisition by the government of immovable property for any public purpose or in the public interest. It may be noted that contrary to the previous Act, ie Act XIII of 1948 this Ordinance deals only with immovable property (Land Acquisition Act I of 1894 also dealt with only immovable property ie land).

Notwithstanding the repeal of the 1984 and 1948 Land Acquisition Acts, all proceedings and matters relating to the acquisition and requisition of property under these Acts (including applications and appeals pending before any Arbitrator or Court) continue to be heard or disposed of as if these Acts were still in force.

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Also the land acquisition provisions of the Town Improvement Act of 1953 as well as Chittagong and Khulna Development Authority Ordinances were to be repealed after the promulgation of the 1982 Land Acquisition Ordinance.

Below follows a review of the most important features of the 1982 Ordinance. Wherever necessary references are also made to relevant administrative regulations and instructions. In accordance with the Ordinance, the legal process is initiated by an application from the Requiring Body, which can be any governmental or non-governmental agency.

In the Ordinance it is stated that whenever it appears to the Deputy Commissioner that any property in any locality is likely to be needed for a public purpose or in public interest, he shall cause a notice to be published at convenient places in or near the property to be acquired (Sec. 3). Any person having interest in such property may object to the proposed acquisition to the Deputy Commissioner in writing within 15 days (Sec. 4.1). The DC shall give the objector an opportunity of being heard either in person or by an agent. After hearing these objections, the DC will prepare a report and refer the case to higher authorities for decision (Sec. 4.2). If the property exceeds ten standard bighas of land, the final decision will be made by the government. In case of property upto 10 bighas, the final decision will be made by the Divisional Commissioner. However, if no objections are raised within the 15 days time-limit the final decision may be made by the DC in case of properties of up to 10 standard bighas of land, otherwise the Commissioner (Sec. 4.3 and Sec. 5) will take the decision in case of dispute.

After a decision of acquisition of a property has been made, DC issues a second public notice, again to be published at convenient places at or near such property. The Public notice shall state the intention of the authorities to take possession of the property. It shall also invite all with interests in the property to appear in person or by an agent before the DC, not before 15 days (!) after the publication of the notice, to state the nature of their interest in the property and submit claims to compensation (Sec. 6).

Claims to compensation are reviewed by the Deputy Commissioner who also determines the award of compensation based on the average market value of similar properties in the vicinity during the 12 months preceding the notice under Sec. 3. Compensation will also be provided for damage on standing crops and trees as well as for indirect loss of business and income due to the acquisition. Compensation shall also be offered for extra costs which can be related to changing residence (sec 8.1). An additional 20 percent of the market value is paid in view of the compulsory nature of the acquisition (Sec. 8.2).

It is explicitly stated that in determining the compensation, the DC shall not consider any 'disinclination of the person to part with the property' or any increase in the value of the

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property to be acquired likely to accrue from the use of it after it has been acquired (Sec. 9).

Payment of compensation must be made before the authorities take possession of the property (Sec. 10.1).

The property acquired under the Ordinance must not, without prior approval of the government, be used for any purpose other than the purpose for which it has been acquired (Sec. 17).

After compensation has been paid or deposited in the Public Account, the property shall stand acquired and vest absolutely in the Government free from all encumbrances. The DC can take possession of the property after a declaration has been made in the Official Gazette (Sec. 11).

Compensation must be paid or deposited within a period of one year from the date of decision of acquisition. All proceedings shall stand abated on the expiry of that period. Besides, the Deputy Commissioner may, with the approval of the competent authorities, revoke all proceedings in respect of the acquisition of any property at any time before the payment of compensation (Sec. 12).

The Ordinance also covers the case of temporary requisition of property for a public purpose or in the public interest. With prior approval of the government the DC can decide on the requisition of any property for a period not exceeding two years. No prior approval will, however, be required in case of emergency requisition (sec. 18).

The DC may take possession of the requisitioned property after servicing the requisition order. The amount of compensation will be equal to the estimated rent which would have been payable for the use and occupation of the property if it had been taken on lease for that period plus compensation for estimated expenses for vacating and re-occupying the property (sec. 20). If a person is not satisfied with the amount of compensation or there is a dispute over ownership, the DC may deposit the money in the Public Account (sec. 21).

A person who does not accept the award made by the DC may submit an application to the Arbitrator for revision of the award within 45 days from the date of notice of the award (sec. 28). The Arbitrator is a Government appointed Judicial Officer, not below the rank of Subordinate Judge (sec. 27). A decision by the Arbitrator is made in writing. If the amount of compensation determined by the Arbitrator is higher than that decided by the DC, an additional compensation for delay at the rate of 10 percent per annum may be paid (sec. 32).

An appeal against the decision by the Arbitrator can be made to an Arbitration Appellate Tribunal, which consists of a member appointed by the government from among persons who are or have been District Judges. A decision of the said Tribunal shall be

final (sec. 34).

It may be observed that the Ordinance does not exclusively apply to acquisition by the government. Sections 14 and 15 govern the cases of acquisition of property at the cost of a person other than the Government. A condition is that there is an agreement between the acquiring person and the government. The Government is entitled to charge a fee (to cover some administrative costs for the acquisition).

2.3.2 Property (Emergency) Acquisition Act, 1989

In the wake of the devastating floods in 1987 and 1988, the government decided to promulgate a new Land Acquisition Act entitled 'Property Emergency Acquisition Act (Act IX of 1989)'. An unofficial English translation of the Act is at Annex 3. The Act was formulated with a view to expedite acquisition of land on an emergency basis 'to control inundation, flood and upsurge caused by natural calamity and to prevent river erosion'. The Act will remain in force for five years (Sec. 1)

This means that the 1989 Act is not replacing the 1982 Ordinance but rather complementing it for special circumstances. So far it has only been applied as covered by or study in respect of land acquisition for the Jamuna Bridge construction and the construction of the Greater Dhaka Flood Control Embankment.

Although there are many similarities between the 1989 Act and the 1982 Ordinance, there are also distinctive differences between them. The 1989 Act permits a quicker land acquisition process through the introduction of simplified procedures, delegated decision making and time-limits for various stages of the acquisition process. On the other hand, it also does restrict the individual's right to appeal against decisions, as pointed out below. And there are no additional provisions to ensure fairer payment of compensation although stricter time-limits may result in more prompt payment. The most significant differences with the 1982 Ordinance are summarized as follows:

1. The 1989 Act gives the DC, on the condition of prior approval or order by the government, the right to acquire any amount of land, up to the limit stated in the government's approval (Sec. 4). This may be compared with the provisions of the 1982 Ordinance, in which the authority of the DC for acquisition is limited to up to ten bighas of land and then only under the condition that there is no objection to the proposal. In other cases the land acquisition applications are referred to the Divisional Commissioner or the Ministry of Land, depending on the quantum of land being acquired.
2. The 1989 Act governs acquisition of both movable and immovable properties. Under the 1982 Land Acquisition Ordinance only immovable property can be acquired or requisitioned.

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3. Under the 1989 Act the acquisition notice shall be served to the owner of the property in writing or, in his absence, any 'male' member of his family. Under the 1982 Ordinance, the order of acquisition shall be served through public notice only.
 4. Persons with interest or right over the property to be acquired have ten days in the 1989 Act and 15 days in the 1982 Ordinance to submit claims to compensation (Sec. 4).
 5. The 1989 Act emphasizes quicker compensation compared to the 1982 Ordinance by introducing the concept of a 'provisional compensation' which is to be determined by the Deputy Commissioner within ten days of the order of acquisition. Land may be acquired on payment of provisional compensation. The basis of the determination of the provisional compensation is the judgment of the DC about an approximate market value. Needless to say, if the DC is willing to apply his experience and wisdom, a very reasonable compensation value may be arrived at during the provisional stage. At any rate the final compensation is to be determined within three months from the date of acquisition. The same principles apply for the assessment of final compensation under 1989 Act as well as the one-time compensation under the 1982 Ordinance.
 6. There is no provision in the 1989 Act to abate or revoke acquisition cases as in the 1982 Ordinance.

2.4 Administrative and Regulatory Guidelines and Instructions

In addition to the provisions in the law, the land acquisition process is regulated by certain administrative instructions. The most significant instructions are summarized below:

In order to arrest what at the time was considered as a practice of too lavish an use of land and 'to ensure the most rigid measures of economy in the use of land for purposes other than agriculture', the Government in 1976 constituted District Allocation Committees (one in each district), Divisional Land Allocation Committees (one in each division) and a Central Land Allocation Committee. The District Land Allocation Committee (DLAC) would have eight members including Executive Engineers of R&H Department and PWD and the Civil Surgeon, with the DC as Chairman. They would be entrusted with land allocation cases within the district not exceeding two acres. The Divisional Land Allocation Committees, which include members of Superintending Engineer/Deputy Director level, with the Divisional Commissioner as chairman, would consider and dispose of land allocation cases above two but below five acres of land. Cases of allocation of more than five acres would be forwarded to the Central Land Allocation Committee (CLAC), which would also consider all land allocation cases in Dhaka city. CLAC has the Minister of Land

Administration as chairman and a number of Secretaries as members. The Land allocation Committees would consider all land acquisition cases before the final decision is made at appropriate levels. Where they fit into the acquisition process will be further discussed below.

In 1989 the government ordered that in reference to the provisions of Ordinance II of 1982, the President would have to give permission for acquisition of land exceeding 10 bighas of land.

There are special instructions regarding unused acquired property and requisition of buildings.

2.4.1 Land Acquisition Procedures

Land acquisition requires interaction between, on the one hand, the **Requiring Body (RB)**, which normally is a national infrastructure development government agency, such as the Water Development Board, the Power Development Board, the Public Works Department etc, and, on the other, the **Acquiring Body (AB)** which normally is the Ministry of Land which delegates some of its authority to the Deputy Commissioner at the District level or the Commissioner at the Divisional level.

The division of responsibility between the Requiring Body and the Acquiring Body is in broad terms that the Requiring Body provides the technical input and the Acquiring Body the legal input in the land acquisition process. It is the Requiring Body which must ensure that the project, which is the basis for the acquisition of land, is approved by the authorities and that funds are available. The Requiring Body must also justify the need for land and other property on the basis of field surveys including detailed engineering design and prepare all necessary documents required for decision making. At this stage the Acquiring Body processes the land acquisition cases including determination of the level of compensation and payment to the concerned people. When land acquisition is completed, the land is handed over to the Requiring Body. The various steps leading up to the final transfer of ownership of land from the individual to the Requiring Body are discussed below. For an easy reference Figures 2.1 on pages 23 and 24 graphically illustrate the interaction between the different agencies during the various stages of land acquisition.

The legal aspects of the land acquisition process starts with the Requiring Body (RB) submitting an application to the Deputy Commissioner with a request to acquire land for a specific purpose. The procedures for dealing with land acquisition matters are established in a Government Memo dated October, 1985. In respect of proposals in the water resource sector, additional guidelines are issued by the Water Development Board. The proposal must contain the following items:

Figure 2.1 : Different Steps for Land Acquisition by WDB
(From Preparation of Projects till Taking over the Possession)

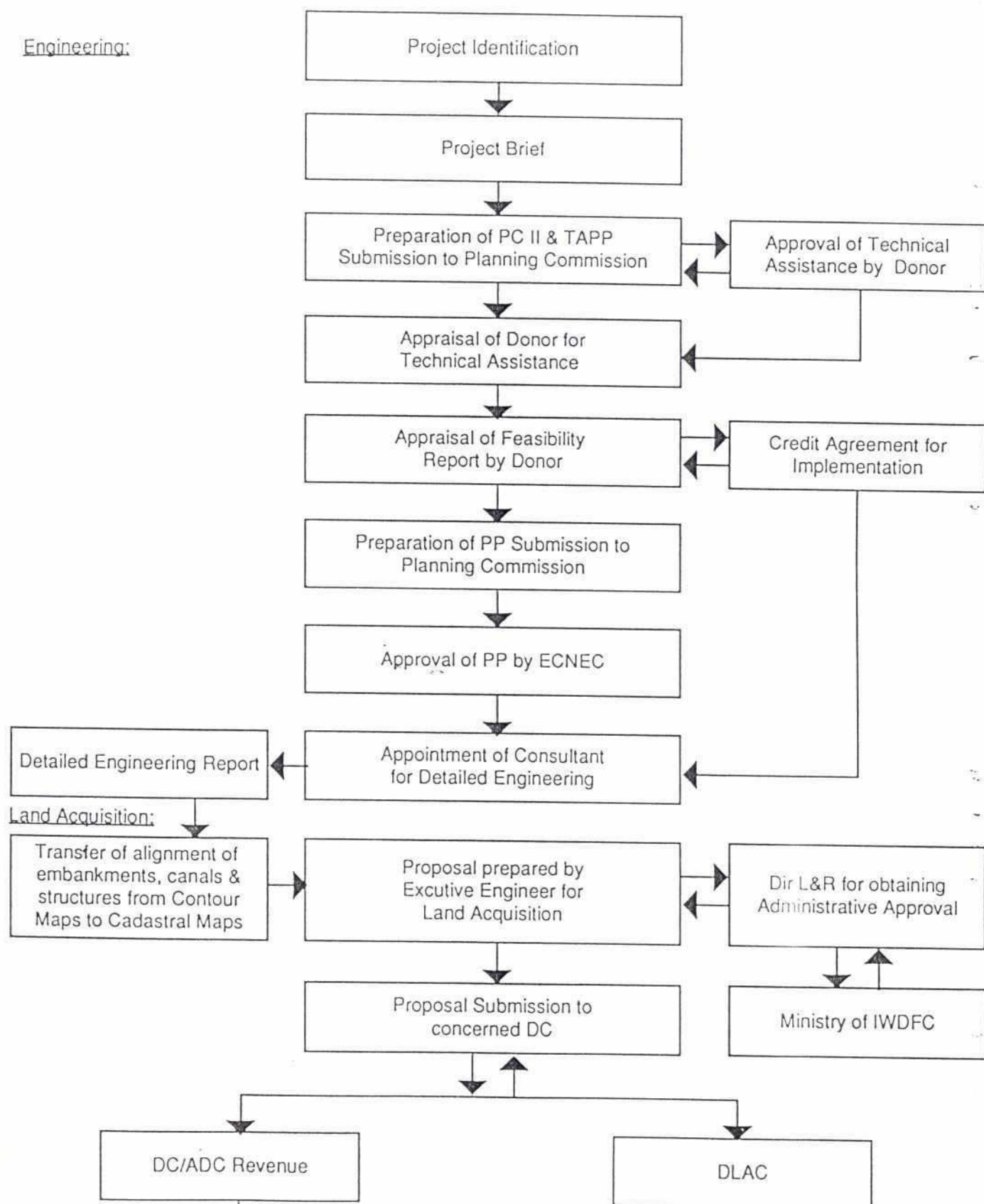
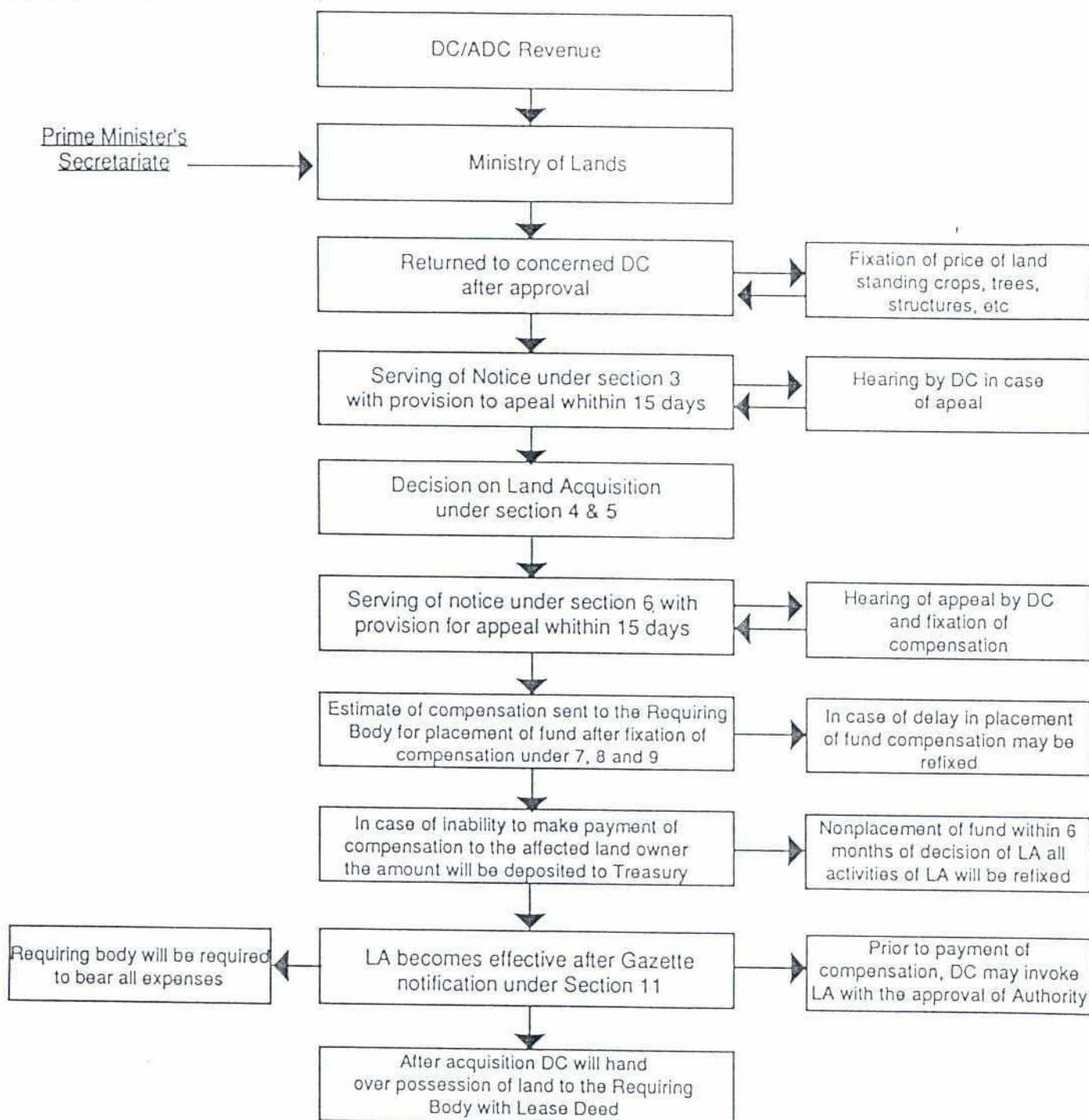


Figure 2.1 : (contd)



Note:

WDB: Water Development Board
 PC II: Planning Commission Proforma for Survey & Investigation
 TAPP: Technical Assistance Project Proforma
 PP: Project Proforma
 ECNEC: Executive Committee of National Economic Council
 DC: Deputy Commissioner
 ADC/Revenue: Additional DC for Revenue
 DLAC: District Land Allocation Committee
 IWDFC: Irrigation, Water Development & Flood Control
 CLAC: Central Land Allocation Committee
 Dir L&R: Director Land & Revenue of BWDB
 LA: Land Acquisition

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- A Proforma indicating the amount of land required, a time table for the acquisition of land and the purpose for which the land is to be acquired;
 - A Layout Plan, which shows the location of the project on a map;
 - A Site Plan, showing the alignment in red ink on a Mauza map.
 - A Land Schedule showing classification of land and ownership of plots to be acquired
 - Certificate of Minimum Requirement, issued by the Requiring Body stating that the quantity of land proposed for acquisition is the absolute minimum for a proper implementation of the project.
 - Administrative Approval, comprising a copy of approved Project Proforma

After receiving the proposal the DC will arrange for a field verification jointly with the staff of the Requiring Body. This includes a classification of the land to be acquired and an identification of trees and standing crops of value which are involved.

The Requiring Body's application is then submitted to the District Land Allocation Committee (DLAC) or the Divisional Land Allocation Committees (depending on the amount of land required) for the allocation of land. The latter may in turn refer the proposal to the Central Land Acquisition Committee for a decision.

After clearance by the relevant Land Allocation Committee the DC issues the preliminary notice and, if required, hears objections against the proposed acquisition.

If there are no objections, the DC may give the formal approval for land acquisition under the condition that the area to be acquired covers less than ten standard bighas. However, if there are objections and/or the acquisition is above ten standard bighas of land, the DC submits the application to the Commissioner or the Ministry of Land for the final approval. The DC's submission shall be accompanied by the DLAC's (CLAC's) clearance, the DC's report on the objection petitions and information on the number of households likely to be affected. In respect of projects executed by the Upazila Parishad, the government has authorized the Divisional Commissioner to make the final decision even if the land to be acquired is above 10 bighas.

After the final approval by the President/Commissioner/Deputy Commissioner (as the case may be), the case is referred back to the DC for the assessment of compensation and the identification of the owner of the plots to be acquired. The market value of

land is based on information in the Land Registration office, the value of standing crops from the Department of Agricultural Extension, value of trees from the Forest Department, value of buildings from the Public Works Department etc. A more complete review of the system for the assessment of land value and the identification of land owners follows in Chapter 3.

With the final approval to acquire land, the Requiring Body must place required funds for payment of compensation with the DC. If the Requiring Body fails to do that within one year of the date of final approval, for no fault of the person interested all proceedings shall stand abated and a declaration to that effect by the DC will be published in the official Gazette (sec 12).

Compensation is paid by the DC's office. There are no specific rules on where or in which form compensation should be paid. Normally smaller amounts appear to be paid in cash whereas larger amounts are paid by cheques to persons who are identified by the Chairman or members of the Union Parishad or by gazetted officers. In case the rightful owner of the plot of land cannot be identified or there is conflict over ownership or the distribution of compensation, funds are deposited in the Public Account.

In case the person does not accept the award of compensation the persons can go for Arbitration according to the provisions of the Land Acquisition Ordinance of 1982 or the Emergency Land Acquisition Act of 1989.

After payment of compensation the ownership of the land is formally transferred to the Requiring Body by mutation of the Requiring Body's name in the revenue records of the Government maintained in the Upazila Land office/Tehsil office. The transfer is also published in the Government Gazette.

2.4.2 Land Acquisition by Local Governments

Local governments (Upazila and Zila Parishads) are supposed to follow the same rules as the central government agencies in respect of acquisition of land. Every year local governments all over the country are acquiring land for the construction of office buildings, staff quarters, rural hospitals and primary health centres. Relatively large areas were acquired during the first half of the 1980's for the construction of new and expansion of existing Upazila complexes.

However, according to current practices, land is normally not formally acquired and payment of compensation to property owners are not made for the construction of rural roads, markets, small scale embankments by local governments. Neither has land hitherto been acquired for the construction or re-construction of feeder roads. There is no outright ban on acquiring land for these kinds of infrastructure, but the local authorities are encouraged not to do it and if they are, for one reason or the other, forced to do it they should not pay with grants from the central government.

In the guidelines of 1982 to the Upazilas, the government states that 'it is presumed that the land required [for road constructions] should come from voluntary donation except in rare cases when the Parishad may decide for unavoidable reasons to acquire a limited quantum of land. In 1987 the same theme was reiterated : 'necessary Action should be taken so that need for acquisition of land does not arise If need for acquisition of land arises in special cases, efforts must be made to take the land out of voluntary donation'.

In a few recent agreements, formal land acquisition and payment of compensation to land owners have been made a condition for donor approval of some rural infrastructure development projects. Rural Development Project 6 (RD-6) and the Rural Development Project 7 (RD-7) are two such projects. In respect of the former there is a further condition that all land for individual projects should be in the legal possession of the government prior to the signing of any construction contract. Also in RD-7, there is a requirement to acquire land for feeder road constructions and expansion of growth centres. In neither project there are provisions for acquiring land for borrow pits. Expenditures for earth fill is included in the budget of the contractor.

The procedures for acquisition of land by local governments are about the same as those of the Water Development Board and other central government agencies. One difference is that in the two above mentioned projects, land acquisition maps are prepared by consultants rather than by government staff.

2.4.3 Institutional Arrangements

The administrative set-up for land administration has two tiers under the Ministry of Land Administration and Land. At the Divisional level there is an Additional Commissioner dealing with land administration under the Commissioner. At the District level there is an Additional Deputy Commissioner in charge of land administration. Under him there is at least one Land Acquisition Officer and several Assistant Land Acquisition Officers. The number of officers depends on the size of the District. Dhaka District, as an example, has five Land Acquisition Officers. Non-gazetted officers include Kanungos (normally two per district but more in larger districts), surveyors, etc.

2.5 Major Findings of Current Land Acquisition Procedures

2.5.1 The Need for a Unified and Improved Piece of Legislation

The Emergency Acquisition of Property Act IX of 1989 was specifically adopted to expedite land acquisition for protection against floods and river erosions caused by natural calamities, as indicated in the following preambular statement of the Act.

'.... it is expedient and desirable to acquire land on an emergency basis in order to undertake permanent arrangements

to control floods and tidal surges caused by natural calamities and to protect against river erosion'

There have been two major applications of this Act since its inception, namely in the Jamuna Bridge Project and the Dhaka Embankment Project.

The application of the Act in case of the Jamuna Bridge Project has been questioned privately in several quarters. It is doubtful, these sources maintain, if a bridge that has been mooted for many years and whose completion will take many more years, can truly be called a project of an emergency nature.

The Dhaka Embankment Project can be treated as one that relates more directly to emergency situations, although the absence of any serious flooding in the city since 1988 has given rise to some controversies in this regard as well.

What emerges from these debates is a concern about the anomaly arising as a result of the co-existence of two pieces of legislation. There is general agreement that some of the special provisions for expeditious implementation as available under the 1989 Act should also be available for projects of major national importance such as the Jamuna Bridge Project. Furthermore, the 1989 Act was promulgated for a period of five years only and is due to expire in 1994. Hence it is felt that a new Act containing the useful elements from the two existing legislations and adding further to it as per recommendations of this study (see FAP-15 document entitled Summary of Findings and Recommendations) should be formulated as early as possible, and certainly before 1994.

2.5.2 Areas not Covered under Present Legislation

The present land acquisition legislation does not cover two important areas, namely public participation and resettlement. There have been for quite some time a recognition of the need for public participation and various attempts at achieving this primarily by bureaucratic fiat. As a result these efforts have not benefited from a clear statement of objectives and methods to achieve these objectives derived on the basis of a national debate on these issues amongst experts and legislators. The absence of legislative stipulation furthermore left it to the discretion of bureaucracy and a party in power to determine how much public participation is to be sought and what modalities are to be adopted for this purpose. It is not as if Bangladesh has no experience of public participation. One may recall efforts under the Swanirvar (self-reliance) movement of the seventies which culminated in the setting up of Gram Sarkar towards the end of the decade. Participatory planning was one of the main objectives in these experiments and a viable model was beginning to emerge. Lessons from this and similar other experiments of the past could be utilised in formulating appropriate legislative and administrative frameworks for public participation.

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In the absence of any legislative requirements, resettlement is also left to the understanding and judgment of incumbent authorities and is determined by the existence of internal and/or external pressures for the same. As has been pointed out in this study the principles of resettlement have never been coherently established. There are categories of people who suffer indirectly but substantially from land acquisition and have to resort to squatting on unauthorised land, but are not entitled to any resettlement benefits. The same is the case with the share croppers and tenants. Legislation needs to cover these cases, and have a comprehensive set of provisions for compensation as well as resettlement and rehabilitation.

2.5.3 Time requirements

This study confirms the conclusions made in earlier studies and the findings are well in agreement with the conventional wisdom that land acquisition indeed is a long drawn out process. But it has also shown that the time required to process proposals varies immensely from case to case. Hamid's detailed study of three cases indicated that the time required for acquisition of land counted from the submission of the request by the Requiring Body to the actual transfer of ownership of the land varied between seven and thirteen months. The study of some selected land acquisition cases under the 1982 Land Acquisition Ordinance has indicated even longer processing time. Out of six cases (selected by the land acquisition offices in the districts), land acquisition was completed within one year and a half only in one case. The processing time for the other five varied from two years and nine months to over seven years. The decision making process has been even more prolonged with the government's decision to refer approval of land acquisition cases (above 10 bighas of land) to the President.

The introduction of land acquisition for the construction of certain infrastructural schemes (feeder road) implemented by local governments, has, according to project staff, prolonged the implementation by at least one year, sometimes much more.

But there are also examples of more speedy land acquisition. The 1989 Act does provide for much more expedient land acquisition. The transfer of ownership of the 26.95 acres of land required for Greater Dhaka Flood Control Embankment project did not take more than a few months (proposal dated 5/6/1989 and the Gazette publication dated the 28/6/89). It is, however, fair to suggest that the use of the 1989 Act alone would not explain the speedier land acquisition. An important reason was also the high profile of the project which enjoyed considerable national interest with plenty of high level political backing.

The 1989 Act has also, by a decision of the government, been used for the acquisition of land for the Jamuna Multipurpose Bridge Project, despite the fact that it can hardly be classified as a flood control emergency project. Also in this case land acquisition seems to have proceeded at a much quicker pace. Since



land acquisition had not yet been completed at the time of writing this report, it was not possible to say how much time would eventually be required.

The analysis of time requirements for different elements of the land acquisition process shows that the approval of the Requiring Body's application and the assessment of compensation by the DC are the most time consuming elements.

The role of the Land Allocation Committees has been questioned by various reviewers. Its main purpose is to ensure that a minimum amount of land is being allocated for acquisition, but it is doubtful if the committee, at least in its present form, can achieve this. Investigations under the Study seem to suggest that the committee can add little to the quality of the decisions and therefore mostly become another source of delay.

Despite the fact that the administrative officers of various districts have provided the Study Team with information which indeed show very lengthy processing time for land acquisition, discussions and consultations with the same authorities and their responses to the study questionnaires seem to suggest that the Land Administration officials see few problems with the application of the 1982 legislation. The fact that acquisition of a few acres of land takes several years does not seem to cause any major concern. Although some respondents do indicate that the process tends to be fairly drawn out, there are few proposals to change the current regulations. But the fact that the Requiring Body often starts civil works before land acquisition is completed does reportedly cause embarrassment. However, even if only a few districts so far have had experience of the 1989 Emergency Land Acquisition Act, most respondents were of the opinion that the two current pieces of land acquisition legislation should be amalgamated with the view to incorporate those elements of the latter legislation which may speed up the process.

There is, however, a concern with the system of arbitration even if there are not so many cases pending under the 1982 Land Acquisition Ordinance. Many officials of several districts would prefer a time limit for the disposal of arbitration cases to limit the scope for long drawn-out processes. In some districts (Khulna, Tangail, Jessore) it has also been suggested to vest arbitration with the Divisional Commissioners/Land Appeal Board or to establish arbitration courts at the district level (Faridpur). From other quarters it has been suggested that the authority of the Arbitration Tribunal should be transferred to the Divisional Commissioners.

If the Land Administration officials appear to be reasonably satisfied with the present state of affairs, the attitudes of the Requiring Bodies are less favourable. Water Development Board officials complain about the processes being very slow.

2.5.4 Valuation of Property Payment of Compensation

As for the valuation of land and the payment of compensation for land and other properties acquired, the Study essentially confirms the broad findings of previous studies. The main complaints by concerned people centre around low levels of compensation and much delay in its payment, if indeed payment is at all made.

For the calculation of compensation, the land acquisition officials at the district have to depend on the available records of rights and records of transfer of property. A full discussion on the weaknesses of the current system of land registration follows in Chapter 3. The following summarizes the experience on how the system works at present.

The common practice of under reporting the value of land in transfer deeds (in order to avoid taxes) results in too low a level of compensation. On the other hand, there are also a few examples of fake transfers at an artificially high level taking place in anticipation of land being acquired, in order to raise the level of compensation.

The practice of not registering inherited land and property in the name of the present owner, in combination with an outdated and disorganized land record system means that the identification of the recipients of compensation becomes very time consuming. The imperfect land record system also leaves the door wide open for manipulations.

In many reported cases, payment is not made in full, even if there is an agreement between the parties. The field survey of this Study reported that nearly 90 percent of the concerned households incurred extra-legal expenses. In the assessment of land acquisition for the construction of Jamuna Multipurpose Bridge, it was found that the recipients as a rule had to pay the officials around ten per cent of the awarded compensation as a service charge.

Non-payment or delayed payment of compensation is, however, not only due to a slow functioning and lethargic district bureaucracy. The policy of disbursing government funds for land acquisition in three or four installments, spread out over the year, means that the district administration may not have sufficient funds available when payment is due.

The surveys also indicate high transaction expenses for the property owners, related to travelling to and from the district office to claim the rights and to receive compensation. Objections against acquisition are often heard and payment of compensation is normally done in the district town. This means that the recipients not only face high costs for travelling to the district town, but also lose income.

Surprisingly few land acquisition offices report problems with the assessment of land value. The officials of some districts,

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however, did consider the undervaluation of the property in the recorded transaction deeds.

The fact that the order to acquire land (under the 1982 Ordinance) is not served to the individuals concerned but is only made known through public notice, results frequently in forfeiture of rights. People get to know about the government's intention to acquire land too late to make necessary preparations. This survey did reveal that a large majority of the respondents had no advance notice.

2.6 Recommendations

2.6.1 A New Consolidated Act

In view of the frequent confusion arising out of the coexistence of two pieces of legislation covering land acquisition, particularly in respect of their applicability to different cases, and also to redress many of the felt deficiencies, the Study Team proposes the formulation a new Land Acquisition Act, replacing the old ones. It should draw on the useful elements of the 1982 Ordinance and the 1989 Act and have special provisions for projects of national importance as well as those of an emergency nature.

A Parliamentary Sub-committee may be formed to formulate and place a bill to the Parliament and organise national debates on Land Acquisition. The Ministries of Land and Law may provide technical assistance to the Sub-committee.

Legal experts and noted social scientists may be coopted into the Sub-committee.

A decision about treating a project as being of an emergency nature or of great national importance, should follow objective criteria set in the Act.

For emergency projects or major projects approved by ECNEC, the CLAC and DLAC should have no further role in acquisition decisions. All concerns about the appropriateness of acquisition should be verified at the stages of detailed engineering design/survey and joint verification by the requiring body and the Land Acquisition office.

2.6.2 Notification

Notification should be wide, incorporating beating of drums in Haats and Bazaars, posting of notices at Tehsil offices, mosques/temples, schools; use of TV, radio and popular local newspapers.

2.6.3 Time Limits

Time limits are to be introduced in case of all projects and measures undertaken to ensure their adherence.

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The new Act should also have appropriate time limits for different arbitration procedures including civil court procedures.

2.6.4 Compensation

Methods for the determination of compensation should be changed, expending more efforts in achieving greater accuracy in estimating market prices and instituting fairer principles of compensation.

Land valuation should be based on prices of different types of land annually determined for each Upazila by an expert committee at the district level.

Instead of the DC, a district level Land Valuation Committee chaired by an MP from the region and the DC as member secretary with required technical expertise, should be entrusted with the task.

Spot payment of compensation cheques is recommended to reduce peoples' suffering. Cash payment may be made when expressly desired by the incumbents. Banks should be accountable for speedy handling of disbursements.

A Flood Action Plan Coordination Committee (FAPCC) at the appropriate local level may play a role in ensuring timely disbursement.

There should be clear instructions for an enhanced role of the DC office in making prompt payments.

Appropriate instructions to commercial banks are also to be served.

2.6.5 Arbitration

The right of appeal against a compensation award may be exercised at two stages.

First, an attempt should be made to adjudicate disputes at the non-judiciary level because of the non-existence of time limits in civil courts. Failing this, a recourse to civil courts remains open.

Chapter 3

3. SYSTEMS OF LAND RECORDS IN BANGLADESH AND THEIR USE

3.1 Introduction

Land information systems and land records can be of many kinds. However, this study will concentrate on systems for detailed documentation of land areas, land use and land ownership as well as other rights in land. In Bangladesh they essentially consist of two types of records, namely

- o public records for mainly revenue purposes : records-of-rights;
- o public records giving evidence of transactions in land and rights to land : land registers.

The present systems concerning such records are presented below.

3.2 Records of Rights

Records of rights consist of written records and large-scale maps of Mauzas (the lowest revenue unit, usually bigger than a village). The maps give the natural features, boundaries and numbered plots, while the written records give owners with numbers of their holdings, serial numbers of the included plots, their areas, land classes, rents to be paid and other particulars. The preparation of maps and records, their maintenance and timely revision are the responsibility of the Directorate of Land Records and Survey within the Ministry of land and its field offices. Under regional offices with a sanctioned staff of around 30 persons there are offices in each sub-district (in principle) under Assistant Settlement Officers and a normal staff of around 20 persons. In total, it is a large organization, at present including around 6000 sanctioned persons in total (but only 4000 in service), of which less than one tenth is senior and mid-level officers. This shall be seen in relation to the total population (slightly more than 114 million) and the total area of 144,000 square km, of which around 60 percent is owned land.

The basic information in this system was once received from cadastral maps. For the greater part of the country they were implemented from the beginning of this century and onwards but do still not exist in limited, mainly tribal, areas. These records are supposed to be revised from time to time.

The present procedure for the preparation or revision of records are described in chapter IV of the East Bengal State Acquisition Act, 1951, and the following rules. The Government may thus order a Revenue Officer to prepare a revision of a record-of-rights in respect of a district or a local area. The work shall start with a cadastral survey based upon a traversal survey, which shall

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ordinarily be carried out by theodolite observations. Even at revisions a new survey is ordinarily done and the plots renumbered. The cadastral survey shall result in a large scale map showing roads, rivers, railways and other physical structures as well as homesteads and other fields. The fields will be numbered for identification. In rural areas scales around 1:4000 (16 inch to one mile) are generally used. Scales in town areas are as a rule larger. Boundary marks of a permanent nature shall ordinarily be erected at every point where the boundaries of three villages meet and may be erected at any other point where this is necessary.

Draft records are then prepared, consisting of statements of rights. Disputes regarding the ownership of land, or the ownership of any interest in land, shall be decided by a Revenue Officer in a summary manner and on the basis of actual possession. The record shall give a statement of rights for every holding (khatian). There shall ordinarily be a separate khatian for each person interested, or each group jointly interested, in the land. A field-index arranged according to the serial numbers of the fields in the village shall also be proposed. When the areas of the fields have been extracted and entered in the preliminary record, a copy of each khatian shall be handed over to respective persons or their representatives. Each khatian shall then be examined on the ground with reference to the Mauza map and be explained to the person or persons concerned. If needed corrections are done.

Maps and records will thereafter be formally attested at a convenient place in or near the village. As each person appears before him, the Revenue Officer shall examine his records, read out all the important entries and make corrections where required. Disputes regarding the ownership of land are still decided in a summary manner. At the same time the revenue payable to the Government is entered in the records along with other relevant information. A fair and equitable rent shall be determined for agricultural land in accordance with the average annual yield of this class of land. The land classes are broad, normally only distinguishing between main land use classes.

The Revenue Officer shall then publish the draft record-of-rights by placing it for public inspection during a period of not less than one month. Objections are heard and decisions given by the Revenue Officer, but any person aggrieved may appeal to an appointed Settlement Officer. Before passing the final order on any such appeal, the Appellate Officer shall give the parties the opportunity of being heard. After this decision, final records will be prepared and published.

As can be seen, this procedure is quite complicated and time-consuming. Normally a revision shall not take more than 3-4 years, but sometimes it takes considerably longer. For Dhaka, for example, the Revisional Settlement has already taken more than twenty years but no final records-of-rights have been available as yet. A general revision of the records within an area is

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supposed to take place about every twentieth year. But normally only one or possibly two revisions of the original cadastres have been completed so far.

Irrespective of general revisions the records-of-rights should be maintained and updated at the sub-district (Upazila) level by reports about transfers, subdivisions, amalgamations, new settlements etc from local revenue rent collectors (tahsildars), which in case of subdivisions shall even make a trace from the latest map showing the proposed change. It is unlikely that this is ordinarily done. When the Tahsildar's report arrives at the Upazila office, notes shall be sent to all known parties to come to the office and confirm the change, whereafter mutation of the records-of-rights can take place. According to information given at visits in the field, the parties never show up in most cases and any mutation is then not done (or such is done by recording the change in the remark column while the Mauza map seldom seems to be changed).

Notices of land transfers shall further be sent from the Land Registrar to the Upazila offices. But the notice itself is not sufficient for the identification of the object sold; so in this case too the parties must come to the office and confirm, otherwise no mutation will be done. According to a former Director General, Land Records and Survey (1990), the duplicate notices are mostly sent in bulk and are illegible. Furthermore, because of illegal encroachments major changes in the environment and the settlements are not reflected in the records. Quite a large number of forgeries take place with regard to land records. By and large 60 to 80 percent of the cases both in the civil and criminal courts should, according to him, directly or indirectly relate to disputes regarding land.

The interest to maintain records-of-rights will probably be still lower in the future from land-owners and Revenue Officers as from 1991-92 all agricultural holdings less than 25 bighas (8.3 acres) are released from land tax.

3.3 Land Registration

Land registration is regulated by the Registration Act, 1908, and adjoining Rules and Instructions. The head of the organization is the Inspector General of Registration under the Ministry of Law and Parliamentary Affairs. Local Offices of the Registrars exist at the district and Upazila levels.

The law states, among other things, that every transfer of land shall be made by a registered instrument, except in case of bequest or sale in execution of a decree. The sale price or the value must be stated therein. Any document for the purpose of registration should be presented within four months from the date of its execution. Registration as this, however, gives only priority over unregistered deeds or deeds registered subsequently. But it does not provide a title or ownership. The Registrar has no duty to investigate that a seller really is the

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owner, only to satisfy himself to the identity of the seller or his representative. In reality, even these conditions are not maintained and connivance of lower functionaries in the registration of fake registered deeds pertaining to government land is very common. It also transpired from field visits that it is not uncommon that the same land is sold more than once by the same seller or that the purchaser is not aware that the seller is only part-owner.

The transfer deeds are very detailed and contains mostly many pages. When the deeds are presented to the Registrar, registration fee and stamp duty are taxed. The stamp duty is very high, varying from 10 percent at low sale value to 18 percent at high. Together with other additional taxes the total sum may well be 17 to 25 per cent respectively. It seems therefore to be a common practice to inscribe a much lower price in the deed rather than the real one.

After registration the deed is placed in a file for copying and a summary description, including price, is given in a running order for the whole Upazila in books called BALAM BOI. An index to those books is also kept. However, the proceeding usually takes considerable time. For example, at a visit to a Registrar's Office close to Dhaka the last transfer deed recorded in the index and BALAM BOI was found to be more than one and a half years old.

So the existing Bangladeshi system of registration of deeds does not provide the final proof of proprietary right. There is neither any provision of compensation if losses occur to some person due to mistakes or errors in the deed. Even if only a part of a property is transferred, a survey and a new map are not needed for registration. To summarize, neither from the records-of-rights nor from the land register can ownership, subdivisions and partitions be safely determined.

One further reason for this is that bequests need no registration. According to Islamic law brothers inherit equal but sisters only a half of what a brother gets. Concerning land it seems to be normal practice that the brothers share the land as co-owners or partition it, while the sisters often agree to take nothing of the land (but it may well happen that their male children later claim their rights). Nothing of this is seen in the land register and very little in the records-of-rights before the records are totally revised for the area in question.

3.4 Use of Land Records in Connection with Land Acquisition Proceedings

Generally, the land records are used for two main reasons in the current proceeding :

- a. Records-of-rights including the Mauza map are used for determination of plots, areas and owners affected by land acquisition;

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- b. Land registers are used for determination of market values to calculate compensation.

3.4.1 Determination of Plots, Areas and Owners Affected

Before any acquisition case can start the Requiring Body (RB), such as Bangladesh Water Developing Board (BWDB) in case of embankments, must prepare a formal proposal for consideration. This proposal shall among other things include

- a site plan with reference to the latest Mauza map showing all the numbered plots and the alignment of the structure (embankment);
- a plot index showing the numbers of the affected plots and khatians, with the total area and the required area of the plots, all prepared from the Mauza map and latest records-of-rights;
- a land schedule showing plot numbers, classifications, areas and ownerships of the required plots.

On the instruction of the Executive Engineer, the Sub-divisional Engineer acquires the Mauza map and the records-of-rights from the Upazila Revenue Officer. He collects the necessary information from this material after checking in the field. Most of these data are in effect collected by Kanungos (officers at mid level in the District Land Acquisition Office) and Process Surveyors on behalf of the engineers.

The project needs administrative approval and allocation of funds in the Annual Development Plan. It is then formally submitted to the Deputy Commissioner (DC) in the district. The proposal is scrutinized by the DC and submitted to a District Land Allocation Committee (DLAC) or for areas within the jurisdiction of Dhaka Improvement Trust, Chittagong Development Authority etc to Central Land Allocation Committee (CLAC). After their approval the Land Acquisition Office (LAO) starts processing the case.

In case of embankments the proceedings normally follow the Acquisition & Requisition of Immovable Property Ordinance, 1982 (LA Ordinance). Process Surveyors and Kanungos are sent to the field for verifying the information submitted. The Deputy Commissioner issues a preliminary notice to be published at convenient places on or near the property stating that the property is proposed to be acquired (sec.3 of LA Ordinance). Objections may be raised within 15 days by any person interested in a notified property. The acquisition can then be finally decided by the DC when the case is less than 10 bighas (3,3 acres) and no objections have been raised and by the Divisional Commissioner in case of objections. If the area exceeds 10 bighas, the final acquisition has to be decided by the Minister of Land.

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The Deputy Commissioner then issues a final public notice (sec.6) to be given in the prescribed manner at convenient places on or near the property. Such notice shall state the particulars of the property to be acquired and shall require all persons interested in the property to appear personally or by agent before the DC at a given place and time, not less than 15 days later, and to state the nature of their respective interests in the property and their claims to compensation. Such a person may also, as far as may be practicable, deliver the name of every other person possessing any interest in the property.

It is stated in sec.6 sub-sec (3) that the DC shall also serve this notice directly to known occupiers of such property and other persons known or believed to be interested therein. The checked land records give indication about such persons. It seems however that the information is not complete even after checking. In the socio-economic survey in six project areas, on average only 61 percent of the affected households were directly served by the notice of acquisition. The figures varied between 28 and 100 percent in different projects (see Table 4.01 on page 57).

On the basis of the information collected and on the claims made under sec. 6 the staff of the Land Acquisition Office (LAO) along with representatives of the requiring body shall hold a joint verification and enquiry in the field and make a Joint Field Survey Schedule. This contains particulars of the acquired land including plot no, khatian no, area, classification and ownership of the land, as well as an inventory of crops, trees, and structures found on the land. The classification normally follows the broad classes in the records-of-rights. On this basis compensation shall be decided by the DC. According to the 1982 Ordinance the land cannot be taken in possession before this decision, a rule which however often seems to be disregarded.

The DC's decision is final but appeal is still possible within 45 days to the Arbitrator if the proposed compensation is not accepted or accepted under protest. Further appellation is allowed to an Arbitration Appellate Tribunal.

The determination of plots, areas and owners affected take a lot of work in this process irrespective of whether the Ordinance of 1982 or the Act of 1989 is used. The Mauza map and the records-of-right give only an incomplete picture of the situation. Three times the staff of the requiring body (RB) and the Land Acquisition Office (LAO) have to go out for checking and verification: first before the proposal from the RB to the LAO, then after it has been submitted and finally at a joint verification before compensation is decided.

The LAOs, their staff and their competence, play an important role in this connection. According to the survey of Hamid et al there is a general complaint about the shortage of the staff and lack of vehicles. The staff consists of Land Acquisition Officers, Kanungos, Surveyors and Process Surveyors, Tracers, Draftsmen and office staff. Apart from the shortage in number, it

has been observed that the quality of the existing staff is not satisfactory at all. Many gross mistakes are committed by them and the backlog is substantial. A great many land acquisition cases are still kept pending (maybe around 30 000 for the country) - however mainly according to the earlier law of 1948 and because of appeals concerning compensation.

3.4.2 Determination of Market Values

In the process of determining ownership and other rights in land for the purpose of acquisition the information contained in the Land Register is not much used. As mentioned, land registration gives priority but is not a proof of rights in land. In case of ownership disputes, the records-of-rights including modified rentrolls, the actual occupancy and deeds of transfer will be the main evidences. They may, however, be supplemented with the information in the Land Register.

The main use of the Land Register in this connection is for estimation of the market values. In determining the amount of compensation to be awarded for any property to be acquired the market value of the property at the date of publication of the notice are to be considered under sec.3 (sec.8). Basically, the market value is determined as average sale prices quoted in registered deeds in the local sub-registry office of the concerned area during the last 12 months. In addition to the market value of the property twenty percent of the value shall be added as compensation in consideration of the compulsory nature of the acquisition.

3.4.3 Problems Encountered

One type of problem connected with the method is to decide the market values in the process of acquisition. It has been observed (Hamid et al 1985 page 66-68) that the proceeding described above is not always followed. To sort out the records for a particular period of time and for a particular area from the huge unorganised files is extremely difficult. Moreover, all lands are not registered in the Registrar's Office of the same Upazila (sub-district) or district. The collector of sale statistics may therefore make biased selection of the records. A usual practice appears to be that the LAO staff collects the easily available sale-deeds and get them authenticated by the Sub-registrar. According to Hamid et al it is alleged that, thereafter, the concerned official makes two lists, one with high values and the other with low values and makes use of one or the other depending upon circumstances. 'Unconfirmed sources tell us that these circumstances are governed by the amount of bribe.'

It is also known that prices could be manipulated in such a way that some owners 'sell' a part of their properties at a comparatively very high price and then compel the estimator to use this deed for calculating the value.

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On the other hand, there are reasons to believe that recorded sale prices as an average are too low. It seems to be a general custom that the prices given in the deeds are much lower than the actual ones in order to evade the high stamp duty. How much is of course difficult to say, but it seems obvious that this discrepancy can be very substantial and definitely cause far to low compensation. Further, it is rather likely that the best land is not sold so often, which may lower the average values. Land may also often be sold under pressure (mortgage, other loans, family needs etc) with resulting underpayment. It is also a fact that from the time of the comparison sales up to the time when final compensation is paid and disposed of, possibly by buying of compensation land, prices normally have risen considerably.

Altogether, there are many reasons to believe that current price statistics do not give the true market values. Surveys performed have given a clear indication that practically all affected land owners feel undercompensated and do not believe it possible to buy equivalent land for the amount received.

Another type of problem depends on defects in the present land records. As was earlier mentioned, a complete revision of the records-of-rights within an area is supposed to take place around every twentieth year, but in reality occurs more seldom. In the meantime mutations of the records should have been made at transfers, subdivisions etc. But as mentioned earlier this is ordinarily not done unless the owner of the land takes action himself. The records are therefore as a rule out of date, especially in areas with high development. To quote Alam: 'In Tejgaon Circle of Dhaka city, the total number of mutation cases was 60,000 over a period of three years from 1985. Updating of this type of changes in records cannot be handled under the present system of land records.'

The land registers have a low legal validity, are incomplete and unreliable. After having stressed the lack of public compensation because of losses due to mistakes or errors in the registers Alam makes the statement: 'The result has been large scale fraud and forgery related to land registration. Under the existing law, one can get any land and even a Government land registered for sale. Sale of Government land (khas land) through fraudulent means are too many. Registration of the same piece of land in favour of more than one person is also very common. For obvious reasons, cases of fraud and forgery in the registration of urban lands are higher compared to lands in the rural areas, since urban lands are much more valuable.' These deficiencies in the records-of-rights and registers cause, problems and uncertainties. Checkings and corrections have to be done and teams have to visit the field on several occasions. After all the checking, the records seem still incomplete and uncertain, and often result in the previously mentioned failure to serve personal sec.6 notices to all affected interest holders. This failure can diminish the possibilities to present claims and defend rights. Especially, it might be serious for all absent interest holders. The present occupiers may falsely claim right to compensation at the same

time as the rightful interest holder loses it. To quote the findings of Hamid et al:

'Paying compensation to owner-occupiers is not an easy job. The complications usually faced include: (a) false land record; (b) confused or inaccurate plot No., CS records, RS Records etc (for continuous change of ownerships), (c) illegal occupants' demand for compensation; (d) the share-croppers' (in the absence of the real owner) demand for compensation, (e) or even the co-sharers' demand for full compensation, litigation on land under acquisition; and so on and so forth'.

This general uncertainty concerning rights in land does not only cause much work and false payments but often also substantial delays of the payments. Field visits revealed that disputes concerning ownership might lead to delays of 3-4 years or more.

The lack of reliable information concerning the total ownership situation within the village definitely hampers efforts to find available compensation land in the neighbourhood to cover land losses or to adapt the ownership pattern to the new structure.

3.4.4 Possibilities to Diminish the Problems within the Present Recording System

There seems to be some possibilities to improve the situation even if the present system is kept to a large extent.

Concerning the price statistics it ought to be quite possible to gather the transfer deeds for a certain neighbourhood and a certain year. The now very superfluous transfer deeds should for registration purpose be summarized in a standard form of no more than one page giving the essential particulars. Many countries such as England, Australia and Kenya, use such printed forms. This will make transactions easier and diminish the need of legal assistance but also simplify handling, copying, storing and not least understanding of the deeds. The storage should be in books for sub-sections of an Upazila, may be even a separate book for each Mauza, within which the deeds can be arranged according to khatian number. As now, an index register should also be kept in running time order with khatian-, plot- and reference numbers. Obtaining the relevant price statistics would then be substantially simpler.

A further development which might be considered even now is to computerize the mentioned index for the future maintenance and let it include also areas and sale-prices. This would make it possible to get an immediate answer on which holdings have been sold within a certain Mauza during a certain period and the average price per acre, with possible sub-divided by land classes. To maintain and store the index in this way on a personal computer should in fact be a simple operation, which could be implemented even without the changes proposed above. It would enormously simplify handling of price statistics.

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The present understatement of the real market prices is of course difficult to eliminate. As it is mostly done to avoid too high registration fees, one natural way would be to lower the rate of registration fees. The loss of Government income could be compensated by introducing a gain tax, calculated on the basis of the difference between the received price and the price when the property was once bought (transformed with the help of some inflation index). This also makes the buyer unwilling to report a lower price than the real one.

One other way might be to increase the additional compensation from the present level of twenty percent. But still better would probably be to abandon price statistics as an immediate basis for compensation. Instead an 'estimation Committee' at the district level, consisting of people well acquainted with the land market, might propose suitable market values to be used for compensation. From time to time a check with price statistics might still be useful.

An important step for improving the whole record system is to strengthen the connection between the Land Administration Offices and the Land Registration Offices. At present the former functions under the Ministry of Land while land registration is the responsibility of the Ministry of Law and Parliamentary Affairs. The Muyeed Committee proposed that all land related functions be controlled by the Ministry of Land. If the Assistant Commissioner at the Upazila level was the controlling officer of the Sub-Registrar's Office, the maintenance of records-of-rights and land registration could be closely linked. Sellers' names in transaction deeds could be checked by records-of-rights before registration, which could immediately be followed by mutation and up-dating of the records-of-rights. So far as possible, every transaction deed should be referred to the description and number in these records. Every land number could further be given a separate entry in the Land Register where all registrations concerning the land in question would be gathered. This would very much facilitate searches and controls concerning rights to land and reduce frauds and mistakes in registration. Successively, the value of both records-of-rights and land registers would increase.

However, to get a really safe and efficient system there is need for another type of land register and another type of maintenance. This is discussed in the next section.

3.5 Modernization of the Land Recording System

As mentioned earlier the two main drawbacks of the present land records are their low legal validity and their poor maintenance. Both can be explained by the fact that the Bangladesh system is built on a registration of deeds instead of a registration of titles.

3.5.1 Title Registration : A Different Type of Land Register

Under the system of deeds it is the deed itself which is

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registered. The deed is a record of a particular transaction and serves as an evidence of this particular agreement but it is not a proof of the legal right of the transacting parties to enter into and consummate the agreement. When this is not scrutinized at the registration the register will have a low legal value. When on the other hand titles are registered, the deed is just an evidence of the title (ownership etc) which is shown in the register. The Register is itself a proof of rights to land and its correctness is usually guaranteed by the State.

There are four main conditions for a good title register.

- a. a clear definition of each land unit within an area, mostly by map and a unique number.
- b. a legal checking and ascertainment of rights in land, and a special entry (folio) for each land unit, where these rights are registered,
- c. a public guarantee of the registered rights,
- d. continued maintenance of the register and the maps including the obligation to register all land transactions and subdivisions.

If the land information system is also to include property and tax records of the cadastral type, such as the records-of-rights in Bangladesh, there must further be a close communication between legal and cadastral records.

With a good register of title all existing valid rights which, according to the law, have to be registered are visible by a look into the entry of the land unit in question. No further investigations and searches are necessary. If the register is complete within an area one can immediately find all owners and other right holders in every property affected by a new structure such as a road or an embankment.

There is a general accord that this type of land register is the best and most efficient and should be a long-term goal in well populated areas. But can it be achieved in Bangladesh?

It is possible if two conditions can be met :

- an initial settlement (adjudication) shall reveal existing ownerships and other relevant rights in all land units within the area; on this base a reliable land register can be established;
- this register must then be kept up to date in such a way that all new relevant rights which are valid against a person in good faith are inserted.

Fulfilment of these two conditions is of course a gradual process in all countries. In Bangladesh it must be an area-by-area

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process. However, the first condition is already embodied in the existing method of revising records-of-rights district by district with certain intervals. In principle, all boundaries of existing land units shall after such a revision be marked on the Mauza map and present ownerships be notified in the records. Considering the work done at such a revision, it is an enormous waste not to update this important information efficiently.

Bangladesh is favourably placed compared to some South-east Asian and African countries which have initiated and/or completed their programme of modernising land records.

3.5.2 Benefits of Title Registration

Much can be said about the benefits to be expected, from a private or public viewpoint, from a well working title registration. Some main points may be summarised as below :

- a. It greatly facilitates all transactions concerning land, and makes such transactions easier, cheaper and more secure. Because private conveyance of land in Bangladesh otherwise may often be both insecure and expensive, it stimulates a well functioning market of land.
- b. It provides security and protection for the owner as well as for others with land rights. In Bangladesh the rights to land are often insecure. This situation is frequently used for improper actions from the powerful landowners against the poor and weak, who have few resources and little knowledge to defend their cases in court proceedings. Even the Government has now difficulties to define and protect its own Khas (governmental) land and other rights to-land.
- c. It greatly reduces disputes and litigation over land, resulting in better social and human relationships, less work for the courts and less expenses for the individuals. There seems to be a general agreement that in Bangladesh most of the present court cases directly or indirectly have connection with land disputes and uncertain rights.
- d. Security of ownership and other rights to land stimulates investment in land. Without such security only short-term or cheap improvements are likely. It further increases the means for such investment through long-term bank credit secured by land instead of short-term money from ad hoc programmes or from the local money-lenders with high rents. Most banking institutions insist on a sound title before granting loans or mortgages.
- e. It gives a better base for improved land use and management. As land is a basic resource in Bangladesh and the population growth rate very substantial, this is an important point. Better land use can be encouraged

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through planning and development regulations, through direct actions, such as regular urban development, irrigation and embankment projects, other infrastructural improvements etc. It can also be achieved by providing good conditions for private development. Large scale up-dated maps and records including reliable registration of all important rights in every defined land unit are essential for all these purposes. This may also be the base for further developments in the land information systems, where vital information concerning property conditions, rights, assessed values and rents, population on the land etc are gathered in different data bases, which are possible to connect by a common key such as the cadastral number of the land unit. If the land units are referred to a general spatial reference system, all this information can then be positioned geographically. It is hardly needed to say that the present land management in Bangladesh leaves much to be desired, not only because of institutional weaknesses and lack of resources, but also because of a lack of proper planning maps and sufficient knowledge of present ownerships and other relevant land information.

- f. Up-dated records are vital for a land revenue system. They can provide a fairer taxation, increase revenue by making taxation coverage more complete and make a more efficient rent collection possible. It is difficult to say how much the Government loses every year in revenue because of an inefficient system. Alam estimates that the present collection of land taxes in Bangladesh gives less than one third of the amount to be expected with strengthened management and updated records. This is not a specific situation for Bangladesh. In Zambia it was found last year that by computerizing the land records the collected land revenue more than doubled.
- g. Reliable land records are often a condition for the implementation of a land reform policy. Land Reform in Bangladesh is an obvious example. By the East Bengal State Acquisition and Tenancy Act, 1951, the Government decided to abolish the old land rent system, building on the right of appointed Zamindars (tax-collectors) to collect and partly keep rent within specified areas. Certain compensation were given and the cultivators were thereafter tenants directly under the Government. Further, a ceiling was introduced. No one could keep more for his family than 33.3 acres (now changed to 20 acres). All rent-receiving interests and all excess land were by a special Ordinance in 1956 acquired by and vested in the Government.

However, the implementation of this land reform needed revision of records-of-rights. But no effective steps were taken to provide for the administrative machinery for a quick revision. Due to the lack of reliable

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records, the Government had no means of knowing the total area of land which had been vested due to the Act. The land reform, especially taking over excess land for re-distributing to landless people and controlling that no one by purchase of more land oversteps the prescribed ceiling of twenty acres, has for lack of an updated land record system largely failed (Ali 1983). The same can, for much the same reason, be said about trials to introduce compulsory consolidation of lands. The key element for implementing a land reform policy and structural improvements is obviously a good system for land registration and maintenance of up-to-date land records.

- h. An accurate and up-to-date land record system is also needed for other types of land control. It has often been emphasized that the holdings in Bangladesh mostly are heavily fragmented with the area distributed on many different fields. This is aggravated by the normal practice to portion out the land to the male heirs upon a father's death. The only real possibility to check such fragmentation is by a title registration system in connection with prescribed regulations. Problems of illegal occupation, abandoned land, irregular land use etc are all difficult to handle without a good registration system.

To conclude, there are many benefits to be expected from a title registration system, benefits which however seldom comes automatically. Improvements in land information systems have to be combined with other appropriate measures to reach full effects. It is therefore difficult to make any reliable calculation of the benefit to be expected in Bangladesh. Many advantages of a modern system are also not easy to express in monetary terms. For example, what is the money value of improved possibilities to implement a planned land reform? Even if some estimates may be done concerning certain benefits, such as increased revenue, most of them can at best be described only in qualitative terms.

It is also hard to give reliable cost figures, both concerning the initial settlement (adjudication) and the continued maintenance of the register. Needed resources vary from country to country, and so far there is little experience of such operations in Bangladesh. The costs naturally also depends on the methods used. Some consideration will therefore be given to this.

But first, it should be emphasised that this discussion only partially is connected with the embankment projects. Indeed, benefits of a revised system are essential also for the land acquisition operations, especially if these are connected to rehabilitation, resettlement and integrated development as will be discussed in a later section. But they have a much wider application. In this case, however, the recommendations concerning use and handling of land records at acquisition must

also consider the possibilities of a long-term programme for a general improvement of the systems.

3.5.3 Methods for Implementation of Modernized Land Records

If it is chosen to gradually introduce a Title Registration System in Bangladesh with connected and well maintained records-of-rights, it is a measure for the future which can be started today. The operations must include much field work with revision of existing records, which means that they have to be performed area by area. In fact the settlement may very much follow a similar line as the systematic revision of record-of-rights which is earlier described in section 3.2.

As shown such a revision is a complicated operation. There might be ways to simplify it. One is to change to alternative survey methods. The present rules prescribe traversing and detailed ground survey. The use of methods based upon aerial pictures and satellites (GPS 'Global Positioning System') should be given careful consideration. It may be that today the necessary technical equipment is not easily available in Bangladesh. These things must however be considered in a long-term perspective. Some discussions and comparisons concerning choice of survey methods in this connection are found in Larsson (1991).

Generally, it seems likely that an extensive use of aerial pictures should be a true possibility for the production of revised Mauza maps. Corrections because of height differences are seldom needed. The landscape is as a rule open and the boundaries should normally be well visible on the aerial pictures, at any rate outside the building areas of the villages. The flight photography may be expensive if it cannot be provided within the country. But in an ordered programme of revision, large areas could be flown and treated at the same time and the cost per acre reduced in this way. It has for example been found in Thailand that most of the survey work in connection with initial registration should preferably be done by aerial methods.

It must be remembered that the survey as a rule takes the most heavy part of the total costs. All should therefore be done to reduce both its time and costs.

But also the proceeding itself should be scrutinized. Since a settlement area has been decided and a Settlement Officer appointed, great care should be given to publicity, since it is of utmost importance that all parties are aware of what is going on and can make their claims. Personal notices should be given to all persons known to have an interest in the land. The technical work is performed by a surveyor, who also may demarcate the boundaries when needed and record claimed interests. In many countries it has been found useful to establish an advisory committee, representing the members of the area, which can help to solve disputes and decide the claims concerning the land.

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When preliminary maps and ownership records are established they have to be open for inspection for a specified time and may even be explained on the ground. After needed corrections are done, complaints may be made to the Resettlement Officer, but after his decision the records are final. Further appellation may however be allowed.

These proceedings are similar to the present revision of records-of-rights, only that more efficient survey methods and more room for advisory committees are recommended. There are no real reasons why it should be more expensive. The staff is already at hand within the Directorate of Surveys and Records, including its Settlement Officers in the districts. The reduction of the work within land offices, registrar offices, courts etc, must also be taken into consideration.

After the settlement is finished, but before further appellations are finalized, the records should immediately be sent to the Land Registrar, which has to insert all owners and other persons having rights in land in a new register, especially prepared for the area in question. It should be based on the principles of title registration. For every land unit notified at the settlement operations, there should be a special entry (folio). In many countries, like in England and Kenya, it is subdivided in a property section, giving the administrative unit, the parcel number, the area, particulars of land use, appurtenances connected to the land, references etc, a proprietorship section, with the name and address of the owner, date and reference number of title deed, sale price in case of transfer etc and an encumbrances section, containing statements of mortgages, leases, charges etc.

Because of the previous adjudication, including preliminary records, public inspection, claims, examination and decision of claims (after advice of a committee with good local knowledge) and further scrutiny in case of appellation, there are reasons to believe that these land registers are reliable and can be guaranteed by the State. If this seems doubtful there is a possibility to declare them as provisional registers, which after a prescribed time, say five years, automatically change to final for all titles, against which no objections have been raised up to then.

The important thing is then that this reliable register is properly maintained. To attain this there must be rules that all transactions concerning rights specified in the law must be registered within a prescribed time, otherwise they will be null and void against an unknown person. Also bequests should be registered, without any stamp duties. In case of sub-division, a survey of the new boundaries must be done and a number given to the new lot, otherwise registration will be refused. In case of inheritance with specified shares, the parties can be registered as co-owners with given shares, but no partition on the ground will be legal if it is not surveyed and given a new number.

It will further be the responsibility of the registrar to send notice to the Land Office in case of changes in ownership and the records of rights will be changed accordingly. All these steps are further simplified if the records are computerized, which is now more or less going on all over the world. Some lessons may be learnt from the recent implementation of computerized records in Zambia in a co-operation project between the government and SIDA. As computerization certainly will come also in Bangladesh all new registers should from the beginning be adapted to such future development. The cooperation between the Registry and the Land Office will of course be simplified if they both are parts of the same organization and preferably share the same building.

3.5.4 The Initial Steps

It may seem difficult to change to a new type of land registration. Some additions to the existent laws must be done, for example registration of bequests and rules concerning new types of books to be kept (useful comparisons can be made with the Kenyan adjudication and registration laws, published in Simpson 1976).

Many countries have however successfully performed this kind of operation. Apart from the preparation work the change is not very dramatic as the system will start only within limited areas and then successively expand. As mentioned Bangladesh is well prepared for this scheme as the practical work does not differ too much from the existing model of revisions of records-of-rights. For a long time both the old and the new system will exist, only in different parts of the country.

There is an obvious advantage with this model: there is no need to decide at an early date if only a more developed part of the country shall be included in the new system or if this will be extended further. Over time, experience can be gained of practical problems, costs and benefits, before further extension to new areas is decided upon. The programme and the time schedule can be adapted to existing resources.

A Pilot Project on Computerised Title Registration

Be it so, the question if and how a new system shall be introduced must be thoroughly considered. A part of such feasibility studies should in this case always be pilot trials within limited areas. They may include comparison of the costs, results and implementation problems of alternative survey methods used in this connection. They may also give an idea of a suitable organization of the work and the practical problems encountered as well as reactions from people concerned.

The pilot trials should be made in rural and urban areas with typical but not too difficult conditions. If there are areas with already existent suitable aerial pictures, they should be preferred. It is good if the pilot areas can be included in the ordinary programme of revision of records-of-rights.

It would however be very interesting if some of the planned embankment areas within the Flood Action Plan programme were chosen as pilot areas and the work performed in such a good time that up-dated records-of-rights were available at the time of land acquisition. In such a case, it could be tested to what degree simplification and reliability of the land acquisition process would be possible, when good records of plots and rights were available, and how these might help in an extended rehabilitation programme. And, if the area was big enough to motivate a separate aerial photography, to which degree could its results be used not only for the preparation of Mauza maps but also for technical projection of embankment, waterways, roads, irrigation etc ?

Such a pilot study could be included in an extended future Flood Protection Programme and partly be supported by donors. It may also be an independent programme. It may be mentioned that this year a cooperation programme of this type has been started in Mozambique with SIDA support. It includes a package with strengthening of survey institutions by equipment and education and a programme for pilot studies within selected areas for a new land register, comprising funds for aerial photography.

Ways and means of such actions should be given attention in the the final recommendations of the Flood Action Plan Programme.

3.6 The Advantages of an Improved System of Land Records and Land Registration for Land Acquisition

It is quite obvious that with title registration and corresponding up-dated records-of-rights the land acquisition process would be simpler and safer in many ways. The revised Mauza map would indicate the actual plot and boundary situation and the title register would immediately present all existent legal and guaranteed ownerships and other rights within every numbered khatian and plot. Site Plan, Plot Index and Land Schedule could be erected without further checking or after simple checking of the land situation with local representatives. The joint verification on the ground by the Requiring Body and the Land Acquisition officials would be highly simplified and could concentrate on the soil, valuation and compensation questions instead of being diverted to the control of boundaries and ownerships. Considering the present state of insufficient personnel and transportation resources at Land Administration Offices and the huge work load now connected with checking and verification, such simplifications should remove real bottlenecks in the proceeding and substantially diminish the present intolerably big backlog of land acquisition cases. And what is also important: all section 6 notices could be personal, including also absent interest holders; and the later compensations and payments would end up in the right hands. Fraud and mistakes would hardly be possible.

But still more significant is that the scope of the process could be considerably widened and include not only compensation but

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also measures to avoid future losses and impoverishment due to reduction of land and the basic resources of living. The Study emphasizes that so far as possible one should avoid resettling people far away in unfamiliar surroundings. Failures and social disturbances will be common. It is far better if the economic base of the affected families could be strengthened within their former living area.

The Policy Guidelines in World Bank-financed projects stress this very definitely as a first requirement.

'whenever feasible, involuntary resettlement must be avoided or minimized, and alternative development solutions must be explored.'

This must be taken into consideration in planning the feasibility study and the costs included in the project budget. It must then be a part of the whole planning and implementation process.

The World Bank further emphasizes the need for participation of and information to the people concerned, from the early stage through the planning and implementation phase. Development packages and strategies should be developed together, socio-economic consequences carefully watched and actions taken to minimize harmful ones. Participation and cooperation should be developed by stimulating group activities.

In what way can a modern land records and registration system contribute to the implementation of these guidelines?

It gives time for preparation to decide how these problems should be handled and early information given to the people concerned. Especially if the register is computerized, which should be a principal aim, it is easy to draw out lists of owners and areas which will be affected with alternative alignments. It is also easy to find the numbers of affected owners in different areas and classes. An alignment can be chosen which minimizes harmful socio-economic effects, early prognoses can be done of the numbers of resettlers and pre-planning and preparations are possible. As it is now, these things are difficult and almost never done.

Furthermore, with a modern land records system it is easy to call affected owners to public meetings to discuss the plans. Participation may thus be a reality. As earlier proposed, at least one such meeting should be held before the alignment is fixed and opportunity given to objections.

As the ownership situation is clear, the body responsible for the project can start planning and partly implementing rehabilitation and resettlement measures well ahead of the formal proposal to the DC for land acquisition. In the first place it is a question of finding compensation land. To a certain degree it can be bought in the open market, by the project or by the owners affected. A modern registration system will help. The rights to

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land are no longer obscure but clear and guaranteed. The new system takes away many earlier hindrances against land transactions and makes the process easier and cheaper. It is further easier to find which land is available.

In the second place it will clarify the extent of land vested in the Government within the neighbourhood. This includes

- earlier khas land, comprising arable land as well as forestries, fisheries, waste and hillside land, Hats/Bazars etc.
- abandoned land
- Char land i.e. newly formed land arising out of river action (such land exists in almost every district but especially in the coastal districts, where it is estimated to be in the region of 2-3 million acres)
- excess land according to the ceiling regulations.

Even the earlier Khas land is often badly delimited and protected and more or less irregularly occupied. The Char land should normally be leased to adjoining cultivators or co-operatives for cultivation. But stronger interests seem to take over in many cases. To cite Dr. Shawkat Ali, a former Deputy Commissioner:

'In most cases when the area is bigger than is permitted by the land-ceiling, unscrupulous land-grabbers would circumvent provisions by forming fake co-operatives. These land-grabbers are usually the surplus and absentee farmers of the area having 'influence' with the local government functionaries. It is customary for them to take over possession of Char land by resorting to violence for which they keep armed retainers in the old Zamindari style. It is common knowledge in Bangladesh that the newly formed lands are always retained by the influential rural notables of the area.'

A modernized land registration and recording system will, in all these respects, help to clarify the situation. Government land can be identified within a land acquisition area and be used to compensate the land losses. It is often said that all arable land is occupied in Bangladesh. But it is far from always the rightful occupiers. An efficient land register is a means to redistribute the land to those who have most need for it.

It may also help to consolidate the new holdings. In many, specially European, countries it is a common practice to include reallocation of land as part of road projects or other big infrastructural projects. The existing systems of plots, fieldways, ditches etc are often disturbed by the new structures. Embankments will in themselves cut over existing plots but also cause secondary structures for drainage, irrigation, water courses, roads etc. To adapt the field system to the new

conditions, consolidation is often the best way. It can also be used to smooth out and equalize land losses among owners in the area as well as to incorporate available compensation in land and thus diminish the need for total resettlement. A reason for consolidation is also that fragmentation generally is high in Bangladesh (5-10 plots per holding).

The need for consolidation in this connection must also be seen against the background that one of the eleven guiding principles for implementation of a flood plan according to the Flood Action Plan is as follows:

'coordinated planning and construction of all rural roads, highways and railway embankments with provision for unimpeded drainage.'

The initial investment for flood protection shall thus be seen as a part of a comprehensive infrastructural plan. Water development in Bangladesh has arrived at a stage where it has to proceed progressively from single purpose water schemes to complex inter-related projects including drainage, irrigation, roads, channels etc. The embankment planning ought to be coordinated with the Upazila planning of the Local Government Engineering Bureau and similar other organizations. In this picture land consolidation has its given place as the most effective means to integrate and adapt the system of ownership boundaries with the new infrastructural pattern. It needs hardly to be said that a modern system of large scale maps and updated land records is of great help not only for consolidation as such but also for the total integrated planning.

The discussion in this section has so far presupposed that such land information systems are at hand. What to do in a situation, especially in connection with Flood Action Plan projects, when this is not the case ?

A big infrastructural improvement, such as embankments or water control by compartmentalization of protected areas, may be looked upon as the first step in a series of measures to improve the land use and the production possibilities. If it is not followed by these other measures, exemplified above, the full effect will not be reached and the benefits will be reduced. The opportunities to raise the level and mobilize the people lost.

As shown, one basic measure is the improvement of the land record and information system. According to the Team's view, the possibilities to revise existing records and improve land registration in the area concerned should therefore be seriously considered well ahead of final implementation of all big water protection measures, particularly for those which may arise out of the Flood Action Plan. It will not only help land acquisition but will also have long-term benefits for the entire development process.

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Also from a cost/benefit aspect, there will be clear advantages in coordination. Aerial photography will greatly simplify survey operations. But they are also useful for project planning.

In fact it is stressed in the Flood Action Plan that this has created a demand for accurate and up-to-date maps. Within the FAP-18 programme some action to meet this demand is under way. Already in 1988 FINIDA began a survey and mapping programme in the south of Bangladesh and will now photograph and map the floodplain of the Brahmaputra and selected areas of the North Central and Northwest Regions. FINMAP will also carry out a major programme to establish levelling and geodetic networks in the two regions. Other mapping actions from France and Switzerland are also included in FAP-18.

FAP-19 is a project to develop geographic information systems for obtaining, storing, manipulating, retrieving and displaying geographically based information for the planning, implementation and management of the FAP activities. Much of the information concerning land has a natural connection to holdings and ownerships. Especially if land records and land registers are computerized, they will form a natural and basic part of a more general geographical information system.

The pilot areas needed for the feasibility studies of land record revision and title registration might therefore, when suitable, be coordinated with embankment projects and started at an early planning stage with integrated use of aerial photography, maps etc. If a change to modern recording and registering systems within selected areas is decided upon, such coordination should be a normal praxis. Considerable advantages and increased long-term benefits can then be reached. The plan of every embankment project according to the Flood Action Plan should therefore include considerations of such co-ordination with mapping and recording activities well ahead of the actual implementation in order to get a sound base for the following land acquisition and rehabilitation operations. This may well be inscribed in the planning guidelines.

Chapter 4

4. SOCIO-ECONOMIC IMPACTS OF LAND ACQUISITION

4.01 Introduction

This chapter reviews the land acquisition process and its socio-economic impacts from the point of view of households which are affected by it. The aspects particularly emphasized are

- experiences of the households about the process of land acquisition;
- the impact of land acquisition on the economics of the households; and
- rehabilitation experiences of displaced households.

It draws mainly on the socio-economic survey covering households from 26 villages in six embankment project sites, and the case studies at the Jamuna Multipurpose Bridge Project site. The methodologies of the survey and the case studies have been explained in Chapter 1. All the tables presented in this Chapter are based on the findings of the socio-economic survey.

4.02 Household Experiences of the Land Acquisition Process

4.02.1 Consultation

From the perspective of democratic and efficient planning, a process of consultation with the local community is both desirable and necessary. First of all, a discussion with the local community about the basic concepts, including the technical design, costs, benefits, financing and maintenance, creates a sense of participation. This is extremely useful not only in ensuring a proper implementation and maintenance of the project, but also in paving the way for local contribution towards the costs of the project, capital as well as operational. Furthermore, a well-determined alignment will have the double benefit of preventing unnecessary loss of valuable agricultural land and adding to the ranks of displaced households. Local opinions can also provide a very useful scrutiny of the relevance and utility of a project and thereby contribute to better designing of projects and caution against wasteful expenditure. Table 4.01 describes the experiences of affected households at 6 selected project sites in respect of the consultation process.

In the selected project sites there was no evidence of the much talked-about decentralized planning or significant efforts on the part of the concerned authority to engage in adequate consultation with the local community. Only 24 percent of affected households benefited from a proper explanation of the project by the relevant authority. With regard to the more

concrete matter of discussions about alignment, the situation was even more non-participatory with only 3 percent of affected

Table 4.01

Consultation Process : Experiences of Affected Households

site	column 1	column 2	column 3
	% of affected households to whom project was explained	% of affected households with whom alignment was discussed	% of affected households to whom notice of acquisition was served properly
Kurigram	18	-	28
Shahzadpur	21	3	77
Magura	4	-	72
Mirpur	14	4	46
Matlab	55	-	39
Moulvibazar	16	2	100
All sites	24	3	61

households benefitting from any discussions on the matter. The community level questionnaire revealed for example that in the case of the Dhaka Flood Control Embankment site at Mirpur, a more thoroughly discussed alignment could very well have greatly reduced the extent of property loss and displacement of households.

The lack of a participatory approach extends even to the manner in which people are officially served a proper notice of acquisition. Considering all sites as a whole, only about two-thirds (61 percent) were directly served with a proper notice of acquisition. For the rest, serving of notice was either delayed or notices were received indirectly or a notice was simply posted on the land. The manner in which the notice of acquisition is received, of course, has a bearing on the household's subsequent ability to pursue its legal rights.

4.02.2 Compensation

For an average household the process of compensation is administratively harassing, financially extortionate and economically unsatisfactory.

Administrative harassment is best expressed by long delays between the land acquisition notice and the payment of compensation, provisional in cases covered by the 1989 Act and final in cases treated under the 1982 Ordinance. There are four main factors which account for these delays :

- inadequate ownership records;
- a lengthy bureaucratic procedure for determining compensation;
- negotiations on extra legal payments; and
- arbitration arising out of dissatisfaction with the compensation level.

Needless to say, the last factor applies only to the case of final compensation.

Table 4.02 shows the extent of delays in receiving provisional compensation as reported by the affected households at different project sites. It should be noted that the project at Mirpur, covered under the 1989 Act with provisions for acquisition on an emergency basis, shows a significant proportion (16 percent) of households reporting delays beyond one month, which exceeds the limit stipulated in the Act. Cases reported from other sites refer to the first of several installments of compensation which is often the case when financial allocation for the year falls short.

Table 4.02

Time Gap between serving of Notice and Receipt of Provisional Compensation

Site	% of households reporting a time gap of			
	less than 1 month	1-6 months	7-12 months	More than 12 months
Kurigram	-	34	2	2
Shahzadpur	10	34	44	-
Magura	6	84	4	-
Mirpur	84	16	-	-
Matlab	-	-	-	-
Moulvibazar	60	34	-	6
All sites	27	39	16	1

Table 4.03 shows the picture in respect of final compensation. Kurigram appears to be the worst case with 96 percent households reporting non-receipt of final compensation at the time of the survey. Overall, the picture is a rather stark one, showing major and systematic delays in compensation, often extending beyond 4 years.

Table 4.03

Time Gap Between Serving of Notice and Receipt of Final Compensation						
Site	% of households reporting a time gap of					
	0-6 months	7-12 months	1-2 years	2-4 years	more than 4 years	Not received yet
Kurigram	-	2	-	-	2	96
Shahzadpur	28	48	-	-	-	24
Magura	90	4	-	-	-	6
Mirpur	46	18	12	-	-	24
Matlab	79	5	2	-	-	16
Moulvibazar	-	-	-	-	22	78
All sites	42	13	2	-	4	39

The extent of financial extortion is indicated by Table 4.04, which shows the extra legal expenses incurred by affected parties in order to expedite the compensation-arbitration process and resolve it in their favour. For all sites as a whole, 87 percent of the affected households had to bear extra-legal expenditure of one amount to another, 42 percent had to bear expenses ranging between taka 1,000 to 5,000, while a not insignificant group of 11 percent had to bear expenses upwards of taka 10,000. This last group in the particular case of Mirpur was as large as 40 percent.

Dissatisfaction with the level of compensation was universal. Most people felt that their property had been grossly undervalued. Table 4.05 shows the differences between perceived fair price and price fixed as compensation. The view at 4 sites including Mirpur in Dhaka, was that the compensation received/offered should have been multiplied by a factor of 2 to 4 to reach a level of fairness. Matlab and Magura showed a considerably lower level of frustration, where respondents estimated an under-valuation not exceeding 50 percent.

Table 4.04

Extra-legal Expenditure on Arbitration and Compensation Procedures						
Site	% of affected households who had to bear extra-legal expenditure amounting approximately to					
	no expen- diture	up to Tk.1,000	Tk.1,000 - 5,000	Tk.5,000 - 10,000	Tk.10,000 +	Total
Kurigram	58	36	4	2	-	100
Shahzadpur	1	25	45	18	11	100
Magura	4	28	58	8	2	100
Mirpur	-	12	28	20	40	100
Matlab	14	11	41	27	7	100
Moulvibazar	-	12	78	6	4	100
All sites	13	21	42	13	11	100

Table 4.05

Comparison of Average Compensation Offered with Compensation Deemed Fair			
Site	average compensation offered (Takas)	average compensation deemed fair (Takas)	ratio
Kurigram	15,289	36,944	1 : 2.4
Shahzadpur	25,375	53,094	1 : 2.1
Magura	37,687	51,531	1 : 1.4
Matlab	54,380	70,398	1 : 1.3
Mirpur	611,746	2,444,400	1 : 4.0
Moulvibazar	18,822	57,270	1 : 3.0
All sites	165,665	624,586	1 : 3.8

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The widespread perception of the inadequacy of compensation levels has in fact a sound economic basis. As has already been pointed out in earlier chapters, the procedure of determining land prices based on the last twelve months' records of registered sales generally results in a serious undervaluation of the price. However, even if this source of undervaluation is ignored, there is a more pervasive and more pronounced source of undervaluation to consider. For a household about to lose all or a portion of its land, the operative consideration with regard to compensation is the cost of resettling in the locality in the changed environment of embankment protection. Land prices undergo significant increases consequent to embankment construction and the extent of this increase is clearly a factor in indicating a reasonable cost of resettlement. Table 4.06 provides some information on the immediate post-project and current period land prices vis-a-vis the price prevailing at the time of serving notices of acquisition. Sixty percent of households taking all sample sites together reported an immediate increase of 1.5 - 2 times (Table 4.07).

Table 4.06

Extent of Rise in Land Price in Immediate Post-Embankment Period

Site	% of households reporting a land price increase of				
	same as before	less than double	double	2-3 times	3-5 times
Kurigram	88	10	-	2	-
Shahzadpur	19	62	2	15	2
Magura	76	24	-	-	-
Mirpur	-	-	100	-	-
Matlab	-	98	-	2	-
Moulvibazar	38	-	62	-	-
All sites	36	35	26	3	3

With the passage of some time, this increase became more pronounced with 63 percent of households reporting an increase by a factor of 2 or more (Table 4.07).

The information provided in Tables 4.06 and 4.07 suggest a possible basis for a more effective determination of compensation levels. The argument here is to collate the experience of other projects to arrive at an average notion of the rate of increase in land price in particular in the immediate post-project

Table 4.07

Current Land Price vis-a-vis Pre-Embankment Land Price

Site	% of households reporting a land price increase of					
	same as before	less than double	double	2-3 times	3-5 times	5 + times
Kurigram	34	46	20	-	-	-
Shahzadpur	12	46	17	10	9	6
Magura	30	70	-	-	-	-
Mirpur	-	-	100	-	-	-
Matlab	-	48	27	23	2	-
Moulvibazar	-	-	38	36	26	-
All sites	7	34	37	15	6	1

period. This average rate of increase can then be used as a factor in calculating compensation levels for future projects. It may also be possible to develop disaggregated average rates based on regions and/or other criteria, and apply them appropriately.

4.02.3 Arbitration

A large proportion of the affected households, ie nearly 40 percent, resort to arbitration because of widespread dissatisfaction with compensation (see Table 4.08).

Arbitration, is a long drawn-out process and takes even longer than compensation. On average it takes about nine notices, three hearings, two and a half years of waiting for a verdict and four years for the final compensation. The average expenditure on the arbitration process, including payments, made even after a favourable verdict, is around Takas 1300.

One of the main reasons why arbitration turns out to be such a long drawn process is the absence of any time limit on various steps involved in it, as has been pointed out under section 2.5.3 of Chapter 2. The need for imposing time limits in the juridical process has been felt strongly at both public as well as bureaucratic levels.

4.03 Socio-economic Impacts of Land Acquisition : the Categories

Land is a most valuable resource in Bangladesh. It provides

Table 4.08

Incidence of Arbitration	
Sites	% of affected households seeking arbitration
Kurigram	63
Shahzadpur	-
Magura	5
Mirpur	75
Matlab	-
Moulvibazar	90
All sites	40

livelihood and promotes social status in this predominantly rural and under developed country. When an embankment is built the area as a whole undergoes tremendous changes. The land use pattern changes from a flood plain type characterised by deep water paddy and open water fishery to a flood-free type characterised by multiple HYV crops and pisciculture. Land as a whole increases in productivity and hence value. In the transport sector boats are gradually replaced by rickshaws. Electricity and other modern amenities of life begin to appear and the area as a whole becomes more closely linked to the national and international markets.

In this situation of a transition, marked by difficulties as well as opportunities, land acquisition has a mixed socio-economic impact on households affected by it, either directly or indirectly. Direct impacts consist of loss of land, homesteads, trees and crops, while indirect impacts can be varied and depend primarily on the location of homesteads, agricultural land and various other job sites in relation to the embankment.

The socio-economic impacts of land acquisition on the households can be categorised in many different ways. But they will eventually be manifested in incomes and/or living standards.

Given below is a simple categorisation of impacts in a descending order of the importance of income losses (and gains) :

- Losses in relation to assets :
they would imply a permanent loss of income through reduction in the quantity and/or productivity of assets;

- Losses in relation to employment :
they would imply a short or medium term loss of income depending on the stability of the lost employment, losses could pertain to opportunities of self-employment, difficulties in access to employment sites (including markets), and direct loss of employment by others;
- Loss of products, such as crops; implying only a short term loss in income;
- Gain (or negative loss) in relation to employment, implying a short or medium term gain in income, resulting from new opportunities provided by the project including direct ones on embankment construction and indirect ones such as increased demand for agricultural labour;
- Gain in relation to productivity of assets, implying a long term gain in income.

The last two categories of impacts listed above, namely the gains, have been by and large kept outside the purview of this study as they are being covered by other FAP studies, in particular FAP-12 and FAP-17. They are, however, very important in evaluating project performance and identifying potential contributors to the project cost.

The other three categories of impacts are discussed below on the basis of the findings of this study.

4.04 Impact on Assets

The impact of land acquisition on assets can be both in terms of quantity as well as quality. The quantitative impact would be in terms of the amount of land along with all its contents, e.g. structures, trees, crops, that is lost due to acquisition. The qualitative impact, on the other hand, results not directly from the act of land acquisition itself, but from what is done with it subsequently, namely the construction of an embankment. Among these indirect impacts the most important one is of course the loss of productivity of land and increased vulnerability of dwelling structures located on the riverside.

These quantitative and qualitative impacts are discussed separately below.

4.04.1 Quantitative Loss of Land : How Many People, How Much Land

The direct loss of land, being the most sensitive factor in land acquisition, will be dealt with in some detail.

First, the incidence, ie how many people are affected. Table 4.09 shows that land acquisition on account of embankment construction has affected a substantial proportion of the population in the project sites. The percentage of such households suffering land loss in no case is less than one-quarter (25.8 percent in case

of Kurigram) and is as high as 90.4 percent in the case of Shahzadpur (Brahmaputra Right Embankment Project). If we consider population rather than households, the percentage affected is even higher for all project sites (column 2 in Table 4.09). Considering all sites together, about 43 percent of the population and 38 percent of the households in villages touching the embankment, have suffered land losses.

Table 4.09

Magnitude of Population Affected by Land Acquisition

Sites	% of households suffering land loss	% of population suffering land loss	% of households wholly located outside embankment protection	% of households wholly located inside embankment protection
	column 1	column 2	column 3	column 4
Kurigram	25.8	29.6	37.2	37.1
Shahzadpur	90.4	90.0	4.2	5.4
Magura	46.3	51.9	46.8	6.9
Mirpur	38.0	42.5	-	62.0
Matlab	26.7	30.8	40.9	32.4
Moulvibazar	52.2	51.1	47.8	-
All Sites	37.7	42.9	33.3	29.0

It is possible that the magnitude of affected households indicated in column 1 of Table 4.09 may be an under-estimate to the extent that some of the affected households may have migrated out of the area and hence were lost to the survey. However, the community-level investigation did not reveal out-migration resulting from land acquisition as a significant phenomenon.

Table 4.10 describes the magnitude of land loss due to embankment construction at different survey sites. Overall, the magnitude of land loss on average stands at 13 percent of the total village land. If one considers only the land owned by affected households, the loss of land increases to about 17 percent on average. The relative percentage varies between the projects with the highest magnitude of loss in the case of Mirpur (28.8 percent) and the lowest in the case of Magura (10 percent).

Table 4.10

Magnitude of Land Loss

Site	No. of villages surveyed	% loss of total village land	% loss of affected household land
Kurigram	5	8.0	14.0
Shahzadpur	5	14.4	15.8
Magura	3	7.8	10.0
Mirpur	3	14.4	28.8
Matlab	5	23.6	27.2
Moulvibazar	4	13.0	14.5
All sites	25	13.0	16.7

4.04.2 Distribution of Land Loss

An important question in respect of land acquisition is whether there is any bias in the distribution of the land being acquired.

Table 4.11

Loss of Land by Land Ownership Categories

Land ownership categories	% households in category losing land	% land lost by h'hs in category
0.0-0.05	7.7	90.1
0.06-0.50	28.5	50.9
0.51-1.50	54.1	22.2
1.51-2.50	71.4	19.5
2.51-5.00	83.9	14.9
5.01+	85.9	9.7
Total	37.7	16.7

Two socio-economic variables were selected for this analysis : land ownership and occupations.

Table 4.11 shows the distribution of land losses across land ownership categories; the first column shows the percentage of households which lost land, while the second column shows the proportion of owned land lost to acquisition by each category. What strikes one immediately is the absence of any bias in land acquisition in the survey sites. Proportionately, more of the large land owners lost land : as many as 85.9 percent in the 5+ acre category compared to 7.7 percent in the lowest category of 0-0.05 acre. However, when the poorer households were affected, they lost proportionately more of their owned land. In the lowest category, for example, the loss was as high as 90 percent compared to about 10 percent in the highest category.

Table 4.12 shows households in different occupational categories which are affected by land acquisition, first as percentages of total affected households (column 1) and then as percentages of total households in each category.

Table 4.12

Loss of Land by Occupational Categories		
Occupation categories	% households in category losing land	% land lost by h'hs in category
Farmer	64.4	14.0
Fisherman	9.6	63.3
Artisan	30.9	25.6
Agri labour	14.9	36.0
Non-agri labour	27.0	13.9
Services	34.9	26.7
Business/petty trade	35.5	18.9
Residual	41.3	16.9
Total	37.7	16.7

As expected, the farmers stand out as the category to bear the brunt of land acquisition, nearly two-thirds (64.4 percent) of them being caught in the process, as opposed to a mere 9.6 percent of the fishermen. However, when it comes to the proportion of land lost, the farmers and the non-agricultural labourers have suffered the least, losing only about 14 percent of their total holding, whereas the fishermen lost 63.3 percent. A substantial proportion of businessmen, who were the next largest category in the village after the farmers, were also affected quite significantly. For the fishermen community land is

not the most important resource and land ownership amongst them is also rather limited. Their case will be discussed separately under employment impacts.

4.04.3 Quantitative Loss of Other Assets : Houses, Trees, Business

Table 4.13 shows for each project site, the proportion of households affected by the land acquisition process in respect of losses of assets other than land, such as houses, trees and business.

Table 4.13

Proportion of Households Suffering Losses of
Different Types Other than Land

Sites	% of affected households suffering loss of			
	Houses	Crops	Trees	Business
Kurigram	0.3	15.4	0.9	0.1
Shahzadpur	4.6	60.0	10.0	0.8
Magura	1.7	11.4	-	-
Mirpur	19.2	18.5	2.8	0.5
Matlab	2.0	19.7	1.6	0.1
Moulvibazar	-	-	-	-
All	4.1	17.6	1.8	0.2

It is important to note that although the proportion of households affected by land acquisition was relatively large (37.7 percent), those losing houses constituted a rather small group (4.1 percent). Tree losses were even more sparse (1.8 percent), and business losses were insignificant (average 0.2 percent). The losses of trees and business were reported only from four sites, mostly from Shahzadpur.

In view of the economic and psychological importance of homesteads, the distribution of their loss was analysed in terms of land ownership size (Table 4.14) and occupations (Table 4.15) of the households. The incidence of homestead loss in different land ownership categories showed an anticipated bias in favour of the rich, ie proportionately less of them were caught in the process. Considering all households in the category the highest incidence (5.5 percent) of homestead loss was in the 0.51-1.50 acre category, while the lowest was in the 5.01 + acre category.

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Considering only affected households the highest incidence (7.3 percent) was in the 0.01-0.50 acre category, while the lowest (0.2 percent) was still in the 5.01+ acre category. Households which suffered the most by losing all land including the homestead (ie 1st row in Table 4.14), constituted 1.0 percent of the

Table 4.14

Loss of Homestead by Land Ownership Categories			
Land ownership categories	% distribution of h'h's	% households in category losing homestead	% of affected h'h's losing homestead
0	13.3	1.0	0.4
0.01-0.50	46.5	4.8	7.3
0.51-1.50	17.9	5.5	3.2
1.51-2.50	8.9	3.2	0.9
2.51-5.00	9.4	4.2	1.3
5.01+	4.1	1.3	0.2
Total	100	4.1	13.4

Table 4.15

Loss of Homestead by Occupational Categories			
Occupational categories	% distribution of h'h's	% households in category losing homestead	% of affected h'h's losing homestead
Farmer	31.8	5.2	5.4
Fisherman	5.4	-	-
Artisan	1.4	1.8	1.9
Agri labour	26.4	2.2	0.1
Non-agri labour	5.1	9.2	1.5
Services	10.2	4.3	1.4
Business/petty trade	12.6	4.5	1.9
Residual	7.0	4.8	1.1
Total	100	4.1	13.4

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total landless households and 0.4 percent of the total affected households, which is not an alarming figure. Among the significant occupational categories, farmers seem to have suffered the most in terms of homestead losses at 5.2 percent. The percentage was higher for non-agricultural labourers, who however, constituted only a small fraction (5.1 percent of the total households). Interestingly, no fishermen household reported any homestead loss.

On the whole, the level of displacement caused by land acquisition for embankments appears not to have been of a magnitude that would call for resettlement schemes as a dire need. It is the pattern of acquisition along a linear strip that explains this relatively low incidence on homesteads. Therefore, the relocation of the small percentage of dislocated households within their own communities, and often on their own (remaining) land, is an usual phenomenon. This will be further discussed under resettlement experiences of the households.

4.05 Impact on Employment

As briefly explained under section 4.2 the impact of land acquisition on employment could be either direct, such as obtaining employment in construction (a positive impact) or losing employment as a share cropper on acquired land (a negative impact) or indirect, eg gaining rickshaw passengers (a positive impact). These impacts can also be divided into two categories : self-employment and employment by others. So, when a boatman loses passengers, he loses self-employment opportunities; when a new shop keeper employs local labourers, it is the other category.

The reason for looking at employment in terms of these various criteria of classification is to help analysis in respect of measures required to undertake a comprehensive rehabilitation plan where the roles of the government, NGOs, the private sector and the individuals are clearly perceived.

The greatest employment impact of land acquisition is the direct and negative one on the farming sector which loses around 15 percent land as pointed out under land loss. This loss increases to 19 percent for the households who lose it, which is a measure of the loss of self-employment opportunity for these land owners. These negative impacts, however, has to be weighed against the indirect and positive impact resulting from increased cropping intensity in the remaining agricultural land, which is the main objective of FCDI projects. One may only point out that it would require an increase of about 25 percent in the remaining agricultural land in these adjoining villages to offset the employment loss on account of land acquisition, which is not a high target in transforming flood plains to irrigated HYV agriculture.

For further analysis of the total impact of FCDI projects the readers are referred to the FAP-12 study on agricultural impact and the FAP-17 study on fisheries.

The next most significant type of negative employment impacts are the indirect ones suffered by self-employed households in occupational categories which utilise the common resources of the flood plains and the rivers for a living, such as fishermen and boatmen. Their losses range from difficulties in access, such as that for riverine fishermen living on the country side, to a total decline in the erstwhile employment opportunity, such as people operating country boats. For all sites together the fisherman community constitutes 5.4 percent of the households in the survey villages, which is not an insignificant category. The boatmen are fewer in number, comprising a mere half of one percent of the total households; and their resettlement may have to be in respect of occupational change if they are to remain in the same community.

One positive and direct employment impact arises at the time of embankment construction. This provides a substantial opportunity for offering temporary help to the affected households, particularly those which have been most seriously affected in terms of employment and income. Unfortunately, biases against the employment of local labourers, women in particular, have been reported from several survey sites. These reports have been further corroborated by the Jamuna Multipurpose Bridge Project (JMBP) case studies. The usual arguments about the lack of discipline amongst the local male workers and inefficiency of the female workers, even if partially true, are weak in the ultimate analysis. It calls for policy decisions about local employment as well as quotas for women, as practised in the Early Implementation Project (EIP) under Dutch assistance. It may however entail some concession to the contractor about the implementation time at sites where women are coming into the labour force for the first time. It also requires the assumption of responsibility by some local leaders to ensure that indiscipline and inefficiency are contained within tolerable limits.

Table 4.16 shows the employment opportunities availed of by various categories of households during the construction of the embankment. Overall about 7 percent households received employment. It was confined to households whose land ownership did not exceed 2.5 acres. The bottom category, ie those who are functionally landless, appears to have availed of this opportunity to a much lesser extent than households with more land (2 percent as opposed 11 percent). It may be indicative of some shyness about physical labour on the part of households newly turned landless. Those who did avail themselves of the opportunity though, had a substantially higher average mandays of employment, namely 150 days as opposed an average of 55 day for all households.

Table 4.17 shows the impact of embankments on sharecropping in different land owning categories. Overall, 6.4 percent of the households in survey villages are involved in losing land that was under share cropping. The maximum impact seems to have been on the functionally landless category of households (.05 to .50

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acre); about 11 percent from this group have been affected. It is followed by the landless category (0 to .05 acre) of which 8 percent lost share cropped land.

Table 4.16

Employment Obtained During Embankment Construction
by Different Land Ownership Categories

Land group	Total mandays	% households receiving employment	average mandays of employment per h'h'
0.00-0.05	150	2.0	150
0.06-0.50	422	10.7	70
0.51-1.50	350	11.1	44
1.51-2.50	114	11.4	28
2.51-5.00	-	-	-
5.00+	-	-	-
All	1036	6.9	55

Table 4.17

Impact of Embankments on Share Cropping and Out Migration

Land group	% household losing share cropped land	% households with family members migrating
0 - .05	8.0	14.0
.06 - .50	10.7	1.8
.51 -1.50	2.8	5.5
1.51 -2.50	2.8	0.0
2.51 -5.00	7.2	0.0
5.00 +	6.7	0.0
All	6.4	3.8

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To complete this discussion on indirect impacts one many look at the last column in Table 4.17 which shows the extent of outmigration experienced by households in different land owning categories. It is premature to interpret outmigration necessarily as an indicator of an adverse impact since there are many cases where such outmigration has led to positive increases in income (for example, through jobs in the Middle East) or the quality of human resources (through higher studies within or outside the country). Considering all categories together about 4 percent households in these affected villages experienced outmigration of some members. The maximum impact seems to have been on the landless category of which 14 percent have reported such outmigration.

Further findings on the employment sector, particularly with reference to women's employment, are discussed under the case studies at Jamuna Multipurpose Bridge Project (JMBP) site (see section 4.09)

4.06 A Special Category of Losers : Households on the Riverside

An important category of losers in embankment project sites are those households which, even if they suffer no land loss due to acquisition, have greatly increased vulnerability because of the location of their homestead and cultivable land outside of the embankment towards the river-side. In Figure 1.2 on page 5, this category consists of types 3, 4 and 9. Not only do these households suffer a steep decline in the economic value of their property, their physical vulnerability from all types of river action also greatly increases. In some cases, many of these households eventually become squatters on the embankment. Considering all sites 52 percent of the squatters came from this category. There are another 11 percent who have homesteads on the riverside and lost some land.

Column 3 of Table 4.09 shows the percentages of households who fall outside of embankment protection and hence become a vulnerable category as explained above. With the exception of the Dhaka City Protection Embankment, where this issue is not a relevant one, the proportion of households involved in every other case underline the gravity of this problem, the estimates ranging from 38 percent in the case of Kurigram to 48 percent in the case of Moulvibazar. Such high percentages bring to light a relatively obscured dimension of the land acquisition and resettlement debate, namely the emergence of a category of losers who have no legal claim to compensation, technically having suffered no loss of land, but who nevertheless suffer an immediate economic loss in the steep decline of their property values and whose physical vulnerability increases directly as a consequence of embankment construction.

4.07 Impact on Household's Economic Status : Income and Living Standard

The construction of an embankment is a major intervention in the

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life of the local community. However, it is unlikely to be the only factor in this regard. More importantly, rural households are rarely mere passive actors in the changing economic environment. In a variety of ways, they take the initiative to cope with changes and identify and avail of new opportunities. In these senses, the temporal outcome in the economic status of households who have lost land in project sites may not be a simple outcome of the fact of land loss but rather is reflective of all the above factors.

For the simplification of analysis it is necessary to have a common indicator synthesizing all these impacts, the important ones amongst which have been discussed in the previous sections. Income is a good catch-all variable for this purpose except that it has problems of estimation and does not fully convey the socio-economic status of a household in a transitional phase when financial wealth is not matched by education and other aspects of cultural and physical well being. It is therefore necessary to use both income and some indicators of the standard of living in capturing the overall impact of land acquisition.

4.07.1 Impact on Household Income

Table 4.18 shows the impact on average household income at different survey sites, while Table 4.19 shows the same for

Table 4.18

Percentage Changes in Average Income of Households Compared to Pre-project Levels by Selected Sites

Sites	household head		Other members		household total	
	changes on project completion	changes subsequently	changes on project completion	changes subsequently	changes on project completion	changes subsequently
Kurigram	-0.6	34.9	-1.1	235.6	-0.6	45.5
Shahzadpur	26.8	37.7	112.0	397.6	43.8	109.7
Magura	0.7	13.8	14.3	28.4	3.7	17.1
Mirpur	-36.0	-34.0	26.2	22.1	-24.6	-23.8
Matlab	7.8	-11.2	65.6	154.8	14.8	8.9
Moulvi-bazar	-24.5	-40.8	68.8	468.8	-22.2	-28.4
Total	-7.3	-10.3	47.8	148.4	0.6	12.5

different landownership categories. The incomes are disaggregated by the earner, i.e. household heads and other members of the household.

First of all, the overall impact on households appears to have been insignificant in the short run and positive in the long run. On project completion, there was a reported increase in the average income of a mere 0.6 percent, while subsequently as the project benefits began to unfold, the average income reportedly rose to about 13 percent above the pre-project level. It is interesting to note that the increase in income resulted from enhanced opportunities for other members of the household rather than the head. Obviously the younger members were more adept at availing of new opportunities in a changing environment, whereas the old conservative patriarch found it difficult to change his occupation or cope with other aspects of the new situation. The demographic factor was also operative in the sense that aging household heads were retiring and/or experiencing mortality while younger household members entered the labour force age. Considering that there was every likelihood of underestimation of income by the respondents and that there has been price escalation, it is difficult to say with certainty if the impact has been truly positive in real terms. However, the Study Team is of the opinion that there has been a marginal improvement at sites where the projects were completed quite some time ago, such as Shahzadpur and Kurigram. The decline reported at Mirpur and Moulvibazar are explained by the fact that at Mirpur, the project had just been completed at the time of the survey; while at Moulvibazar most of the losses were in terms of rich homestead land which had high yielding orchards. The high level of increased income at Shahzadpur seems to be the result of industrialisation and remittances. The area as a whole has benefited from the immigration of handloom entrepreneurs who have provided substantial employment to erstwhile landless labourers. The pressure of multiple dislocation resulting from several retirements of the Bramaputra Right Embankment, has also forced some people to seek fortunes abroad, mostly in the form of migration to the middle-east. At Kurigram, the benefit has been primarily through agricultural improvement.

The variation between the different land owning categories as shown in Table 4.19 appears at first sight to be unusual in the sense that some poorer categories are showing large gains in income while the highest land owning category is showing a decline over the long run. Further investigation on a case by case basis reveals that some of these households are from Shahzadpur which have benefited from industrial and remittance income. The high rates of increases are also caused by the extremely low base at which the concerned household members existed before the project.

4.07.2 Impact on Household Living Standard

These indicators were chosen to represent the living standards of surveyed households, namely housing condition, access to potable

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water and electricity in the house. Table 4.20 presents the findings. There seems to have been a modest overall gain in the living standard in respect of potable water and electricity,

Table 4.19

Percentage Changes in Average Income of Households Compared to Pre-project Levels by Land Ownership Categories

Land categories	household head		other members		household total	
	changes on project completion	changes subsequently	changes on project completion	changes subsequently	changes on project completion	changes subsequently
0	-30.1	-22.9	36.9	48.6	-24.2	-11.9
0.01-.50	1.2	-4.6	12.3	117.4	2.4	8.2
0.51-1.50	-14.9	-15.6	11.7	89.6	-11.6	-2.4
1.51-2.50	24.9	20.6	164.5	411.3	55.1	105.2
2.51-5.00	7.1	-0.7	77.1	211.6	15.0	23.0
5.01+	-21.7	-26.3	35.5	102.0	-13.5	-7.7
Total	-7.3	-10.3	47.8	148.4	0.6	12.5

while the housing condition showed a mixed picture, exceeding by a narrow margin. The largest decline occurred at Shahzadpur where 39 percent reported worsening compared to 15 percent reporting improvement. Shahzadpur and Moulvibazar gained electricity after the project. In addition, Shahzadpur reached a 100 percent tubewell water status after the project. The largest relative improvement in water supply occurred in Moulvibazar, Kurigram and Matlab.

On the whole the findings on project impacts on household living standard are in conformity with those on income, and point towards a modest improvement with underlying variation between areas and land ownership categories. Since the results relate to affected households, they are indicative of greater opportunities that exist in these communities for further development, thus laying the foundation for self-managed rehabilitation. Two factors are essential to achieve this : comprehensive planning and appropriate institutions.

4.08 Resettlement and Rehabilitation Experiences

This subject will be dealt with in much greater detail in Chapter

6 in respect of efforts by governmental and non-governmental organizations. What will be presented here are the experiences at the individual level in respect of relocation and or rehabilitation measures.

Table 4.20

Summary Comparison of Household Living Standard
in Pre- and Post-Project Periods

Site	Housing condition			Access to Potable water		Electricity in the house	
	Same	Improved (percentage)	Worsened	Before (percentage)	Now	Before (percentage)	Now
Kurigram	76	16	8	48	90	-	-
Shahzadpur	46	15	39	84	100	-	18
Magura	90	6	4	84	84	-	-
Mirpur	86	10	4	28	46	72	90
Matlab	95	5	-	48	80	-	-
Moulvi-bazar	68	28	4	28	82	-	66
All sites	76	13	11	56	83	11	28

First, it would be useful to find out how many people were physically dislocated as a result of land acquisition. Table 4.21 shows that of 310 surveyed households who were affected by land acquisition, only 33 (i.e. 11 percent) had been dislocated, of which 24 (i.e. 8 percent) were subsequently relocated. It may be assumed that the dislocation of the other 9 households did not involve a total loss of the homestead. The maximum dislocation occurred at the Shahzadpur site where the embankment had been retired four times in the last 20 years. The average time taken for resettlement was 149 days, or about 5 months.

Table 4.22 shows how the new homestead land was procured by the 24 households who relocated themselves. The most dominant mode seems to be a purchase from the market followed by the use of own land. Interestingly, a significant proportion (7 of 24) have resorted to squatting either on other people's land or on the embankment itself. Table 4.23 shows the pattern of financing land purchases for the 10 households who did so. Both compensation money and own savings featured strongly. It is clear that compensation money had not been sufficient in at least half the cases when land was bought. Moreover, a large proportion of

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Table 4.21

Dislocation and Relocation of Households

Sites	Whether dislocated		If yes whether relocated	
	Yes	No	Yes	No
Kurigram	2	46	2	-
Magura	4	50	-	4
Shahzadpur	20	36	16	4
Matlab	6	45	6	-
Mirpur	1	49	-	1
Moulvibazar	-	51	-	-
All (%)	33 (10.6)	277 (89.4)	24 (72.7)	9 (27.3)

Table 4.22

Method of Procuring New Homestead Land

Site	Own land	Gift	Purchase on other land	Squatting on embankment	Squatting
Kurigram	1	-	1	-	-
Magura	-	-	-	-	-
Shahzadpur	2	-	8	4	2
Matlab	3	1	1	-	1
Mirpur	-	-	-	-	-
Moulvibazar	-	-	-	-	-
All (%)	6 (25.0)	1 (4.2)	10 (41.7)	4 (16.7)	3 (12.5)

N = 24

settlers failed to buy land and became squatters, indicating further evidences of the inadequacy of compensation money in buying land.

Table 4.23

Financing of Land Purchase				
Site	Compensation money	Own savings	Loan	Others
Kurigram	-	2	-	-
Magura	-	-	-	-
Shahzadpur	5	3	1	1
Matlab	1	-	-	1
Mirpur	-	-	-	-
Moulvibazar	-	-	-	-
All (%)	6 (60.0)	5 (50.0)	1 (10.0)	1 (10.0)

Note : Multiple answers, N = 10

Table 4.24

Financing of House Construction				
Sites	Compensation money	Own savings	Loan	Others
Kurigram	-	1	-	1
Magura	-	-	-	-
Shahzadpur	4	7	9	2
Matlab	4	2	-	1
Mirpur	-	-	-	-
Moulvibazar	-	-	-	-
All (%)	8 (33.3)	10 (41.7)	9 (37.5)	4 (16.7)

Multiple answers, N = 24

The average cost of building a new home was reported to be approximately 14,000 takas, the financing of which was similar to that of land as shown in Table 4.24.

Finally, the manner in which the compensation money was spent by the households would throw some additional light on the problems and prospects of rehabilitation. Table 4.25 presents the picture for different sites. It is interesting to note that, contrary to popular belief, consumption, although a significant category overall, was not the most important item for spending compensation money. Instead, it is investment which accounted for more than a third of the compensation money (36 percent). These investments of course included bank deposits as well as money lending. Consumption was the second highest item of spending, accounting for 21 percent of the compensation money; land purchase and building together received about 28 percent. It needs to be observed that the expenditure pattern of compensation money may initially appear to somewhat weaken the earlier observation on its inadequacy in covering the costs of a new home. In other words, it gives the impression that people had money to spare for investments other than housing. Further reflection will provide a very plausible explanation for this apparent contradiction; people invested compensation money in other sectors because it was not enough for a house.

Table 4.25

Use Pattern of Compensation Money at Six Projects Sites							Total
Sites	consump- tion	land purchase	build/ repair dwelling	loan repay- ment	invest- ment	others	
Kurigram	19.6	27.0	9.9	4.8	33.6	5.1	100
Shahzadpur	20.5	10.0	15.2	14.4	38.3	1.6	100
Magura	33.0	22.1	1.5	13.4	24.1	6.0	100
Mirpur	14.5	12.6	17.8	5.9	42.1	6.9	100
Matlab	31.6	4.0	18.8	9.7	21.1	14.6	100
Moulvibazar	62.7	9.8	11.6	1.0	8.7	6.2	100
All	21.9	12.0	16.1	7.2	35.7	7.1	100

It was felt by the Study Team that resettlement and rehabilitation experiences are better understood through a case study methodology. The findings from the case studies at the Jamuna Multipurpose Bridge Project is presented in the next section.

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4.09 Relocation and Rehabilitation Experiences at the Jamuna Multipurpose Bridge Project (JMBP) Site

The resettlement scheme at the JMBP site is briefly described under sub-section 6.5.2 of Chapter 6. What is presented below are individual experiences based on case studies of selected households and individuals; the methodology for their selection has already been explained in Chapter 1.

4.09.1 Resettlement

Except for a few squatting families most of the 27 displaced households relocated themselves in places far and near without any outside assistance. A majority of settlers, both men and women, who were interviewed stated that as far as physical resettlement was concerned they were not interested in any further dislocation. However, it appeared that there was a general lack of information about the resettlement programme itself.

An important feature of their self-managed resettlement is that a good number of displaced families both from the villages of Matikata and Bhalkutia relocated themselves outside the embankment, although originally their homesteads were located inside the present embankment. The most cited reasons were a massive increase in land price in the same area following the land acquisition programme, delay in receipt of compensation and depletion of compensation money (due to bribe and incidental expenses). It has been found that in one locality twenty families, both from Matikata and Bhalkatia, resettled themselves outside the embankment. Within a few months after they moved into their new homes they were confronted with floods.

The increase of land price, after the initiation of the land acquisition programme had affected different land owning groups in different ways. People who owned relatively more land, could afford to buy at least some land with the compensation money on the countryside of the embankment. However, those who had only a small piece of agricultural land or only the homestead could hardly buy any land on the countryside. Those who could afford, managed to buy land only outside the embankment. In some cases though, they had spent the amount received, or at least, part of it, in maintaining their subsistence and thereby were unlikely to own any land in the near future.

There are families with small land holding size living inside the embanked area. These small holders, who were affected by land acquisition and continued to remain within the embanked area, were the ones who in most cases already owned additional plots of land in the same area. In almost all cases the size of the homestead of these households decreased substantially after land acquisition.

In one case an affected small holder could manage to buy a plot within the embanked area with the compensation money. But this

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was only possible because of kinship, where the seller of the property was the buyer's sister-in-law, who sold the land at a price that existed before land acquisition.

4.09.2 Women's Experience of Setting up New Homestead at JMBP

Of the twenty seven women interviewed, twenty had to setup new homes. Of the remaining seven, four were squatting families still living in the acquired home. The other three female interviewees were affected only by losing agricultural land. Almost all these twenty women who went through the process of relocation described their experience as 'traumatic'. For four of these women, this was not their first experience. In the past, families of these women resettled in these areas from the adjoining Chars.

All these women recalled the increased pressure of work associated with resettlement. Houses which were constructed usually required land filling. The men folk were involved in soil digging, while it was the women who did the work of levelling the floor, making the toilets and organizing the kitchen. They had to perform all these tasks in addition to their regular chores of cooking, cleaning, washing, child caring, poultry and cattle rearing and also gathering fuelwood and water.

The women also reported that it was a period of profound psychological stress. The pressure of work, uncertainty about the future etc affected both the partners, yet the women were expected to provide men with a psychological 'cushion'. As mothers they were also expected to put up with the unpredictable moods of their children. Many reported that instances of domestic violence marked a sharp rise during this transition period.

Deaths and illnesses were also attributed to resettlement. Of the twenty women affected three reported deaths of parents-in-law following their displacement. They were all old people, yet their family members believed that the eviction stress was the immediate cause of their death. Eleven of the women reported loss of weight in the previous year.

4.09.3 Women's Experience of Work Load at JMBP

Lack of close access to water has increased these women's work loads manifold. Some of them now have to cover a long distance to fetch drinking water. Of the twenty families settled outside the embanked area only two could manage to sink tubewells. Most of these families have to walk a long distance to the inner side of the embankment to bathe and to wash their utensils and clothes. All these activities demand extra time and effort on the part of the women. With regard to fuel wood supply as well, it is the women and children who have to spend more time and effort. Women who have moved out to Char areas and the outer side of the embankment, have much less access to fuel wood as there is hardly any tree.

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The chances of solving their energy problem in the future by planting new trees are also remote for these women, since recurrent floods in the region is a common phenomenon. The sandy condition of the soil is also not conducive to grow trees. Within three months after they had set up new homes, the area was under three feet of flood water. While setting up new homes outside the embankment these families failed to take into account that the level of flood water would increase in this area. During the floods they had to take shelter on the roads along the embankment or on Machans (makeshift structures above the water).

It is not difficult to visualize the hardships that these women face in performing their customary role of feeding the family during the flood time. Therefore, in analysing the impact of land acquisition on women this factor has to be borne in mind as well.

4.09.4 Effect on Income and Occupation at JMBP

As stated earlier, women of the area do not normally work outside their homes. Therefore, their participation in the monetised workforce is very limited. Bidi making, paddy husking etc are the only few avenues where women participate directly in the monetised labour force. Women who are settled in adjoining areas could retain these professions. But Moiful and Shofura who had settled at a distance from the original home sites no longer had the opportunity to earn by Bidi making and paddy husking. The shift also deprived Moiful's family from some extra income that her husband used to earn as a casual labourer in the ferry terminal.

A few more regular and important sources of income for women had been poultry, animal husbandry, kitchen gardening etc. These incomes are integral parts of the poor households' survival strategy. Due to a host of factors, such as reduction in land ownership size, location of land in low lying area, sandy soil condition, lack of space for grazing and animal fodder, it has become very difficult for these women to continue with such activities.

4.09.5 Scope of New Work Opportunities at JMBP

The Jamuna Multipurpose Bridge Project is still at its initial stage. Economic activities centering this bridge are yet to be developed. Of course, the construction of the bridge and embankment-cum-approach roads, should create some employment. But it was reported that the local people had little access to these jobs as the contractors preferred to bring in labourers from outside. Moreover, the bridge authority has decided that they would not employ any female worker in construction work. The reason assigned for this was, the work needed to progress on tight schedule and women would not be suitable as construction workers. Therefore, new opportunities in respect of women's work from the project in the near future appeared to be slim.

4.09.6 Interventions by NGOs at JMBP

There are a few NGOs operating in the area. The Service Civil International (SCI) is one. It provides alternative employment to these affected women through tree plantation along both the sides of the existing embankment. The purpose is to hold the soil and protect the embankment from river erosion and floods. This scheme is funded under the Food for Works Programme. A good number of poor women have been employed under this project. Each woman is responsible for planting and the maintenance of 250 plants and receive 3.75 maunds of wheat per month. Five such women were interviewed and all of them expressed satisfaction with the work they were performing and stated that this work was a life saver for them. Although the work demands them to be at the road side from dawn to dusk, with an hour's lunch break, they have not encountered any resistance from the social and religious leaders of the area. Affected women who were not involved in this project stated that they were interested in the type of work that the SCI was providing. However, Hamida Khatun and her husband, a displaced family, opened a grocery store in close proximity of the bridge site. They are already doing good business and are supplying essential consumer items to the labourers.

4.09.7 Summary of Experiences at JMBP

From the discussion above, one can see that land acquisition for the purpose of Jamuna Bridge construction has created multi-dimensional problems for the affected people. Its impact on women, especially of poor households, has been severe. Their homes or arable land or sometimes both were lost and the compensation that the families received was not adequate enough to buy land of the same kind. They fell victim to frauds and cheats, and also to corrupt and oppressive government functionaries involved in the compensation process. They also lost various supplementary sources of food and income. There has been an increase in their work load and work time. They have furthermore been subjected to immense psychological stress. These people were quite unaware about the magnitude of the project and its multifaceted implication on their lives and livelihood. No effort was directed towards community participation by the authorities concerned. As a result the affected people were deprived of the opportunity to provide inputs to such projects which had direct bearing on them. That community participation was lacking in the project was no where better illustrated than in the decision that female workers would not be employed in the execution of the project. This arbitrary decision not only deprived the local women of a source of income in a crisis situation, it also deprived them of a rare opportunity to challenge the social taboo against women's involvement in work outside home.

4.10 Conclusions

The foregoing review of household survey data and the case studies at Jamuna Multipurpose Bridge Project site underscores

four major conclusions:

- a. The burden of land loss resulting from land acquisition for embankment projects tends to be distributed across all land-holding categories rather than on land-poor households only. While more of the larger land owners are caught by land acquisition, the poorer land-owners lose proportionately more of their land when affected.
- b. Restriction of the definition of 'target group' to land-poor households who have lost land misses out a very important category of losers, namely, households who lose no land but whose livelihood vulnerability increases significantly as a consequence of becoming located outside of embankment protection. Survey data show this category to be a substantial one and it is from their ranks that many of the squatters on the embankment emerge. This calls for a serious re-examination of how 'target group' identification is made for programmes of assistance for the affected communities.
- c. Current methods of calculating compensation levels represent a serious valuation problem. This in turn sets in motion a vicious chain of manipulations, procedural delays and arbitration suits. The net result is a high economic and social cost for all parties involved. This points towards a more rational calculation of compensation levels as a key priority. There are two factors here which merit attention. Firstly, if the basis for compensation is conceived as the cost of resettling in the same community in the post-project period, a critical factor to consider here is the rate at which land prices increase in the immediate post-project period. National or regional averages on such rates of increase can be worked out by looking at land price histories of already completed project sites. Secondly, aside from the absolute size of land loss, an additional factor to consider in fixing compensation levels is the proportional land loss sustained by a household vis-a-vis its total ownership. If the proportional loss is above a critical percentage, such households may be considered for higher rates of compensation. A more rational compensation will invite few arbitration suits and thus prevent the vicious chains of procedural delays and extra-legal extractions.
- d. If one distinguishes between two priority areas of concern with regard to minimising the direct and indirect social and economic costs of land acquisition, namely minimising the negative features of acquisition procedures on the one hand and expanding on programmes of assistance for resettlement on the other, the evidence from household experiences would tend to emphasize the benefits of the former over the latter. To the extent that resettlement programmes have as their target group only land-poor households, they leave out of consideration a substantial proportion of affected households. Furthermore, the fact of land loss by itself may

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not be the principal determinant of changes in a household's economic status subsequent to embankment construction. A variety of other macro and micro factors may apply in this regard. The net outcome in terms of changes in household economic status shows only tentative patterns. Given these considerations, assistance to affected communities may be better conceived in terms of minimising direct and indirect costs of acquisition for households through more streamlined and effective procedures along with the focus on resettlement assistance to worst-off households.

Chapter 5

5. PLANNING AND DESIGN OF EMBANKMENTS

5.1 Introduction

It has been mentioned earlier that land acquisition is generally viewed with concern in Bangladesh because land is scarce. Furthermore, the acquisition of agricultural land for the development of infrastructures tends to be seen as land taken out of productive use. An important objective in the Flood Action Plan (FAP) is therefore to explore all possible ways to minimize the amount of land to be acquired for various projects under the FAP and to find ways to maximize the use of the acquired land, for example by making additional use of an embankment as a road, or the slopes for growing pulses.

In this chapter the above issues will be addressed primarily from the point of view of planning and design of embankments. Both engineering as well as socio-economic perspectives will be given equal importance in this review.

Section 5.2 discusses the importance of embankments in flood control. Section 5.3 provides a brief historical review of earth-filled embankments and the introduction of proper planning and design in their construction. Section 5.4 explains the present practice in planning and design of embankments. In section 5.5 the design parameters are reviewed in some detail in order to explore ways of reducing land requirement. Section 5.6 reviews the problem of embankment failures and their causes. Section 5.7 draws conclusions about the scope of minimising land acquisition under the FAP by adjustments/amendments in existing planning procedures and design criteria. Section 5.8 discusses the prospects of utilising embankments for resettlement and rehabilitation purposes. The recommendations are presented in section 5.9.

5.2 Embankments in Flood Control

Among the flood protection measures in Bangladesh suggested by many experts are embankments, channel improvement, opening of offtake of spill channels, river training, estuarine works and protection of important cities and towns. Embankments are the oldest known form of flood protection and have been extensively used for this purpose, more than any other form of either flood prevention or flood protection.

Embankments are by far the least costly method of flood protection as they can be constructed and maintained almost entirely by using local resources of unskilled labour and materials. A large number of embankment projects and some town protection schemes have already been completed. Construction of embankments to mitigate the flood problems in the country is, no doubt, readily acceptable due to the inherent simplicity of the

technology and the immediate relief provided by it. But the construction of embankments create other problems. It leads to siltation by raising the river bed which will mean that the elevations of the plain may be reduced to a great extent with reference to the river beds (Figure 5.1).

While deciding on the construction of an embankment, due consideration should be given not only to flood control but also to such other aspects as river morphology, necessity of keeping provision for flushing sluices for allowing the silt laden river water into the protected area, if so required.

5.3 Historical Review

Earthen embankments are not a recent invention. They have been constructed since the early days of civilization. Many old works in the subcontinent exist in central and southern India. Some of the oldest known works date back to the sixth century B.C.

Till recently the design of embankments was carried out by the rule of thumb. Consequently, the role and confidence of the designer was limited, the slopes of embankments were very extended and heights modest.

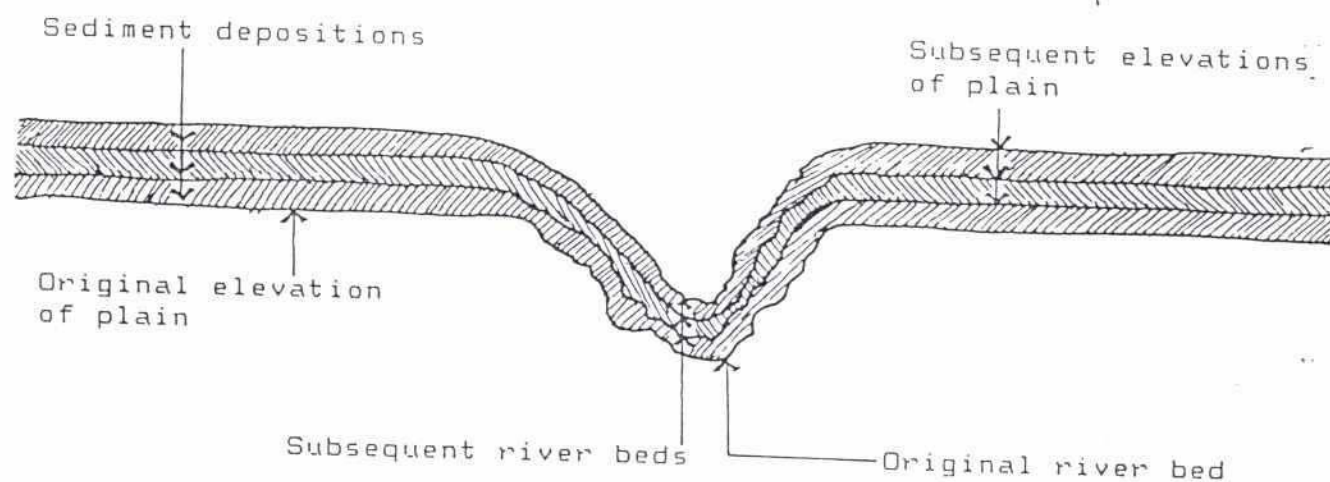
However, with the development of soil mechanics the above picture changed radically. Techniques of determination of soil properties and their control during placement as well as rational methods of stability analysis have been developed so that the embankment is now an engineering structure whose safety can be predicted with almost the same degree of accuracy as various other engineering structures. This has, in turn, led to the design of embankment and ancillary structures with a greater degree of accuracy and confidence.

It should nonetheless be understood that even with these developments, it is still not easy to find mathematical solutions to the problems of design. Many of its components are still dependent on judgment and experience. With a large number of projects being implemented, many problems in the design of embankments are being encountered specially in respect of their stability. Earthen embankments are not rigid and hence more susceptible to failure. However, failures of embankments helps the engineers to improve their design procedures.

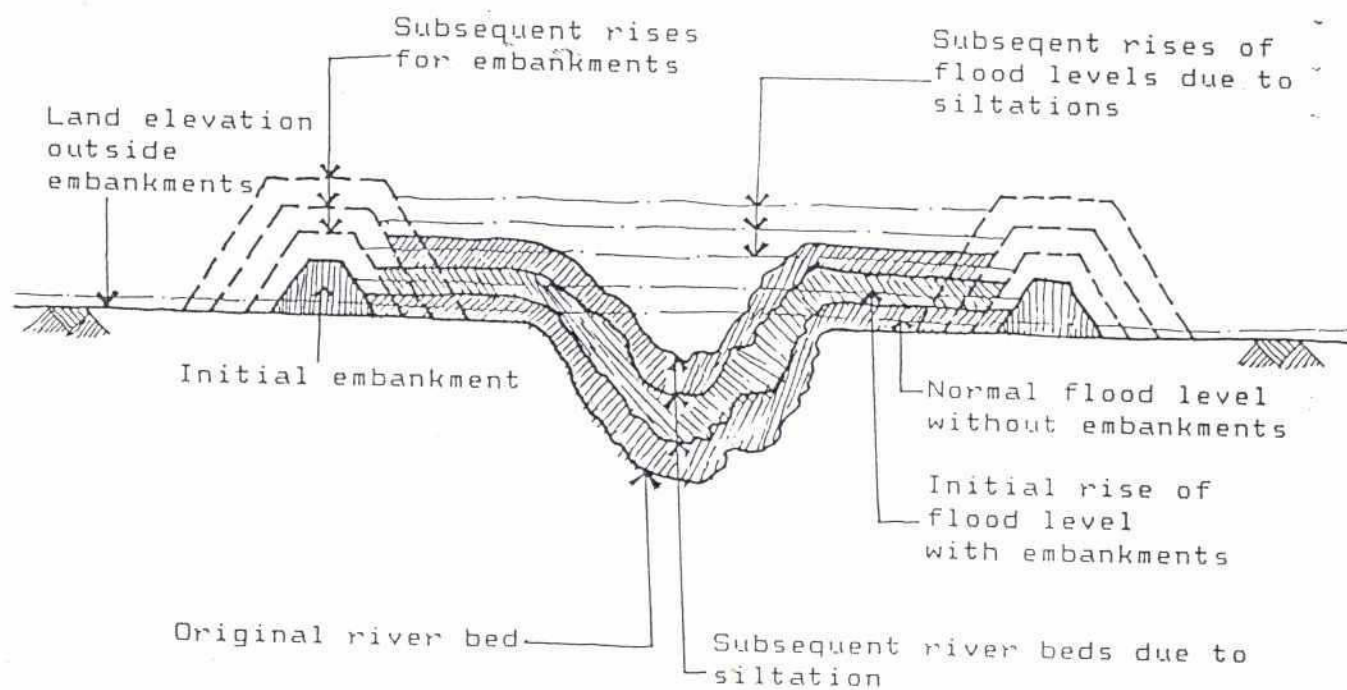
The failure of embankments may be attributed to various factors, namely improper design, faulty construction, lack of supervision during the construction, poor types of soil used in the earth fill of the embankment, lack of proper maintenance, bank erosion and man-made cuts.

Planned embankments on a large scale are a phenomenon of the 1960s in this country. It followed from the Krugg Mission of 1957-59 which recommended the construction of thousands of kilometers of embankments along the major rivers and coastlines to protect the country from recurring floods and storm surges.

FIGURE 5.1 : SILTATION WITH EMBANKMENTS



A. NATURAL LAND FORMATION BY RIVER



B. SILTATION WITH EMBANKMENTS

The EPWAPDA was set up in 1959 to carry out the planning and implementation of water resource development of the country with special emphasis on flood control. By 1964 the International Engineering Company (IECO) of San Francisco, USA, was engaged as General Consultants to prepare, amongst other tasks, a Master Plan on irrigation, drainage and flood control.

Planning and design of projects in those days were primarily carried out by the engineers. Multidisciplinary approaches or participatory planning concepts were not given much importance.

The main emphasis in the planning of embankments during this period was primarily on flood protection and not so much on the minimization of land to be acquired, which is now an important consideration in view of the high population density of Bangladesh. For the earthfill of the embankments land used to be generously acquired for borrow pits on both sides of the embankments (Figure 5.2). This happened, for example, in the cases of flood embankments on both sides of the Gumti river, Coastal Embankments and Brahmaputra Right Embankment. As more and more embankments were constructed, awareness about the need to economize on land gradually increased. Initially, it was decided that no borrow pits on the country side of the embankments should be constructed. Borrow pits were constructed on the riverside only and the additional cost for taking earth from a distance was supposed to be compensated for by the additional crop yield on the land thus saved. In the coastal areas the borrow pits on the river or sea side were supposed to be silted up in 3-4 years. Subsequently, this procedure was introduced in the construction of all embankments along other rivers throughout the country. But in these cases the borrow pits for earthfill were excavated on the river side, and soil on the countryside was obtained on payment of royalty to the owners. Excavation was upto a depth of 0.3m to 1m (Figure 5.3) so that the land could be utilised for agricultural purposes subsequently.

Properly planned, designed and constructed embankments along with regular supervision and maintenance can go a long way in providing benefits and achieving the objectives of the project.

Figure 5.2: NORMAL PRACTICE OF LAND ACQUISITION

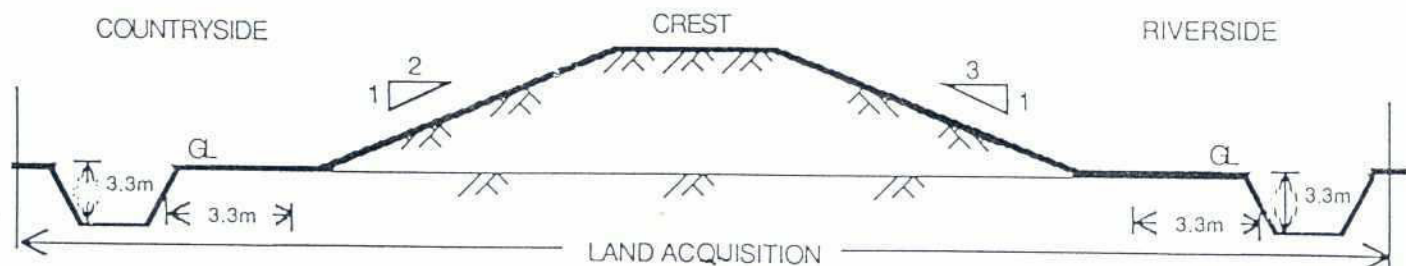
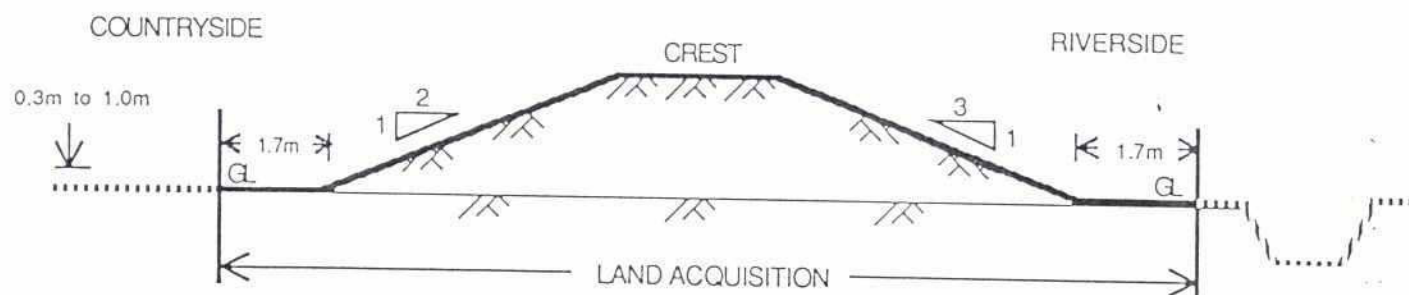


Figure 5.3: PROPOSED LAND ACQUISITION



5.4 Planning and Design : the Present Status

At the very initial stage of conceptualisation of an embankment project, a pre-feasibility study is generally done by the concerned department. A preliminary technical survey is carried out in order to assess the nature of the problems and identify the potential for a project. The outcome of the pre-feasibility study is a project concept paper which forms the basis for a dialogue with interested donors for the feasibility study. The land acquisition issue is not brought up at this stage since the components of the project are still not known very clearly.

The feasibility study carries out a semi-detailed technical survey of the project and involves topographical, hydrological, socio-economic, agricultural and soil surveys. It determines the type of project needed : Flood Control (FC), Drainage (D) and/or Irrigation (I). Information on land is confined to its topography and suitability for different crops by field verification of the existing soil maps. Existing cropping patterns are observed. Most of the land related enquiries are directed towards identifying the existing land use pattern and its future potentials.

A tentative alignment of embankment is made at this stage based on hydrological analysis and following guidelines mentioned at 5.5.6.

Under the present practice, tentative alignments selected during the feasibility study are finalized at the stage of detailed engineering, when further information is also obtained regarding the location of structures and other features.

Much more detailed surveys compared to those under existing practice are needed during the preparation of the Feasibility Study so as to minimize the changes of the alignment of embankments and location of structures at the Detailed Design stage.

An important point to note is that even at the stage of finalization of the alignment, information on the number of

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households to be affected directly or indirectly, the nature of the impact on their living and livelihood and their need for resettlement or rehabilitation assistance are at best only vaguely known. More detailed information needed for planning of rehabilitation and resettlement scheme, begins to emerge only when the requiring body (mainly BWDB in case of flood embankment) approaches the Land Acquisition office of the concerned Deputy Commissioner for acquiring land on their behalf.

5.4.1 Public Participation in Planning

Proper planning of a project from the very early stage of feasibility study is essential to achieve maximum benefit from the project. Generally, the beneficiaries of a project are not made fully aware of different aspects of the project. Without full cooperation of the beneficiaries, the benefits of the project cannot be maximized. If the beneficiaries can be made aware of the benefits of the project from the very beginning of the feasibility study then the land acquisition as well implementation of the project will face less problems. The beneficiaries should at the same time be made aware of the cost of the projects and the necessity of sharing of the cost by them. After the implementation of a project the beneficiaries will themselves may take all necessary steps to get maximum benefits from the project as they were aware of the project features and objectives from the beginning. Because of the awareness of the beneficiaries of the benefits to be derived from the project they would be found more agreeable in sharing the cost of the project in the form of taxation or other measures. Though in recent years considerable importance is attached to public participation in a project, no systematic and organised guidelines and methodology have yet been evolved to ensure the same. During the last few decades, though the beneficiaries are being increasingly made aware of project features and benefits, these efforts are not sufficient. More effective steps need to be taken in this regard. These steps still are mainly dependent on the attitude of the project officials. It is therefore necessary that more definite and systematic guidelines are brought out in the form of a manual and be used widely for setting the terms of reference for project personnel involved in planning. For wider publicity public announcements, holding of public meetings at Haats/Bazaars and Upazila Headquarters, should prove effective in ensuring participation of the beneficiaries at every stage from the very beginning till the operation and maintenance of a project.

5.4.2 Interdepartmental Coordination

Most of the flood control, irrigation & drainage projects are multidisciplinary. For these projects ground water potential, navigation and fisheries aspects are required to be taken into consideration at the time of the feasibility study. But as these are the responsibilities of other ministries or departments, it is essential that for maximising benefits of a project there should be effective coordination among the concerned ministries and departments.

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Systematic and effective coordination among the engineers, others of various concerned departments and agencies as well as public representatives and local administration is essential during planning, design and implementation stages of any project. Not only association but also effective participation of people in the project area as well as outside the project area effected due to the construction of the project should be ensured during all the stages of planning, implementation and operation and maintenance of a project.

5.4.3 Design of Embankments

The design of an embankment generally involves the following stages :

- **selection of a preliminary cross-section** based on some basic parameter values (design parameters)
- **stability analysis** of the preliminary design based on soil characteristics, wave action, seepage gradient, compaction factor etc. Data may not be available on many of these factors and simulation may have to be resorted to.

There are various methods of computing embankment stability based upon shear strength of the soil and certain assumptions on the nature of embankment failures. However, of these methods the Swedish Slip Circle method, which assumes that the surface of rupture is a cylindrical one, is comparatively simple for analysing embankment stability. In this method the factor of safety against sliding is the ratio of average shear strength to the average shear stress determined by statics on a potential sliding surface. The factor of safety is considered to be not less than 1.5.

- **fixation of the alignment** on the basis of technical, morphological and socio-economic considerations. The alignment should be selected in such a way that the embankment is constructed as efficiently and economically as possible so that the earth fill is minimum and the land to be acquired is the least. Separate design criteria are required for mechanical and manual construction.

5.4.4 River Training as a Component of Embankment Projects

A retired embankment not only means progressively increasing loss of land and households but also an increasing demand for resettlement, and therefore should be avoided as far as technically, economically and environmentally feasible. Therefore, for embankment projects along the major rivers, the need to include river training as an integral part of the project should be seriously examined in the feasibility study. Measures on river training and bank protection need to be ascertained on the basis of adequate studies on causes and patterns of erosion and a comprehensive assessment of all losses including costs of retired embankments. FAP-20/21 is addressing these issues.

5.5 Design Parameters

Design parameters are mainly based upon an estimation of the magnitude of flood flows and corresponding flood levels and their frequency of occurrence.

The criteria adopted at present to ensure the safety and stability of embankments are explained below :

5.5.1 Freeboard

Freeboard is dependent on the height of wave action and some abnormal floods of short duration. The height of waves generated by winds on the surface of waterbodies, mainly depends on the velocity of wind, the fetch (the distance over which the wind can act on a water body being generally defined as the normal distance from the windward shore to the proposed embankment), the depth of water and width of the water surface. The freeboard in some major embankments are as follows :

- Brahmaputra Right Embankment : 5 feet
- Meghna-Dhonagoda Irrigation Project : 5 feet
(on the Meghna River side)

5.5.2 Crest Level

The crest level is calculated on the basis of the design flood level for a selected frequency and the freeboard.

The frequency of flood selected for the design of an embankment is usually on the basis of estimated probability of occurrence of and damages caused by the floods of various levels.

Generally, the following flood frequencies are considered :

- 1 : 20 years flood, where agricultural damage is primary.
- 1 : 40; 1 : 50; 1 : 100, where loss of human lives is primary

However, it is expected that the regional studies, mainly FAP-1 and FAP-9B, will address this aspect in greater details.

5.5.3 Seepage or Phreatic Line

The seepage, phreatic or saturation line is the line within the embankment section below which there is positive hydrostatic pressure.

It is essential to determine the position of the phreatic line because it :

- gives a divide line between the dry or rather moist and submerged soil

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It is essential to determine the position of the phreatic line because it :

- gives a divide line between the dry or rather moist and submerged soil

- represents the top streamline and so helps in drawing the flownet
- helps to ensure that it does not cut the down stream face of the embankment.

For the stability analysis of an embankment, determination of the phreatic line i.e. the seepage or hydraulic gradient, through the embankment cross-section is a prime requirement.

5.5.4 Side Slopes

Generally, in ascertaining side slopes for an embankment the following aspects are considered :

- Stability of the country side slope during steady seepage flow
- Stability of the river side slope during sudden draw down
- Resistance of the foundation to the shear failure
- Stability of the foundation under the weight of the embankment.

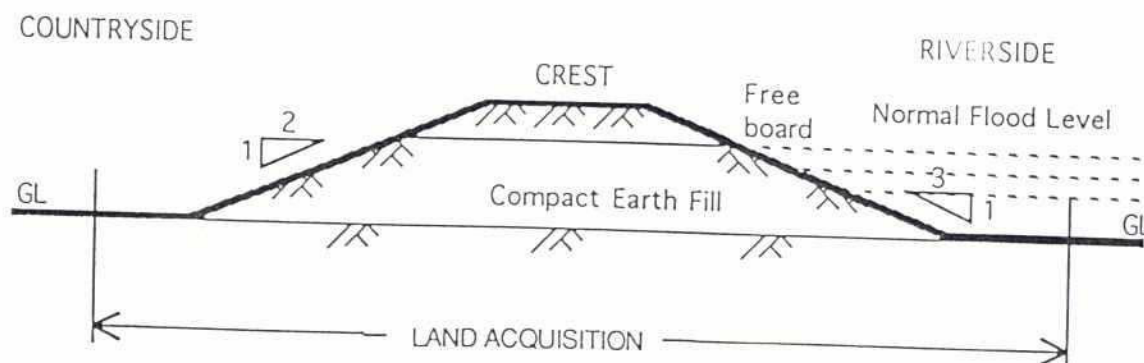
Turfing on the crest, side slopes and berms are made to protect the side slopes against waves and rain cuts. Turfing also increases the stability of the side slopes.

5.5.5 Selection of Soils

Soils for earthfill need to be carefully selected based on an analysis of the soil samples at regular intervals. The present practice is reviewed under Section 5.6.

While carrying out the earthfill adequate compaction at least below the normal flood level will enhance the stability of the embankment (Figure 5.4).

Figure 5.4: COMPACTION



5.5.6 The Alignment of an Embankment

- The alignment of an embankment should be fixed on the basis of a safe distance or set back position considering the scouring of the river bank and the deep water channel flow during the past years for which data are available.
- Alignments should avoid, as far as possible, passing over subsoil strata consisting of peat or organic soils. If unavoidable, suitable measures should be taken to upgrade the subsoil before the construction of the embankment.
- The alignment of an embankment should be fixed, as far as practicable, considering the availability of suitable soil for embankment construction.
- The alignment of an embankment should be fixed to avoid households and negative social or environmental impacts (eg on wildlife habitats, etc).
- The alignment should as far as possible follow the existing roads or embankments.

5.6 Embankment Failure

Embankment failures cause great damages to property and may result in substantial loss of life, because of the suddenness of the event and the consequent state of unpreparedness of the people.

Various authors (eg Middlebrook, Sherard) have listed a number of reasons for the unsatisfactory performance of embankments and earth-filled dams around the world. According to them the failures or damages are due to overtopping, seepage through the embankment and removal of material from the toe. Piping through the embankment or its foundation and excessive settlement may lead to crack openings exposing the embankments to leakage, sliding, damage to slopes etc. A high rate of rise of the water level in the rivers could also be a contributing factor in so far as the embankment does not get sufficient time to attain normal settlement under its own weight and experiences saturation to almost the full height, immediately after construction.

After the 1987 flood in Bangladesh the BWDB identified the following main causes of embankment failures in the country :

- Erosion of embankments due to wave action and river current;
- Exceeding hydrologic design parameters during the flood;
- Inadequate section and poor construction of embankments;
- Lack of compaction of earth in the construction of embankments;
- Lack of regular supervision and maintenance;
- Inadequate assessment of linked projects;

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- Public cuts.

In one of the field evaluation reports, the Master Plan Organisation (MPO) noted that the design parameters of the embankments used by the BWDB engineers were mostly sound and satisfactory but the same can not be said about the operation and maintenance activities. Turfing made on the slopes, are being removed by the farmers for their cattle. Moreover, cattle graze over the embankment damaging it; and deep rain cuts are not being repaired. The MPO report also added that embankments being constructed under the supervision of the Upazila Nirbahi Officers (UNO) were deficient, compared to standard specifications, in all respects, as the concerned supervisors do not follow any approved design criteria, nor do they take any technical advice for the same. The poor construction work is further aggravated by inadequate or no maintenance.

However, there is scope for improvement in the activities of both the design engineers as well as field engineers and the interaction between them. For example, though the procedures adopted by the design engineers are sound, the embankments are designed on the basis of assumed characteristics of the soils rather than actual soil data along the alignment of the embankment. This may result in improper design of embankment at different locations. It could be improved if soil samples at different locations are obtained and tested in the Soil Research Laboratory of BWDB and the results are furnished to the design engineers. In addition, design engineers should visit the field at specific locations to be selected by the field engineers where different soil types are encountered. These will help the design engineers to design the embankment properly and would ensure the stability of the same. As for the field engineers, there should be closer supervision of the alignment, prompt reporting on different types of soils at different locations, and a close supervision of the works of contractors to ensure proper earthfill and compaction as per design value. There is also room for a closer link and better coordination between the field engineers and the design engineers. To support the comments above, three specific problems can be cited in case of three different projects, namely the Narayanganj-Narsingdi Project, the Meghna-Dhonagoda Irrigation Project and the Dhaka City Flood Protection Project.

The case of Narayanganj-Narsingdi Project is a classic example. In the alignment of the embankment there was a segment which had pure sand. The contractor constructed the embankment with sand which resulted in a total breach in that portion during the next monsoon period. After 2/3 years' breaches this was brought to the attention of the design engineers who redesigned that portion of the embankment with a clay core and a clay cover along the slopes with turfing. This solved the problem effectively. Similarly, in case of the Meghna Dhonagoda Irrigation Project the alignment ran over the bed of an old river bed which was composed of fine silt. During the high stages of the river Meghna, there was piping through this fine

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silt below the base of the embankment and it failed. This was also corrected with the help of design engineers who advised removal of the fine silt before reconstruction of the embankment. In case of the Dhaka City Flood Protection Project a portion of the embankment subsided after reaching half of the height of the embankment. Only then samples from the subsoil were taken by soil boring. It was found that the soil below the topsoil was unconfined clay, which could not withstand the load of the embankment and this resulted in subsidence. If soil samples were taken earlier, then the design could have been prepared accordingly.

5.7 Scope of Minimisation of Suffering from Land Acquisition

There are three main factors which determine the extent of displacement and suffering experienced by people as a result of land acquisition for an embankment project, namely

- amount of land acquired
- alignment of the embankment
- stability of the embankment

As mentioned earlier, the amount of land to be acquired depends on the size of the embankment and the sources of material for earthfill. Recent decisions about acquiring soil from adjoining land owners on payment of royalty whenever possible rather than taking it from borrow pits, leaves very little room in design to minimize land acquisition. The only other parameter which may come into play is the quality of the earthfill : higher quality of earthfill will allow the base width to be reduced. The margin of maneuverability in this regard is unlikely to be significant and any improvement in design would call for substantial quantities of data on soils which are currently not available.

The alignment of an embankment affects people in both direct and indirect fashions. The most direct impacts are the loss of land, homestead and trees by land acquisition. The indirect losses arise from the location of the household, its agricultural land, trees, waterbodies and other fields of employment in relation to the embankment. A greater set-back distance from the river increases the stability of the embankment but puts more households and agricultural land on the riverside. Finding the optimal alignment of an embankment is not a simple exercise; it calls for a thorough examination of different options on the basis of accurate data on the distribution of people and their assets on the flood plain, a good contour map and reliable time series data on river movements and flood levels.

There appears to be ample room for doing a more thorough analysis in determining the alignment at the time of the feasibility study. It is true that the absence of a good land records system makes it rather difficult to carry out the required cost benefit analysis of alternative locations. Till an improved records system has been put in place, it would be worthwhile to carry out a more thorough investigation on the potential alignment sites.

The failure of embankments cause the greatest distress in terms of losses and damages and may eventually result in retired embankments, causing further land acquisition. The design criteria followed by BWDB personnel to ensure the safety of embankments are quite satisfactory and leave little room for manipulation. However, safety is also endangered by faulty construction and poor maintenance. These are therefore the areas where there is room for improvement in procedures. Some of these have already been discussed under the section on public participation (5.4.1) which seems to promise the most mileage in this regard.

5.8 Rehabilitation of Displaced Persons

There are four categories of displaced households, namely

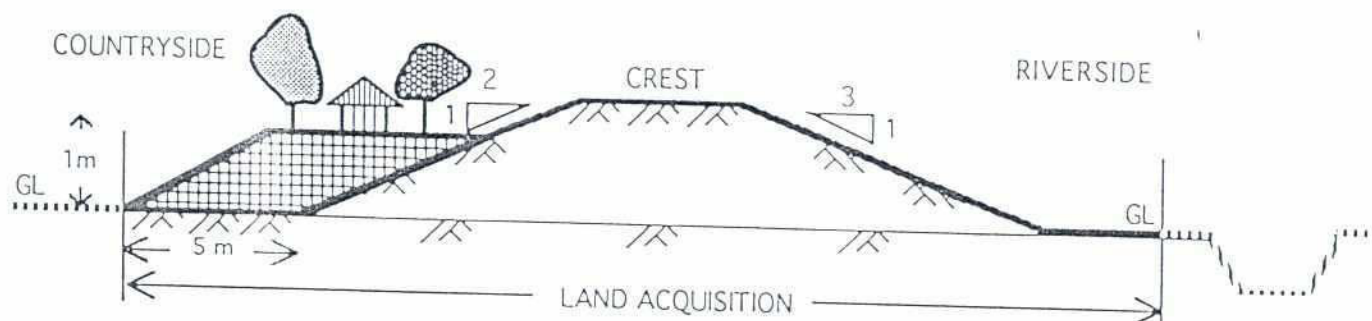
- those who lose all their land including homestead (household categories 1 and 11 in land taxonomy in Figure 1.2);
- those who lose only their homestead but not all land (household categories 2, 5 and 8 in land taxonomy in Figure 1.2);
- those who lose all or most of their land but not homestead (household categories 9 and 10 in land taxonomy in Figure 1.2);
- those with homesteads on the riverside (household categories 3, 4 and 9 in land taxonomy in Figure 1.2).

Obviously, in terms of priority for resettlement, it is the first category which deserves the highest attention, followed by the second category. In considering resettlement for them, options are somewhat limited. There is the obvious option of acquiring additional land to resettle them on the countryside beside the embankment along the right of way. An additional 5m width of land may be acquired from the toe of the embankment on the countryside which may be raised to a height of say 1m above the design polder water level (Figure 5.5).

The other option is not to settle them physically on or around the embankment but to allow them the right of utilization of the slopes and the land reserved for the right of way in a manner which does not threaten the safety and stability of the embankment. Such use may consist of growing vegetation which has a binding quality on the land such as vetiver grass, Babla tree (whose wood has valuable economic uses), etc.

The top of the embankment is generally used not only for supervision but also as a local road. The possibility of planting trees of the right species on the crest should also be explored in consultation with experts. In case the embankment is used as a regular road, the other opportunity of rehabilitation arises through the construction of shops and similar other

Figure 5.5: SETTLEMENT OF DISPLACED PEOPLE



structures on small projections out of the main section on the countryside of the embankment. This would be particularly useful in areas where flooding on the riverside affect settled households, by providing a temporary flood shelter on those lands.

Resettlement of the most seriously affected households could also be done on the countryside by acquiring land from those who have large land holdings and are not affected by land acquisition for the embankment. This will, however, be best achieved through a community consensus resulting from a consultative procedure carried out from the very onset of the project proposal. If there is any Khas land available in the area, then the displaced persons should be settled there on a priority basis.

Planting of trees on land adjacent to the embankment on the riverside is another activity which could provide an income generating opportunity for the displaced persons, if the plantation scheme is such that it does not result in heavy siltation endangering the embankment. It could in fact be beneficial by working as a barrier to wave action and the velocity of river flow. This concept, however, needs to be carefully planned and evolved through trial and error methods on the basis of experts' advice and analysis.

Opinions are greatly divergent on the plantation of trees on the embankment among the engineers, forestry experts and others. For example, the predominant view among the engineers is that only turfing and vegetation should be allowed on the crest and slopes of a flood protection embankment. Plantation of trees on the berms of the embankment along both the countryside and the riverside in plain areas may be allowed (Figure 5.6). But in case of flashy rivers which carry high concentration of silt no plantation of trees on the berms on the river side should be allowed (Figure 5.7).



Figure 5.6: EMBANKMENT IN PLAIN AREAS

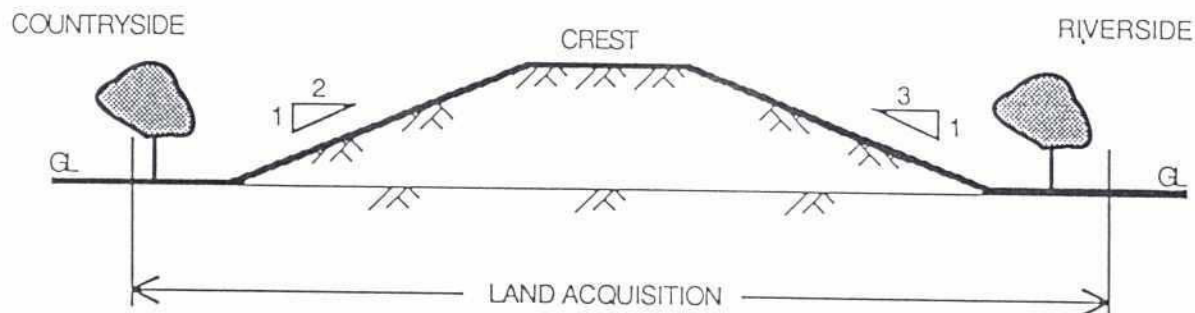
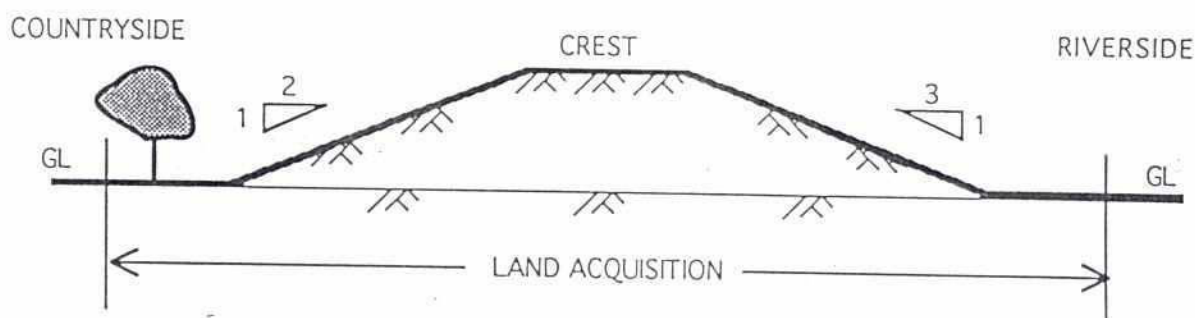


Figure 5.7: EMBANKMENT IN HILLY AREAS



5.8.1 Other Concepts on Flood Mitigation and Resettlement

Resuscitation or channel improvement by dredging is considered as one of the methods for flood minimization or mitigation. But this method should be carefully assessed in the perspective of the morphological characteristics of the river system in the delta. In fact siltation in the rivers is affected due to causes in the upstream. Attempts to eliminate the effect without any thought of eradicating the causes could never be wise. However dredging in selected areas to invigorate some distributaries might be of some help to provide quicker discharge for the flood water to the sea, thereby minimizing the flood level in the river. Corrective and localized dredging will also greatly help the navigational aspects as well.

Silt clearance by dredging at the offtakes of the major distributaries of the Ganges and the Brahmaputra may be considered. Similarly, in the greater district of Sylhet

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dredging of the bed of the Khowai River at the outfall may also be considered. It is expected that these would greatly increase the drainage capacity of these rivers for quicker discharge and thus reduce the magnitude and intensity of flood to some extent.

Many professionals reject the concept of dredging outright due to its prohibitive cost. But considering the expected benefits that can be achieved from dredging, specially in channelising and increasing drainage capacity of the rivers, dredging merits consideration as pilot projects at selected locations as mentioned earlier. Some pilot projects may be taken up following the suggestion of Mr. J. Dempster, Chairman of the Panel of Experts for the FAP, for the construction of a wide embankment or artificial levee for a linear village. The suggested measures would not only help the clearance of silt from the river bed, but also help the resettlement of people adversely affected by floods. Besides, the dredged sludges will help in raising the levels of the adjacent areas. The proposed scheme along with its application and concept can be seen in a schematic diagram at Figure 5.8. The Study Team however feels that the economics of the proposed concept needs to be carefully studied during the pilot phase.

5.9 Recommendations

Though the BWDB engineers have acquired substantial experience and expertise in planning, design and implementation, there is some scope for improving their procedures and performance, specially in the field of construction of embankments and physical structures. While for structures they always take soil samples upto a desired depth, such practice is effectively absent in the case of soil samples for an embankment. This situation needs to be changed. Soil borings should be made at regular intervals and at places where different types of soils are found. Soil samples should be taken from different depths in each boring, specially when an embankment runs over the dead bed of a river. The soil samples should be tested in laboratories and the results sent to design engineers for use in the preparation of embankment designs for different soil conditions. This would enhance the stability of an embankment and, at the same time, keep its base width to a minimum, thus contributing towards a minimal acquisition of land.

Beneficiaries of a project should be made aware of the benefits, project features, objectives as well as the cost of the project at every stage from the very beginning of the pre-feasibility study till the stage of operation and maintenance of the project. To ensure this, manuals with definite, systematic and organised guidelines and methodology should be evolved.

Feasibility studies should be prepared in a much more detailed way compared to the existing practice, so as to minimize the changes of the alignment and location of structures at the implementation stage.

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Systematic and effective coordination among engineers and other professionals from various concerned departments and agencies as well as the local administration during planning, implementation, operation and maintenance of a project should be ensured.

Effective coordination among the planning and design engineers is absolutely essential during the feasibility study and detailed engineering of a project.

River training measures and flood protection embankments should be taken into consideration simultaneously in order to minimize the risks of failure of an embankment on the erosion prone banks of rivers.

Earthfill for the embankment should be obtained by excavating borrow pits on the river side while earth on the country side should be obtained on payment of royalty to the owners of the land by excavating earth from 0.3m to 1m so that the land can be subsequently utilised for agricultural purposes.

Additional land of about 5m width adjacent to the embankment on the country side may be acquired for the construction of a bench alongside the embankment with a height of 1m for settling the people adversely affected by the project.

The crest of an embankment should be maintained and utilised as a road for inspection. Crests and slopes of embankments should be turfed and plantation of trees can be allowed on the berms on either side of the embankment in plain areas. In the hilly areas, trees may be allowed to be planted only on the countryside berm.

Owners of the land adjacent to an embankment or those settled on the countryside alongside the main embankment should be given the legal authority to plant trees on the berms and vegetation on the slopes of the embankment adjacent to his land and should derive all the benefits from these activities while being made responsible for a proper maintenance of his portion of the embankment.

Chapter 6

6. RESETTLEMENT AND REHABILITATION

6.1 Introduction

This chapter discusses various options for resettlement and rehabilitation which could complement the financial compensation provided to those households which have lost land and other property due to land acquisition. This follows from a growing awareness of the high economic and social costs of (and growing public protests against) involuntary dislocation of people due to the implementation of large infrastructure development projects, such as the construction of embankments as currently envisaged in the Flood Action Plan.

The first part of the chapter includes a review of the concept of resettlement and rehabilitation. Section 2 highlights the socio-economic impact of embankments on rural households. Section 3 presents a brief review of government policies and the experiences of previous attempts to implement large scale resettlement programmes. Section 4 attempts a critical review of a selected number of Governmental and non-governmental programmes aimed at small scale resettlement and rehabilitation programmes for the rural poor. Section 5 attempts an overall critique of all resettlement and rehabilitation programmes in light of some important issues. In section 6 is a set of recommendations towards rehabilitation of the dislocated poor households.

6.1.1 Resettlement and Rehabilitation Defined

In the context of this study, resettlement is defined as certain measures related to physically relocating households which have lost their homesteads and/or land due to land acquisition with an equivalent piece of land or monetary compensation enough to buy the same amount of land.

Rehabilitation is defined as other financial or non-financial measures along with or without physical relocation as the case may be, and aimed not only at removing the disadvantages caused by land acquisition but also to make the affected households socially and economically viable and self-sustaining in their new location.

The underlying presumptions upon which the proposal in this report is based is that the households affected by land acquisition should not be worse off, at least economically after the loss of land.

6.2 Socio-economic Impact of Embankments on the Rural Poor

It is needless to emphasise that the affected people in the embankment sites undergo different types of hardships and consequences due to dislocation often hurriedly imposed on them.

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Following are some typical impacts :

- Land acquisition is hurriedly done without adequate consultation.
- On the countryside land price goes up; as a result the same piece of land may not be replaced with the amount of compensation if relocation is to be made in the same locality.
- The people on the river side will be subjected to enhanced vulnerability being exposed to regular floodings with a reduced land price and frequent crop loss.
- Marginal owners are most vulnerable as proportionate loss is highest for the land poor households, thus reducing some of them to landlessness and the amount of compensation due to them is substantially lost in the process of realising the same and on domestic consumption and repayment of loans.
- There will be a change in employment scenario either in loss of jobs and creation of new ones.
- Poor share-croppers will lose employment and will not merit compensation.
- Poor women will be affected by loss of paternal land and employment, say, paddy husking, may be due to want of such employment opportunity, if relocated to a distance normally unmanageable to cover to continue the jobs. Moreover, access to water may be a problem. Last but not least, being reduced to a status of landless households women may be deprived of some extra-earning from poultry farming and kitchen gardening.

These are some of the impacts mainly in the domain of their economic life. The impact on their psycho-social life has been ignored in this exercise. But any attempt at rehabilitation of the dislocated should take note of these aspects.

However, in addition to all these it is important to remember that the result of the socio-economic survey presented in chapter 4 did indicate that only a relatively small proportion of households lost a lot of land and/or the homestead due to land acquisition. More people were indirectly affected (tenants, people living in other people's homesteads, people living outside the embankment etc); and what adds to their misery is the fact that under present conditions they are not entitled to any compensation at all.

Hence the issue of resettlement and rehabilitation should be considered on the basis of the findings on the socio-economic impact of land acquisition on poor rural households. Since we are addressing a specific social group for the purpose of

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resettlement and rehabilitation, it is important to take this specificity into consideration, otherwise recommendations for rehabilitation may be misdirected. And this takes us to a short review of the resettlement and rehabilitation policies of the governmental and non-governmental organizations.

6.3 A Review of Resettlement Policies and Programmes

The government's policy regarding those who have to give up land and other property for the construction of rural infrastructure of greater national interest is to offer compensation in cash only. With the exception of a few programmes in the past, and more recently the Jamuna Bridge Construction Programme, there are no provisions in current policies to provide additional (social or economic) facilities for those households which are negatively affected by the acquisition.

It is increasingly clear for the policy makers that the current level of compensation will not allow the people to buy the same amount of land and cannot compensate for the incremental cost of moving the household. Nor will it compensate for the high social cost involved in involuntary relocation. In Bangladesh, the problem is aggravated by notoriously late payment and high costs faced by the people to recover the sanctioned award of compensation.

The problem of involuntary dislocation of households is obviously most severe in the case of acquisition of large continuous areas of land such as would be required for the construction of large scale hydro-power dams, airports, urban settlements etc. The configuration of land required for schemes implemented under the Flood Action Plan (embankments and dykes, drainage and irrigation channels) is different. These structures will require rather narrow strips of land. With the present policy not to acquire land for the borrow-pits the land requirement is even more reduced. The method of strip acquisition of land will certainly affect a lot of people, but the likelihood that people will lose all land is much less.

The socio-economic survey presented in Chapter 4 shows that in the past only a small percentage of the affected households in villages close to the embankment reported loss of all land including the homestead. More households were found to be indirectly affected (applies to households living outside the embankment and thus facing increased vulnerability).

However, this does not exclude the need for special arrangements as and when it is found that people are involuntarily dislocated and made landless due to acquisition of land for development of nationally important projects. Failure to do so may, at times, disrupt the nation-building process.

6.3.1 Resettlement that went wrong : the Case of Kaptai Dam

Infrastructural development that requires dislocating settled

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communities will surely generate a feeling of alienation among the latter leading to various forms of active and passive resistance if the issue of relocation is not handled properly.

A case in point is the experience of Kaptai dam construction in the late 50s in the south-eastern region of Bangladesh. It is reported that the Kaptai dam affected 125 mauzas covering about 400 square miles of cultivable lands, almost 40 percent of which went permanently under water due to its construction. As a result 10,000 tribal peasant households and 8,000 tribal households involved in slash and burn farming were affected. The people were adversely affected more due to the illconceived design and planning of the dam. The original inundation level that was estimated was surpassed by real inundation level that further aggravated the problem of resettlement.

The compensation policy regarding resettlement and rehabilitation of dislocated households were guided by the 1948 Act and the Chittagong Hill Tracts Regulation I of 1900. It has not been possible to review the programme of resettlement and rehabilitation under this project in this study. However, it is a well recognised fact that the failure to resettle and rehabilitate these households in an adequate manner has resulted in the political crisis that the country has been facing over the last two decades in the region.

6.3.2 The Resettlement Programme of Jamuna Multipurpose Bridge Project (JMBP)

The JMBP authority has chalked out a comprehensive resettlement plan. However, as mentioned earlier, the resettlement plan is yet to be implemented. According to the plan, except for the 'slightly affected' owners of agricultural lands, all other affected people were deemed eligible for resettlement in the resettlement sites. Even those squatting families who previously did not own any land but were affected by land acquisition were also made eligible to resettle in these sites.

Plots of 300m² were to be created for allotment to the resettlers. Provisions were made for households, which could afford, to be given the option to obtain a larger plot of 600m².

An important consideration of the resettlement plan was to provide adequate facilities to ensure that the standard of living of the resettlers was not compromised. Accordingly, various infrastructural supports were also incorporated in the plan. These included flood protection, roads, drainage, drinking water supply etc. It was envisaged that such supports would be provided to not only those who move into the resettlement sites but also to those who resettle within their own villages.

The plan set some standards for the proposed public facilities. Homesteads at the resettlement sites were to have access to a road with a width of 5m. Proper drainage facilities were to be provided to prevent water logging in the roads. Installation of

hand tubewells for an adequate supply of water was also proposed for both the resettlement sites and the remaining villages. Every 9 households in the resettlement site were to have one tubewell, whereas in the existing villages there was only one tubewell for 15 to 20 homesteads. In addition to the ground water supply, open water sources such as ponds and tanks were also proposed.

With respect to educational facilities it was decided that for every 485 households there should be one primary school and for every 1,146 households one secondary school. Provisions were made for 0.5 acre for each primary school and 1.5 acre for each secondary school. It also reserved sites for health centres according to existing national standards, ie 0.5 acre for every 2,000 people. For 742 households 1 market place was planned. Standards applied for the creation of community facilities such as places of worships were as follows; for mosques and Madrashes 1.5 acre per 5,000 persons and for Mandirs 0.5 acre per 30,000 persons. The plan also included playgrounds and graveyards.

Even if it is too early to dismiss the resettlement programme attached to the Jamuna Multipurpose Bridge Project, a preliminary assessment leads to the conclusion that it is unlikely to be a great success. For example, less than 50 percent of the eligible households have accepted plots in the designated resettlement areas. According to the people interviewed, they prefer to resettle in the vicinity of their previous homestead. Even unprotected land outside the embankment is for many respondents a better choice than a far away resettlement enclave.

The experience of resettlement at JMBP testify that settlement programmes without consulting the potential displacees and paying heed to their concerns in respect of locations, market linkages and social networks, may fail to rehabilitate affected people adequately.

6.4 Experience of Resettlement and Rehabilitation Projects

The previous section presented an example of a major effort at resettlement of displaced people. However, there are smaller programmes in order to resettle and rehabilitate the poorer sections of the society both by the NGOs and the GOs. The study has looked into some of these programmes in order to find out their relevance for people being involuntarily dislocated through land acquisition.

6.4.1 Selected Rural Development Programmes of GOs and NGOs

The purpose of the present review of selected development programmes is not to undertake a full-fledged evaluation of these programmes, but to draw lessons that would be useful for planning future resettlement and rehabilitation programmes for the affected people.

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However, it is important to remember that the programmes of rural development which have been studied are aimed at the rural poor, who are part of settled communities and are integrated into the socio-economic networks of rural life. These programmes are aimed at settled households either in the form of income generating activities or making land and land based economic programmes available to them.

The choice of development programmes was in accordance with the Terms of Reference of the study in which the following were specifically mentioned : the landless cooperative programme under BRDB, Operation Thikana and the government's Khas Land Distribution Programme and from among the NGOs, BRAC, Proshika MUK and Nijera Kori were pre-selected.

Out of these, the Khas Land Distribution Programme of the government in association with Nijera Kori, the Guchchhagram programme of the government and Proshika MUK are involved with programmes based on land distribution among the poor, and essentially attempt to resettle the rural poor but goes beyond resettlement and address several aspects of rehabilitation.

BRAC's rural development programme and the landless cooperative programme of BRDB, on the other hand, address the rehabilitation issues exclusive of any land based resettlement programme.

6.4.2 Resettlement Programmes

A. Guchchhagram programme of GOB

The Guchchhagram (cluster village) programme was introduced by the previous government to resettle the landless rural poor with a homestead land and a housing unit on a piece of government Khas land.

The programme under review was in village Jamurki, about 10 kilometers to the north west from Mirzapur, the Upazila HQ. The surveyed Guchchhagram was on a 2.79 acres of Khas land. Forty three households from eight villages of the union were settled here. Of them, 21 households were from Jamurki. Other villages were within a distance of half a mile to 2.5 miles. Most of the beneficiaries did not have any homestead land and some of them lived in other people's premises. Many lived in Jhupris, made of synthetic paper, either squatting on the roadsides and other Khas land or placed on kin's and employer's land.

Each household received a 21 feet x 12 feet house with tin roof, bamboo walls and poles on about 0.375 acres of land along with a sanitary toilet. Per unit construction cost, except tin and earth digging, was Tk.4821 for houses and Tk.888 for a toilet. The Government gave cash grants for construction, the Relief Ministry gave 3 bundles of tin for each household and WFP gave 60 metric tons of wheat for earth filling for the Guchchhagram. The cost for 2 bundles of CI sheet and earth filling per house were estimated at Tk.6000 and Tk.2000 respectively.

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The Upazila administration had no particular fund for any income generating programme for the Guchchhagram. The administration, mobilising its limited resources, distributed goats and chicks and formed groups through BRDB cooperatives. They had also asked the local NGOs to introduce programmes in these areas.

The settlers in the Guchchhagram expected to get ration cards, relief goods and employment. However, none of these expectations had so far been realized. As a result, frustration was becoming pervasive. This was aggravated by the low quality of construction materials.

Many of the settlers had lost their earlier employment opportunities due to migration here from their native villages where they had old social relations with the employers. Many of the settlers go to their native villages even now for employment. However, it is tiresome to travel such a distance every day.

Many of the settlers were thinking of leaving the Guchchhagram and appeared to be waiting for their titles to the property.

B. Khas Land Distribution Programme of GOB and Nijera Kori

The programme of Khas land distribution among the landless was officially initiated by the Ministry of Land, GOB in March 1987. The Land Reform Ordinance of 1984 did not make any provision for the distribution of Khas agricultural land among the landless. NGOs participated in the programme since its inception and formed the NGO Coordination Council for Land Reform Programme (NCCLRP).

Some of the important objectives of NGO-Land Ministry cooperation in this programme were initially envisaged as

- giving Khas lands to the landless groups instead of individuals;
- providing the landless groups with development support;
- ensuring possession of Khas land by the beneficiaries;
- proper identification of the landless and Khas land in each Upazila;
- participation/representation of the landless groups organised by NGOs in local level Land Reform Committees.

The programme under review in Char Jubilee Mauza in Noakhali Sadar Upazila, is coordinated by Nijera Kori, a national NGO whose core programme includes Samiti formation with the target group, training programme, collective cultivation and legal aid support to the poor.

In the programme area a section of the landless people and the Ryots of different villages adjoining Nobogram were organised by Nijera Kori in 1987 under different Samitis including Sarathi,

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which was studied.

Khas land distribution

The Samiti played an important role in identifying the actual landless people for Khas land distribution. They put pressure on the local administration by carrying out a militant procession before the day the Upazila Khas Land Distribution Board interviewed the applicants for Khas land distribution. The Upazila Land Distribution Board had selected the landless people in an open meeting for the distribution of Khas land in Nobogram but published a list of selected landless persons at the Upazila headquarters. In the list the Samiti found 34 false claimants and demonstrated against the list, for it believed that the Jotedar in collaboration with the administration included those false claimants in the list. The Upazila Nirbahi Officer (UNO) arranged reinterview of the applicants and published the list of the selected applicants on the spot as per demand of the Samiti.

However, the UNO included those 34 persons in the list on the condition that the document of land distribution and demarcation of land plots would be done in the presence of the landless selected. As a result, the Sarathi Samiti recovered 34 acres of Khas land from the illegal occupation of the Jotedars.

Collective cultivation

The Samiti has a collective cultivation programme. Last year all the individual holdings and the 34 acres of land, recovered from the Jotedars, were brought under collective cultivation. The share was equal. For cultivation, they borrowed Tk.786,279 from Nijera Kori. The success of the collective cultivation was mixed. Though the Samiti managed to pay back the loans taken from Nijera Kori, the production target was not reached, the reasons being bad weather and salinity. Apart from these, there were some other exogenous factors. They sold paddy immediately after the harvest at a lower price because the Jotedars threatened to forcibly take away the produce.

Empowerment

The Samiti members received conscientization training from Nijera Kori on five basic human rights, namely food, shelter, clothes, education and health. They also get lessons from Nijera Kori about how to be empowered. Nijera Kori informed them about different Acts about empowerment and specially about the Khas land distribution policy of the Land Reform Committee. Solidarity among members is quite evident in the activities of the Samiti.

C. Proshika's Bastuhara Resettlement Programme

Proshika's core programme includes group formation and its expansion, and formal and informal training for human resource development. Proshika's income and employment generation



activities include nursery, agricultural activities, silk-worm cultivation, paddy husking, irrigation scheme, cow fattening, buying bullocks for ploughing, milch cow rearing, goat rearing, small trade and rickshaw pulling. Proshika carries out special programmes on literacy campaign, adult education, child motivation for schooling and Bastuhara rehabilitation programme with land, housing, tube well, sanitary toilet, social forestry and vaccination of livestock and poultry. The latter has been reviewed for the purpose of this study.

Khutamara Bastuhara Samiti

Of the three Bastuhara Samitis, Khutamara was established in 1989. Proshika advanced loans to the female groups of Bastuhara Basti project for land purchase, cultivation, house building, sanitary toilet construction and income generating programmes like the Dhenki programme. The total amount of loan till April 1991 was Tk.147,600. The group has paid back only Tk.29,400. In other words, the recovery performance was only 16.3 per cent.

The total cost of land and housing was Tk.147,600. The cost of land purchase was Tk.56,500 of which Tk.48,000 was for land value, Tk.7,000 for stamp duties and Tk.1,500 for legal notice. The total cost of house building with slabs and rings for the sanitary toilets was Tk.62,000. The unit costs of land and houses were Tk.4,708 and Tk.5,200 respectively, totalling Tk.9,908. To cope with the new situation a total of Tk.28,700 was given as loans for land cultivation and paddy husking business. Altogether per household loan amounted to Tk.12,300.

Group Performance

The colony had a bad start. The land quality was poor and except for sugar cane no other crops were suitable for cultivation on this land. However, the yield of sugar cane was far below the average yield of the area. Though the group repaid the loan taken for sugar cane cultivation and earned a small amount of profit, yet it was not sufficient to pay other loans of Proshika. The Dhenki project has seemingly failed. The amount of loans piled up so high that Proshika stopped giving them loans any more.

Meanwhile, the group members lost employment opportunities and charity sources from their erstwhile patrons for coming to this colony; as a result, their income had declined. This led to frustrations among the members of both the groups about the future of the Samiti, particularly the colony.

Though land ownership was given to the female members, none of them had regular incomes excepting a little earning during the post harvest period by paddy husking. It was the male members who were to pay back the loans. All these made the male members resentful against both Proshika and the female members. As a consequence the male members often misbehaved with their spouses.

Halhalia Bastuhara Samiti

The Samiti members established this colony in 1989. A loan of Tk.88,250 was given for purchasing 3.00 acres of land of which about 0.40 acre was for homestead. The female group got another loan of Tk.19,640 for Dhenki programme. Every member got Tk.1,228. However, the programme failed and the group members paid back a small part of the loan before using up all the money for consumption.

The total cost of resettlement of 16 households was Tk.160,250, consisting of Tk.88,250 for land and Tk.72,000 for houses with sanitary toilet slabs. The unit costs of land and houses were Tk.5,516 and Tk.4,500 respectively, totalling Tk.10,016. Altogether per household loan was Tk.11,243.

Athiabari Mahila Samiti

The Athiabari Mahila Samiti purchased 0.33 acre of land for silk worm cultivation with a credit assistance of Tk.4,000 from Proshika. This land was given to four members of the Samiti. As land was fallow, all the members of the female group and their counterpart male groups voluntarily cleared it and made it cultivable. The female members who became land owners received help from their husbands for cultivating this land. Proshika also provided them with technical support, marketing facilities and credit assistance for silk worm cultivation.

6.4.3 BRAC's Rehabilitation Programme

BRAC's core programme aims to emphasize organizational efforts, solidarity among the poor, access to resources and in addition credit and income generation among the rural poor. In 1975 BRAC started to implement its Rural Development (RD) programme, in Jamalpur district. The project includes sericulture, irrigation, horticulture and nursery, non-formal primary school (NFP), functional education, para-legal aid and vulnerable group development components. Apart from these components, Ayesha Abed Foundation, another project of BRAC, carries out an embroidery project. It is an income generating project and employs a sizeable number of women.

A. Tetulia Samiti

In Tetulia the members of the Samiti made some savings, took loans from the Samiti and made repayments every week by instalments. If any member failed to repay, others pooled their resources to pay back. The collective effort in paying back loans followed from the threat of withdrawal of BRAC's support to the group in case of default of its members in repaying loans.

The group members were satisfied with the credit programme of BRAC. However, credit programmes for paddy husking and cow rearing did not produce the desired results so far as income and employment generation was concerned. Most of the members used

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these loans for consumption.

BRAC's loan for the purchase of homestead land helped the beneficiaries to some extent in severing their dependency relationship with the rich, but had not increased their income. Shopkeeping was also a good programme as it was adding income to the families of the group members.

However, it did not enable the women members to use the loan as they had wished. Rather they depended on the male members of the families to make use of the loan. It was also observed that some of the recipients of these loans were relatively well off.

The rickshaw programme of the male group seemed to have yielded good results as it had not only increased income but also helped the beneficiaries to free themselves from the exploitation of the private rickshaw owners who charged a high rent.

B. Nakugaon Samiti

BRAC started its programme here in 1984. The group members were satisfied with the credit programme of BRAC. However, like Tetulia Samiti, here too the credit programmes for paddy husking and cow rearing had not yielded desired results, so far as income and employment generation was concerned and most members used part of these loans for consumption. BRAC had given rickshaw loans to the male group.

The recovery performance of the group was excellent. In the area, many poor people collected twigs and leaves from the forests of Bangladesh and India. Most of the group members were also engaged in twig collection and it was learnt from knowledgeable quarters, and confirmed by the group members, that a major chunk of the loans was paid by the group members from this income. Some reported that they had been paying back loans by selling crops because they used up the loan money for consumption and education.

6.4.4 BRDB : Productive Employment Project (PEP)

The Rural Employment Sector Programme (RESP) was a follow-up to the Intensive Rural Works Programme (IRWP) undertaken between 1981-82 to 1985-86. The programme has been financed by SIDA and NORAD. IRWP was started in three comparatively poorer districts of Bangladesh, namely Kurigram, Faridpur and Madaripur.

RESP was redesigned to remove the drawbacks of IRWP. It has two separate but inter-related projects, namely the Infrastructure Development Project (IDP) and the Production and Employment Project (PEP) for the rural poor.

RESP has been in the process of implementation since 1986-87. The first phase of RESP ended in June 1990 and the second phase will continue for 3 years commencing from 1st July 1990.

The Programme in Muraridaha

The male group in Muraridaha, about 4 miles to the south-west from Faridpur district town, belonging to the programme of PEP undertook two income generating projects. Both were collective ventures. The group leased a pond of 0.60 acres from a private owner of the village on condition that the members would reexcavate the pond and use it for seven years freely. For reexcavating the pond PEP managed to get a grant of 79 maunds of wheat from the World Food Programme (WFP). About 10 members of the group obtained employment for about 30 days in reexcavation work. During the first year PEP also gave a loan of Tk.2,500 for fish cultivation.

The group auctioned the Tambulkhana Haat at Tk.12,444 of which Tk.4,000 was from its own funds and Tk.7,444 was borrowed from PEP.

The female group took loans from PEP for different purposes like cow fattening, goat rearing, paddy husking, small trading and land mortgaging. Unlike the male group the loan for the female group was individual.

All the recipients of the first loan earned substantial profit from cow fattening. The recovery rate of all three loans was 100 percent.

6.4.5 Socio-economic Impact of the Programmes

In this section an attempt is made to review the impact of resettlement and rehabilitation programmes of the GOs and NGOs on the rural poor in terms of selected socio-economic indicators.

In the analytical plan three sets of indicators have been chosen:

- Assets, as a more stable indicator of economic well-being;
- Income, as an immediate indicator of economic well-being;
- Quality of life as a composite indicator, including both the above.

The three case studies on resettlement and two on rehabilitation are analysed separately on the basis of these indicators. The comparisons have been made to draw conclusions about the usefulness of these experiences in formulating an overall rehabilitation programme towards economic self-sufficiency.

A. Resettlement

In this section the impacts of the three resettlement programmes (Guchchhagram, Nijera Kori and Proshika MUK) are assessed on the basis of the field survey.

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The economic impact in respect of assets show that there has been an overall improvement in respect of land and housing in all three programmes (Table 6.1A).

Table 6.1A

Impact of Selected Resettlement Programmes
in respect of Assets

Indicators	Guchchhagram	Proshika MUK	Nijera Kori
	(percentage change)		
HHS owning homestead land	83	73	87
HHS owning arable land	0	73	87
HHS with tin roof houses	73	80	0
Cattle owning HHS	-10	0	-33

Admittedly for Guchchhagram and Proshika this is a direct impact of the projects' land distribution programmes for resettlement.

The result in respect of land and housing in Nijera Kori has to be seen in light of the absence of such land distribution by the programme itself which emphasises empowerment instead. The fact that most of the households who earlier owned no land were now owners is indicative of the success of the programme in obtaining and retaining land which had been distributed by the government. It is well known that in this particular region where Nijera Kori operates, powerful Jotedars in collusion with the local bureaucracy grab all Khas land.

With regard to income (Table 6.1B) the picture was somewhat mixed. The average income of members declined in all cases, more notably in Proshika (-19%) and Nijera Kori (-14%) compared to Guchchhagram (-7%). When the total household income was considered the picture improved in all cases, particularly so for Proshika which shows a positive change of 6 percent, and Nijera Kori where the negative change reduced to 4 percent. In case of Guchchhagram the picture did not change very much.

As for the standard of living indicators (Table 6.1B) such as tubewell water, sanitary toilet and bicycle, the overall picture showed a positive change in all cases, particularly for Guchchhagram and Proshika.

In respect of resettlement, the performance of the NGO programmes was somewhat better than that of the GO programme.

B. Rehabilitation

In reviewing the performance of the two rehabilitation

programmes, one by BRAC and the other by BRDB, the picture appears to be mixed (see Table 6.2A). In respect of land the BRAC programme did better than BRDB. On the other hand, BRDB did better in respect of housing and cattle. Overall there was no deterioration in respect of assets in either programme.

Table 6.1B

Impact of Selected Resettlement Programmes
in respect of Income and Living Standard

Indicators	Guchchhagram	Proshika MUK	Nijera Kori
	(percentage change)		
Average income of respondents	-7	-19	-14
Average income of HHs	-6	6	-4
HHs with tube well water	13	53	53
HHs with sanitary toilet	97	83	0
HHs with bicycles	0	0	3

Table 6.2A

Impact of Selected Rehabilitation Programmes
in respect of Assets

Indicators	BRAC	BRDB
	(percentage change)	
HHs owning homestead land	13	4
HHs owning arable land	13	0
HHs with tin roof houses	10	20
Cattle owning HHs	9	33

As for the income indicators (Table 6.2B), comparable improvements were registered by both programmes with regard to members, while performance was much better in respect of overall household income, with BRAC registering 50 percent increase and BRDB 35 percent, on average.

In respect of the standard of living indicators (Table 6.2B), the situation was initially better for BRDB with regard to water. Improvements in sanitation was marginal in either case. In respect of transportation BRAC showed some improvement, while

BRDB showed no change in the initial poor status.

In the two rehabilitation programmes positive results were seen in both the GO and NGO cases. Assets have increased in general, incomes while increased quite substantially. In respect of the standard of living indicators the improvements were less visible if not absent.

Table 6.2B

Impact of Selected Rehabilitation Programmes
in respect of Income and Living Standard

Indicators	BRAC	BRDB
----- (percentage change)		
Average income of respondents	17	19
Average income of HHs	49	35
HHs with tube well	58	0
HHs with sanitary toilet	3	7
HHs with bicycles	6	0

C. Social impact

The social impact of the programme on the female members was assessed on the basis of selected indicators of empowerment and changes in social attitudes. It was found that female members' participation in those decisions that influenced their economic and social life, improved since they had joined the programmes.

6.5 A Critical Review of the Programmes and Issues

6.5.1 Self-reliance

Admittedly, there has been some improvement in the economic profile of the participants in BRAC's rehabilitation programme over time. But it is difficult to say how significant this improvement is. At least, the beneficiaries and the programme implementers did not feel that they, even after five years, could independently pursue their economic activities without BRAC's help, and none of the members had graduated to a self-reliant situation. Indeed, continuous doses of credit and assets kept them above the level of poverty.

The Guchchhagram's resettlement Programme had been in operation for a shorter time and the indicators of economic independence were even less obvious. There were on the contrary clear signs that the beneficiaries were developing a relief mentality due to

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the initial perspective of the programme which aimed at resettling the rural destitutes. Expectations among the members ran high for relief goods and employment. Though the collective income increased it was not yet noticeably reflected in their household income.

In BRDB's landless cooperative programme, the survey indicated some signs of growing differentiation among the members of the cooperatives. The entrepreneur type among the members seemed to have done better than others.

In summary, all three programmes showed various degrees of improvement. Still it was early to suggest that any of them, whether NGO or GO, had succeeded in making the poor self-reliant.

6.5.2 Empowerment by Nijera Kori

It was observed that the organizational and legal support accorded by Nijera Kori provided additional strength to the solidarity of the members of the Samities to confront the Jotedars in order to recover and establish their rights over the Khas land which had been distributed to them by the government. The question that was raised by these instances, was about the capacity of the poor to sustain state resources, when delivered, against the predatory power elites in the rural social world. In the context of relocation of rural households with state and NGO resources this 'capacity' assumes critical importance. It seems that Nijera Kori has thoughtfully touched on this important issue of empowerment of the rural poor.

However, Nijera Kori appeared to take a rather narrow view of conscientization which, if attained, was assumed to be enough to ensure the basic needs of the poor. To heighten the expectation of the rural poor for meeting the basic needs only by conscientization without creating resources adequate to meet their demands, may generate frustrations, especially when the materialization of such a goal is delayed indefinitely or involve them in a confrontation with the vested interests which Nijera Kori can not handle anymore as an NGO.

Conscientization, as understood in a dynamic sense, would mean that the rural poor would be able to mobilize their creative energies in a manner that would enable them to identify the areas of solidarity across classes and genders in their everyday life. Nijera Kori, or for that matter any NGO with empowering goals, may find a role here. Once that process of solidarity formation begins, the NGOs should consider the prospect of withdrawal to other areas. The rural poor would then be left to test their new found solidarity without the presence of empowering NGOs which may make the NGOs less paternalistic.

6.5.3 Need for a Redefinition of Target Group

The other issue that emerged from the review is the target group concept used by the NGOs. It is a good one in so far as it

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defines areas of activities. However, in a situation of large scale involuntary dislocation it may not be achieving the results which are desired. Moreover, in a community where a process of acute differentiation is at work, rural households above the level of defined categories of beneficiaries may find it difficult to adjust to the injection of new resources to a group with whom they have an established socio-economic relationship. Aid to the poorest may threaten their position and make them more vulnerable to pressures pushing them downwards. What may eventually transpire from this process is a continual swelling of the target groups. A process of cyclical mobility could also result, with individuals moving in and out of the groups as their fortunes change over time.

The NGO, will therefore become a permanent feature, with a permanent clientele, thus jeopardizing the goal of self sustaining development of the poor. The criteria of definition of target group should not, therefore, be too rigid, such as an amount of landholding. In any case, during involuntary dislocation of the households the target group definition may be made more flexible as wide spread distress is anticipated.

6.5.4 The Case for Rehabilitation

It has been defined earlier that rehabilitation is about complementary support services over and above the financial compensation for land and other kinds of property lost due to the government's acquisition.

One argument is that the customary compensation is neither sufficient to buy new land in the vicinity, nor enough to compensate for the extra costs involved in involuntary dislocation or occupational change that may be necessary. Moreover, payment is often late and the receipt of compensation often carries a price tag. This means that the affected persons are often paid less than what they have been awarded.

Another argument in favour of a policy of complementary services is that even with enough money, poor people have no access to existing service or material supply delivery systems, whether these are private or not. If they are losing a productive asset such as land, they face an increased vulnerability which only money will not compensate for.

The complementary activities which would be of help would be in the field of skills training, dissemination of technologies and marketing, and perhaps also credit. These are the kind of activities undertaken by most NGOs and even some government rural development programmes. It has been seen earlier in this chapter that the participants of these programmes are normally experiencing higher income and better social conditions after joining the programmes even if this does not necessarily apply to all participants. This finding is corroborated by other studies of rural development programmes. Members of households who are negatively affected by rural infrastructure development

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programmes, whether they lose land or not, would probably be better off as members of such programmes than those without these support services.

However, even if the coverage of different rural development programmes (government and non-government) is increasing over time, they still cover only a minority of the target population. There is no guarantee that such programmes are established in areas affected by the schemes to be taken up under the Flood Action Plan.

Summarizing the above, it is obvious that people being negatively affected by rural infrastructure development programmes would probably benefit from participation in governmental or non-governmental rural development programmes offering different kinds of material and non-material supply services. Even if these positive effects are well acknowledged the Team, however, would not recommend the establishment of a new poverty alleviation rural development programme specifically designed for the needs or within the framework of the Flood Action Plan. The priority in respect of improving the land acquisition policy is to ensure that the existing system works, ie that compensation is actually paid in time, and that the level of compensation is fair.

The Team, however, does suggest that in case rural development programmes are established in the vicinity, they might be invited to extend their activities to villages affected by the Flood Action Plan projects. Again, it is up to the specific organization to decide whether they will have the resources or interest to extend their activities.

It has already been suggested that a mapping of rural development organizations will be an important part of the detailed planning of the FAP schemes. During this mapping exercise the different organizations may not only be identified and the geographical coverage determined, the organizations may also be invited to participate in the planning of socio-economic activities. It is during these exercises that they may be asked to extend activities to the areas affected by the infrastructure.

6.5.5 A Case for Enabling Programmes

When the state or any of its agencies compulsorily dislocates the marginalised by taking away land or reduce their land holdings considerably for development needs, and again when the same agencies bring them within the programmes of relocation, the latter find themselves at both ends of development; once by being dislocated and again by being relocated. There may be assumptions among development experts that the pains of the first process may be obviated by the second. That the second process can be another kind of uncertainty and imposition is recognised by very few. Decisions of interventions of any kind from outside and by other people are always a suspect or even a threat to a society that does not participate in such decisions, even if it is meant

to be doing good for the latter.

If the basis of compulsory dislocation and involuntary resettlement is a consequence of planned change generated by major development programmes of regional or national importance, then it can be assumed that the programmes are to benefit the targeted people.

The welfare assumption implicit in such a premise can be misleading if it fails to address itself to people's notions of benefits and well-being. Obviously, there is a critical question of choice and the availability of socio-political space for the articulation of such a choice. If this argument is tenable then one has to consider programmes offered both by GOs and NGOs in the rehabilitation of the affected people which are more enabling than interventionist. It is in the very nature of intervention that the people are treated as objects; they are acted upon: led, guided and targeted. The development experience of interventionist types are known to have generated another kind of dependency which may be different in form but not much in content.

In the context of large scale land acquisition for embankments and compartments, enabling programmes that educate the target groups to organise themselves in order to ensure access to resources and institutions that are meant for them, may be more appropriate for the rehabilitation of the displaced.

Enabling programmes can operate at two levels, first, by creating an appropriate socio-political climate in which unproductive and anti-productive forces operating in the society will be contained by appropriate juridical measures which will also help to create political space for the affected to change their own lot. Second, the enabling programmes can help the affected to make use of this juridical space and take initiative to regain or even improve upon their condition that existed prior to relocation.

Here is the space for NGOs to educate, animate and cooperate with the affected to familiarize and make use of the favourable legal rights to the latter's advantage and to demand appropriate legal rights for the easement of the pains of relocation. Of course, law is not an automatic cure for all ills. It is a tool, and if handled properly, can be of some use.

The experience of Nijera Kori in helping to reclaim Khas land, by providing legal and organizational support to the members from the locally powerful Jotedars, is worth one's attention. Enabling programmes, if introduced prior to land acquisition, will not only encourage local participation in the planning process but also evolve appropriate institutional arrangement suitable for the area in implementing such participation.

What came out clearly from the review of resettlement and rehabilitation programmes is the inadequate level of

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participation of group members in decision making. Apart from asserting their right to reflect and act upon aid flows which truly belong to group members, participation helps to make group members aware of national and international processes shaping their lives. Local level participation may identify problems and solutions which may be missed out at the national level. One sure way of avoiding this is by ensuring the participation of the 'beneficiaries' in the design, conceptualization and implementation of the programme. A democratic decision making process and enhancement of the domain of accountability are the only means of creating space for such participation. What is strongly suggested is a periodic review mechanism in the organization so that the 'beneficiaries' and the implementers can collectively face and solve problems that may crop up from time to time and thus contribute to the enabling of the poor.

Indeed, enabling programmes are expected to generate countervailing forces against bureaucratic hassles, wasteful and procrastinating, spread over the whole process of dislocation and relocation of households. Last but not least, enabling programmes will be expected to create appropriate space for programmes of income generation and skill development to yield better results than what were noticed.

The fact that the organizations come from outside to the target groups should not pose a limiting factor. When the organization limits the space of involvement of the prospective 'beneficiaries' in the programme, there may be a possibility that the organization and the beneficiaries will fall apart unless sustained by continuous doses of economic resources to the members from outside.

6.6 Concluding Remarks

To conclude one should consider the question of the construction of embankments and rehabilitation of the affected people together. Hence embankments should be designed, constructed and maintained in a way so that the rehabilitation of people become an essential component of the whole exercise and the issue of rehabilitation should be addressed in a manner that it relates to the whole process of water resource management, embankment being one aspect of that. In other words, the construction of embankments and the rehabilitation of the displaced people are linked processes. Hence rehabilitation is more than an one-shot affair like resettlement in the form of giving monetary compensation or an equivalent piece of land or a homestead against the one that has been acquired.

Rehabilitation is a process that will not only make the displaced people socially and economically viable and self-sustaining in the newly settled areas but will also ensure the viability of the embankment in the efficient completion of the structural forms, in full realization of the economic opportunities and in proper maintenance of the structures.

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Considering the specificity of the social groups and the variety and complexity of socio-economic impact on different sections of the poor with regard to land acquisition and the essential linkages between embankments and the people, the whole issue of rehabilitation should be seen as a dynamic process. As such the process of rehabilitation should begin with planning and design, and follow through to the maintenance of embankments. The design of the embankments should consider the question of settlement of the displaced which is the initial condition of rehabilitation. Land acquisition should be minimal and free from interference from combinations of vested interests and arbitration should be just and faster to facilitate the process of rehabilitation by saving the money and time that is now lost in the process. Compensation should be quick and adequate unlike it is practised now. But all these will need awareness, action and organizational solidarity of the poor to ensure participation and accountability in the process.

This highlights empowerment of the poor as a necessary component of rehabilitation. Without this, resettlement and rehabilitation programmes, whether of GOs or NGOs, concentrating only on the development of skills and distribution of assets, will not achieve self-sustaining improvements.

6.7 Recommendations

6.7.1 Pre-land Acquisition Phase

1. For any programme of rehabilitation of the displaced and the marginalised in the embankment region (countryside and riverside) a socio-economic mapping of the people in the region is a necessary step. The survey should include people on both sides of the prospective embankment with special emphasis on landownership and land use pattern. It should look into the demographic profile and the range of economic activities, both farm and non-farm, in the region in order to examine the scope and nature of post-settlement development support. A detailed profile of economic assets of the households should be made so that appropriate programmes can be evolved (i.e. credit, skills training). The survey should include potential beneficiaries of the project which land is being acquired, in order to understand the comparative change in the economic status of the people of the region.
2. To examine the usefulness and relevance of existing institutions at the community level to facilitate rehabilitation, an understanding of the composition, authority and functioning of both the formal and informal institutions and their relationships will be necessary.
3. A maximum publicity regarding the plan and necessity of the embankment/compartments project in the locality should be given to facilitate access to information, which is an essential aspect not only of rights of citizens but also of the rehabilitation process itself. The plan of the proposed embankment should be

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displayed in public places and important community centres.

4. Land based para legal training, both for poor men and women, should be organised by the NGOs who are already active in the regions or by the local governments or by volunteers trained by NGOs and local government functionaries.

5. GOs desiring to participate in the process of rehabilitation may find it useful to organise training programmes for local government representatives, field level NGO workers and group members and volunteers drawn from the educated rural unemployed, both men and women, on land survey and settlement processes. NGOs with this particular objective in their programmes may be encouraged to organise this training.

6. In the project area special emphasis should be put on the formation and promotion of groups of the affected poor by both public sector rural development agencies and NGOs to ensure participation in land acquisition and post-acquisition rehabilitation.

6.7.2 Land Acquisition Phase

7. Maximum publicity campaign regarding the land acquisition process should be carried out by the local government, government development agencies and the NGOs to ensure public accountability in the acquisition process.

8. Interaction between implementing bodies, local level government authorities, NGOs and the groups of the affected poor should be enhanced which may take the form of a committee drawing in representatives from all the above categories in order to reduce socially and economically undesirable acquisition.

9. Those who have been involuntarily dislocated due to the loss of homestead, should be guaranteed a new plot of land with a choice either to buy it themselves or be awarded the same by the authority. The plot must as far as possible be equal to the one lost and located in the vicinity of the previous homestead (within the same village). If there are Khas lands available in the village, these households shall be given first priority to such land. If there is no vacant land available, land has to be acquired, in accordance with normal rules, at the cost of the government for resettlement of the household. The land must be raised above the flood level at the expense of the project. These plots must be formally transferred to and registered with the owner and not be retained as government property. To ensure that women get their rights to the property, half the land must be registered in the name of the wife.

10. The total cost for these resettlement efforts must be included in the estimate for the project. As a general principle, accurate costing should be aimed for. If specific privileges/concessions are to be provided, such as free distribution of resettlement plots, their justification and

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amount should be 'socially' derived.

11. The process of determination of fair, just and quick compensation and solution of disputes regarding land ownership and compensation award should include and emphasize local level public accountability mechanism suggested earlier.

12. NGOs may consider legal aid to ensure protective support to the land poor involved in the process of dislocation and relocation in order to enable them to retain control of the resources and minimize wasteful use of time and energy in this process.

6.7.3 Post-land Acquisition Phase

13. Economic programmes by already existing and/or future NGOs in the region should emphasize credit programmes and skill developments on the basis of regional socio-economic mapping which should clearly identify small investment and employment opportunities in the region, of course, taking into consideration the environmental impact of such economic pursuits. Since the NGOs are used to work with a target group approach, during involuntary dislocation of the households the definition of the target group may be made more flexible as wide spread distress is anticipated. In this case the upper limit may be set at 1.5 acres of land holding. From the socio-economic survey, it seems households under this ceiling on average lost more than 50 percent of their land due to embankment construction.

14. Since displacement from the riverside will disrupt normal access to water, to minimize hardship for women who normally procure water for the household, and to make water available tubewell sinking programmes should be given priority among the affected. This could be both on the basis of donations and soft loans depending on the need and capacity of the recipients.

15. Since the experience of the involvement of the NGOs in the execution of the Khas land distribution programme is useful, the insights and lessons from these new and creative efforts can be utilized in the process of dislocation and relocation of the affected people in the embankment regions. The co-ordination between the NGOs and the government can be enhanced by NGOs having these experiences or by any NGO who has Khas land distribution as its main objective.

16. Local governments and/or NGOs should supervise and monitor the process of land acquisition and resettlement and make public all the findings and recommendations arising out of this process. Enhanced interaction of the local government with the people will only strengthen this institution which should play a vital role in the rehabilitation process of the affected people.

17. Local governments should play an important role in maintaining the embankments, specially in taxing the beneficiaries and spending the money on repair and maintenance and

rehabilitating the displaced households. To rely on donor-dependent NGOs for long term rehabilitation of the displacees and maintenance of the embankments is likely to generate and ensure new forms of dependency. Hence programmes of local resource mobilization should be encouraged both in the form of taxation of the rich by the local government and savings of the poor by the NGOs believing in empowerment of the poor.

18. To increase the scope of participation and the degree of accountability, people's participation should be enhanced. Only programmes that increase people's awareness of their civic responsibility and individual rights can accomplish this objective. Since the distinguishing hall marks between real and rhetorical programmes of empowerment are the level and degree of people's participation in the development process, people's own initiative should be encouraged by development agencies. One way of doing this is to involve them in the local level accountability process. People should be encouraged to participate in the decision making process not only of the implementing bodies but also of the NGOs themselves.

Parallel and not opposed to the local government, proportional representation on the basis of democratic choice by the affected marginal social groups in the local level committees should be emphasised to collaborate with the implementing bodies and rehabilitation efforts by NGOs. These local level committees will act as a countervailing force against all kinds of irregularity and corruption both of the implementing bodies and the NGOs in the dislocation and relocation process of the marginal rural households.

Chapter 7

7. MAIN RECOMMENDATIONS OF THE STUDY

Presented below are the main recommendations of the FAP-15 study on Land Acquisition and Resettlement, organised under ten priority topics, namely

- 7.01 Minimization of Land to be Acquired
- 7.02 Optimal Alignment of Embankments
- 7.03 Compensation
- 7.04 Arbitration
- 7.05 Resettlement
 - 7.05.1 Small Scale Resettlement
 - 7.05.2 Large Scale Resettlement
- 7.06 Rehabilitation
- 7.07 Funding Issues
- 7.08 A New Legal Framework
- 7.09 Restructuring of the Administrative Framework
- 7.10 A Modernized Land Record System.

The first seven of the above concern the actual process of land acquisition, while the last three relate to the creation of a regulatory and administrative framework necessary for implementing the substantive recommendations.

These recommendations are selected as the most important ones and synthesized from amongst those contained in the individual chapters of this report or in the Draft Summary of Findings and Recommendations, which was presented at a National Workshop on the Study in February 1992.

7.01 MINIMIZATION OF LAND TO BE ACQUIRED

All efforts must be made to minimize the quantum of land to be acquired for projects under the Flood Action Plan. There are at least five measures which should be explored, as noted below.

First, improvements in embankment design to obtain a minimum base width have to be diligently pursued. It will involve a judicious choice of design criteria based on accurate data, the absence of which tends to increase safety factors and promote a more generous land acquisition.

Second, improved stability of embankments should be sought through the choice of better earthfill materials, superior construction, better maintenance and control of river erosion by appropriate measures, including river training subject to technical and economic feasibility. This will result in the

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avoidance of retired embankments and reduce the pressure on land acquisition.

Third, borrow pits should be avoided on the countryside except when they are needed as irrigation or drainage channels. This would also be subject to a cost benefit analysis of alternative sources of earthfill materials, which in turn would require good soil data.

Fourth, resettlement needs must be minimized by leaving most of the small scale resettlement cases to private initiatives, as discussed under Recommendation 7.05.1.

Fifth, land acquisition for uncertain projects must be stopped. It should be primarily confined to projects for which the soundness of planning and the availability of funding are guaranteed.

7.02 OPTIMAL ALIGNMENT OF EMBANKMENTS

The alignment of an embankment must be determined not only on the basis of technical analyses of safety and stability, but also a full cost-benefit analysis of alternative alignments at the time of the feasibility study. Information needed for such analysis should include, among others, the estimated number of persons to be dislocated and the changes in productivity of land inside as well as outside the embankment. A more thorough sample survey will need to be carried out around potential alignment sites, while a more accurate land record system would help identify the number of persons involved.

Public participation must be allowed in the determination of alignment, on the basis of full explanation of the technical considerations and an appreciation of the specific problems of the area as well as the affected households. Such participation would not only bring in local wisdom as an essential ingredient in decision making, but also forestall many potential acts of protest against the embankment, including public cuts.

7.03 COMPENSATION TO BE FAIR AND QUICK

The issue of compensation is one of the most important in land acquisition and is the root of much hardship and suffering through procedural delays, extra legal payments and various other forms of extortionate and fraudulent practices. It is therefore strongly recommended that compensation principles and procedures are clearly conceptualised and efficiently administered. This is the only way to ensure a fair and quick compensation. In this regard four areas are particularly emphasized below.

Fundamental Principles

The entire process of determination and payment of compensation should be based on well accepted fundamental principles and guidelines based on them. Amongst fundamental principles, the



following are recommended strongly

- nobody should be worse off as a result of a development project;
- there should be uniform application of the principles;
- those who are benefitting from a project must contribute towards the cost of the project in proportion to the magnitude of benefit;
- the principles, including when and how, if at all, they can be deviated from, must be determined on the basis of informed participation by all the relevant categories of people, and incorporate the best of available knowledge and wisdom.

Inclusion of the Neglected Categories

Although different categories of people undergo different types and degrees of suffering, it is only those who lose land that are entitled to compensation. This is not a fair principle and should be amended by inclusion, minimally, of the following categories :

- people on the riverside who experience increased physical vulnerability from floods and are often forced to take temporary shelter on the embankment during the flood season;
- share croppers and tenants on land being acquired, who lose employment and income;
- people whose profession is dependent on water bodies, such as boatmen and open water fishermen, whose earnings are often seriously disturbed by embankments.

It is true that not all the above categories will be equally important in all the regions of Bangladesh. Furthermore, the exact nature of compensation for different types and degrees of losses are to be determined through a rational process of debate and analysis based on fundamental principles of compensation.

Greater Transparency in the Identification of Affected Parties

Identification of the real owner of land is often a serious problem in land acquisition because of the existing system of poor land records and inheritance laws.

Updating of land records should therefore receive priority consideration in order to expedite the determination of the true owner. Within the existing system some progress towards this end can be achieved by

- checking of titles before registration of transfer deeds from the office of AC, Land; and

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- suo moto initiation of mutation proceedings by Assistant Collector (AC), Land on receipt of Land Transfer (LT) notices from the sub-registrar's office.

Wide publicity in national news media and notification in Bangladesh embassies in countries with large concentrations of Bangladeshi citizens is recommended as an additional measure of informing the rightful owner.

The ultimate aim should, however, be a modernized land records system, as discussed under recommendation 7.10, which will immensely simplify the identification of the owner.

Determination of Compensation

Different categories of losers should be entitled to different types of compensation ranging from cash value of land at one end to access to rehabilitation opportunities at the other, as discussed below.

Agricultural Land : compensation for acquired agricultural land, if the fundamental principles mentioned earlier are applied, should be worked out as the larger of the following:

- the price of a piece of land in post project period that would provide an income equivalent to what was obtained from the piece of land acquired, or
- the market price of the piece of land at the time of payment of compensation, so that the affected person has an opportunity to buy an equivalent piece on receipt of compensation.

To the above value it is recommended that an additional 50 percent be added as compensation for dislocation in agricultural activities for a year or two.

Homestead Land: In this case compensation has to be adequate enough to enable the loser to buy an equivalent piece of homestead land on the countryside. The price of such land normally escalates rapidly and, hence, delayed payment will result in higher compensation. The price of land as well as the price inflation rate for the area are to be determined by a Land Valuation Committee for the district; as discussed under Recommendation 7.09.

Structures, Trees and Crop Potential : Their existence, quantity and quality must be determined early enough to avoid false claims and manipulations. The right time is the feasibility study stage and it is worthwhile considering a complete stock-taking of structures, trees and cropping patterns on potential land to be acquired, before alignment is decided upon.

People on the Riverside : They should have some compensation in the form of preferential access to small scale resettlement on the countryside, as discussed under Recommendation 7.05.1.

Share-croppers and Tenants : If the project is well implemented, the enhanced productivity of land will demand increased labour input which will absorb displaced share-croppers and tenants. However, in the event of delayed completion or poor project performance, the displaced share-croppers and tenants should be entitled to special access to rehabilitation programmes in the area which are a part of the project, unless they exist independently. The concept of paying as compensation the expected income from the share-cropped land which is acquired for a fixed period of time, say 2 or 3 years, need careful consideration in case of genuinely unemployed people.

Uniform Application of Compensation Principles : the Case of FFW Projects

At present the government is normally not paying compensation for land required for schemes implemented under the Food for Works Programme. It is strongly recommended that in respect of the Flood Action Plan schemes the government should pay compensation for land in accordance with normal rules even if the cost of construction is met through food aid. In the cost estimate of projects under the FFW there should be provision of funds for land acquisition.

Procedural Improvements

First and foremost, the procedures should be widely disseminated in clear terms so that manipulations based on ignorance and/or ambiguities are minimized. Secondly, the payment of compensation should be on site, either in cheques or in cash, depending on the amount and the expressed preferences of the awardees.

7.04 ARBITRATION

The best strategy is to smoothen out the compensation procedure to such an extent that arbitration is seldom resorted to. This would include the involvement of local leaders and/or representative of the affected people in decisions about critical issues such as alignment of embankments, criteria for compensation and assessment of land quality, standing structures, crops etc.

Arbitration, when unavoidable, should be tried at two levels. The first attempt to resolve the case should be at a semi-judicial level through a Tribunal, failing which recourse may be taken to the civil courts. This Tribunal may consist of retired judges and public representatives without known regional biases.

Time limits should be introduced on various judicial procedures in order to reduce the long delays that characterize the entire

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arbitration process.

7.05 RESETTLEMENT

7.05.1 SMALL SCALE RESETTLEMENT

Adequate and Quick Compensation: the Best Strategy for Resettlement

Adequate and quick compensation for acquired land is recommended as the best strategy for resettlement for projects under the FAP, for three reasons. First, land acquisition is not likely to involve a large number of cases under the FAP, where the entire land holding or the homestead is affected. Second, even when physical relocation is needed people have varied individual preferences regarding resettlement, which are often difficult to accommodate under an official resettlement plan. Third, under this strategy land acquisition will be minimized, as mentioned under Recommendation 7.01, and official involvement avoided in the distribution of resources for which the efficiency of bureaucracy is not known to be high.

Special Cases Requiring Assistance : Two Options

There are, however, special cases where assistance is needed in resettlement, for example households losing all land or homestead, which are really poor and powerless, or households on the riverside which experience increased flooding during the monsoon, as mentioned under Recommendation 7.03.

Two options for these special cases are recommended :

Option 1: Rehabilitation Assistance for Self-managed Resettlement

Quick and fair compensation should be followed by special access to rehabilitation programmes in the area as discussed under Recommendation 7.07.

Option 2 : Physical Resettlement

A plot of homestead land may be provided to the affected households, which is equivalent to the one lost, either in exchange or on payment of a fair price if compensation has been received. In case of the riverside people affected by increased flooding, the homestead plot should be offered at a concessional price, say at par with the current (presumably reduced) price of land on the riverside.

Use of Khas Land or Land Acquired along the Berm of Embankments for Resettlement

In case of physical resettlement two options are recommended. First, khas land, if available in the area, should be utilised. Second, new land may be acquired along the side of the embankment

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on the countryside and a linear settlement created. The crest of this lower embankment may have a width of about 15 feet or as determined by analysis and a height determined in consideration of the design water level on the countryside.

Physical resettlement programmes must be followed by various empowerment programmes to enable resettled households to retain their new land.

7.05.2 LARGE SCALE RESETTLEMENT

In case an entire community is dislocated, large scale resettlement is needed, for which the following recommendations are made.

Advance and Comprehensive Planning

The planning of rehabilitation must start at the conceptual stage when a consultation process with the people to be affected should also start. Planning should emphasize full identification of all the affected people, of various occupations, genders and age groups, and the nature of disruptions which will be caused to their life and living. Planning should identify ways of recreating the social and economic networks based on the findings on disruptions, particularly when resettlement is away from original communities.

The cost of dislocation and the cost of resettlement should be estimated as accurately as possible on the basis of a sample survey as a part of the feasibility study. The cost of resettlement should be included as project cost, and cost benefit analysis carried out accordingly.

Resettlement must be Well Timed

The resettlement activities should be well timed so that people are not dislocated before arrangements for their relocation are complete.

Titles to New Land

Titles to new land must be given to the resettled persons. It should be in the name of both husband and wife in case of couples. There may be stipulations on rights to sell or transfer the property for a period of time.

7.06 REHABILITATION

Best Strategies of Rehabilitation : Good Planning and Implementation

A well planned and well implemented project with a high social rate of return is strongly recommended as the best measure for the relocation of households affected by land acquisition. Such planning should proceed in consultation with local people and be

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based on an accurate assessment of the nature and magnitude of dislocation and the new and enhanced opportunities expected to ensue from a successful implementation of the project. Under these circumstances, the most that is needed by weaker and poorer households is the assurance of access to the new and enhanced economic opportunities.

Rehabilitation at Different Phases of the Project

Opportunities for rehabilitation activities will emerge during all three stages of the embankment projects, namely planning, construction and operation and maintenance.

For example, at the time of the feasibility study local persons likely to be displaced by the project may be employed in the various field surveys for the feasibility studies according to their skill. During the construction phase, preferential access to employment may be given to local labourers who are displaced by land acquisition, particularly the females. Existing prejudices in this regard must be overcome and the local people must be exhorted by local leaders to demonstrate their best performance. Subsequently, further employment opportunities for the poor and the landless lie in the maintenance of the embankment and social forestry on the berm and other appropriate places at the embankment site. The Feasibility Study should carefully estimate the costs of such rehabilitation activities and include these as project costs.

Two Components of Rehabilitation Programmes

Rehabilitation programmes should include both interventionist as well as awareness raising programmes. The former should include credit and skill development, service deliveries such as tubewell, sanitation, housing and electrification. Awareness raising programmes should include legal aid, para-legal training, non-formal education and dissemination of information.

Organizational Need for Rehabilitation Programmes

The creation of a new organization or agency to implement rehabilitation programmes is not recommended, as it may lead to unnecessary bureaucratisation. It is discussed further under Recommendation 7.09.

7.07 FUNDING ISSUES

Avoid funding shortage

At the planning stage a more realistic assessment should be made of funds including provisions for cost overruns and implementation delays while formulating cost estimates of the project.

At the implementation stage, the ADP allocations must be placed with the requiring body at the beginning of the fiscal year for

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land acquisition to be carried out during that year.

Rationalize Fund Disbursement Strategies

The existing procedures of withdrawing annually allocated funds for land acquisition even for minor delays in acquisition, resulting in the entire long drawn process being reinitiated, should be reviewed and a more rational strategy evolved.

Beneficiary Shares Cost

The principle of beneficiary sharing in project cost must be propagated at all levels and be strongly advocated as an inseparable concept of participation.

The experience of various innovative programmes of the past in this regard, such as the Swanirvar programme of the late seventies, should be reviewed carefully and lessons drawn from them.

7.08 A NEW LEGAL FRAMEWORK

The implementation of the recommendations made so far and others in earlier chapters of the Report will require many amendments in the existing legal provisions and the introduction of new ones. In view of this and in light of the confusion arising from time to time as a result of the co-existence of two pieces of legislation, one of which will discontinue after 1994, the Study Team recommends the formulation and institution of a new unified Act on Land Acquisition,

- incorporating the more useful elements from the 1982 Ordinance and the 1989 Act;
- keeping special provisions for land acquisition for projects of national importance and/or emergency nature;
- having clear statements on fundamental principles;
- giving clear guidelines on juridical as well as administrative procedures, particularly for making critical decisions;
- providing clear guidelines on the setting up of administrative structures required to implement the procedures.

The adoption of the proposed new legal framework should follow participatory principles on the basis of full information, scientific knowledge, traditional wisdom and universal justice. This Act should be adopted by the Parliament after the Bill has had a full run of national debates in all appropriate forums.

7.09 RESTRUCTURING OF ADMINISTRATIVE FRAMEWORK

Four basic ingredients that have emerged from the Study as

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essential for the successful implementation of land acquisition are

- participation of all the relevant groups of people;
- professionalism, based on knowledge, skill and efficiency;
- justice, based on some fundamental universal principles; and
- accountability within a well laid out legal framework and administrative guidelines.

The existing administrative framework fails to ensure one or more of the above dimensions, and should therefore be reformed and/or restructured.

A few specific recommendations in this regard are made below.

New Coordinating Structures at Different Levels : FAPA & FAPCC

Institutional structures needed at various critical levels in order to ensure smooth coordination amongst various ministries, and bring about an effective interface between the government, the people, the NGOs and the various professional groups, have not emerged yet in any development sector. The most serious lacuna is in the field of ensuring people's participation in decision making, implementation and cost sharing.

Appropriate institutions for the optimal planning, design, implementation, operation and maintenance of the FAP projects should be urgently evolved through trials with pilot models that can extract the support of all the interest groups and yet bring into play the best skills and expertise at all levels.

In this regard the concept of a Flood Action Plan Authority (FAPA), chaired by the Head of the Government, as an apex institution is worth considering. BWDB/FPCO may provide the secretariat for this Authority which is essentially being conceived as a policy formulating and coordinating council rather than an implementing body. It may be assisted by 5 regional authorities, one for each hydrological region. On ground, there may be a Flood Action Plan Coordination Committee (FAPCC) chaired by a local MP at the Upazila level and the Executive Engineer of the project as secretary. Another option in this regard is to strengthen BWDB, broaden its decision making structures and raise its status as an autonomous body, as it was in the past when it was an Authority.

The recommendation of a Flood Action Plan Authority has not been approved by the Review Committee of FPCO, on the ground that it will duplicate bureaucracy. However, the Team feels that the proposal should receive further consideration from different quarters before a final decision is taken in this regard.

Organizations for Land Acquisition and Rehabilitation

Governmental organizations, local governmental bodies and non-governmental organizations have important and complementary roles to play in the process of both land acquisition and rehabilitation. It is important to carefully assess the existing organizations' capabilities and involve them in a well-coordinated manner utilising their strengths. For example, NGOs could have an advantage in grass roots communication while governmental organizations can facilitate the flow of government resources and administrative support. The coordination of all the different bodies is a task which could be best performed by a local government body with adequate authority, such as a FAPCC proposed above.

Role of Land Administration Office

A review should be made of the role of the Land Administration Office in acquiring land for other agencies. Justification for such a role arises from the complications in ascertaining ownership and the need for using the authority of the government in case there is resistance to acquisition.

A good land record system should nullify the first argument, while the authority of the government could always be resorted to when resistance is encountered and can not be otherwise overcome. Therefore, the Study Team recommends that the Land Acquisition Office should concentrate on improving land records; and the possibility of direct acquisition by the requiring body should be given careful consideration and trial. Specially for FAP, a trial run could be carried out in an experimental area such as the Compartmentalization Pilot Project in Tangail. A simplified procedure may involve the following steps :

- decision on alignment of embankments and other structures and agreement over compensation criteria through public consultation and technical analysis of costs and benefits;
- preparation of the land acquisition schedule based on accurate records of land, buildings, crops, etc, through a detailed survey, if needed;
- wide dissemination of the land acquisition schedule to ensure the attention of displaced persons, along with a time schedule for conducting land transactions;
- direct purchase of land based on a case by case valuation applying abridge criteria; and
- invoking existing land acquisition procedure in difficult cases.

It is to be recognized that a direct purchase of land will be easier with full public support. This can only be achieved by

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redressing deficiencies in the present planning procedures regarding public participation.

Role of Land Acquisition Committees

The role of the Land Acquisition Committees at District, Divisional and Central levels (DLAC, CLAC) was conceived as that of a watchdog to control the lavish use or misuse of land. While for small scale local projects they may have some role, for emergency projects or major projects approved by ECNEC, the CLAC and DLAC should have no further role in acquisition decisions. All concerns about the appropriateness of acquisition should be dealt with at the stage of detailed engineering design/survey and joint verification by the Requiring Body and the Acquiring Body.

Land Valuation Committee

Land valuation should be based on the prices of different types of land, annually determined for each Upazila by an expert committee at the district level. This Land Valuation Committee may be chaired by an MP from the region with the DC as member secretary. Required technical experts should be commissioned for the task.

7.10 A MODERNIZED LAND RECORD SYSTEM

Recognizing the wide ranging difficulties in the process of land acquisition, created by a poor and antiquated system of land records for the registration of titles and transfer deeds, the Study Team strongly recommends modernization of the land records system in Bangladesh. Two separate recommendations are made : one retaining the existing system, the other proposing more basic changes.

Within the Frame of the Existing System

- Rationalize transfer deed to one standardized page with essential information;
- Transfer this to a much reduced 'Balam' book with a certified photocopy, an improvement over the present Land Transfer (LT) notice, to the land administration office (AC, Land);
- Make updating of record of rights on the basis of the transfer deeds obligatory within set time limits;
- Introduce a system of checking of title before registration of transfer, by reference to the record of rights updated on the basis of transfer deeds as mentioned above;
- Physically locate the office of the Sub-Registrar in close proximity of the Land Administration Office.

Within the Frame of a Computerized System

- Revise records of rights, following procedures similar to the existing revisional settlement, but introducing more efficient survey methods including the use of GPS (Geographic Positioning System) and aerial photographs; standardization of Khatian keeping provision for previous and subsequent owners;
- Computerize the records of rights at the Upazila level with a standard one-page sheet for Khatians and the use of digitisers and plotters to produce computerized maps, which can be subsequently updated on a real time basis;
- Make registration of all land transfers, including bequests, obligatory under law, within a stipulated time period;
- Institute a new system of transfer of ownership which uses records of rights to specify the transfer; this ensures an automatic verification of title ownership of the seller;
- Computerized recording (updating) of all land transfer events, including bequests;
- Train modern professionals who can run and maintain a computerized Land Records System;
- Merge the function of land registration with land administration.

Initiation of a Pilot Project on the Modernization of Land Records in Bangladesh

The Study Team recommends the initiation of a Pilot Project in one of the FAP project areas, such as in Tangail, where a pilot project on compartmentalisation is being carried out under the FAP (FAP-20), and land acquisition is likely to take place in the next one year or so. The broad objectives of this pilot project on land records should be as follows

- Work out the cost-benefit analysis of the two alternate modernization schemes proposed above, by actually carrying out each scheme in a selected Upazila where land acquisition is likely to take place soon.
- Recommend a strategy for the modernization of land records in the entire country, giving priority to FAP areas, on the basis of analysis of experiences of the Pilot Project, with a fully worked out time table, activity plan and cost estimates.

An abridged proposal for the initiation of the recommended Pilot Project on the Modernization of Land Records in Bangladesh is enclosed at Annex-4.

TERMS OF REFERENCE

The Consultant undertaking the study would :

- (a) review both available studies on land acquisition in Bangladesh and World Bank and bilateral donor guidelines on involuntary resettlement in development projects;
- (b) undertake socio-economic surveys of households whose land was previously acquired in order to assess, inter alia, the impact of acquisition on the economics of households, the ways in which money paid in compensation was used, and the perception of those affected of the acquisition procedures and how these could be improved;
- (c) review in detail the legal, administrative and regulatory framework of land acquisition in Bangladesh (including inter alia, the Acquisition and Requisition of Immovable Property Ordinance, 1982) as applicable to projects undertaken by national as well as local government agencies and recommend ways to improve the land acquisition process, so that land acquisition is carried out in a timely way and to ensure that negative impacts (e.g. the acquisition of unnecessary land) are minimized ;
- (d) review present methods of determining levels of compensation for land to be acquired and of making payments, and recommend any changes needed for projects under the Action Plan (e.g. , develop procedure to more realistically assess levels of compensation, including relocation grants; ensure more timely provision and payment of funds; institute time limits for the payment of compensation);
- (e) review present methods of consulting households whose land is to be acquired and recommend ways in which such processes can be improved and ways in which displaced households can be encouraged to participate to the maximum extent possible in decision about their relocation and rehabilitation;
- (f) review present approaches used in planning the resettlement of households which are displaced in the construction of FCD/I projects and to recommend how these approaches should be modified to ensure the welfare of these households and to streamline project implementation. This would include, inter alia exploring the possibility of resettling displaced people on reclaimed land and devising institutional mechanisms for resettlement;
- (g) review the system for the registration of land ownership; assess any problems experienced in using the system for land acquisition and resettlement, including adjudication of disputes; and recommend any special procedures for surveys needed in Action Plan projects;

- (h) review existing rural development projects (e.g., cooperatives under BRDB, LGEB, Operation Thikana and the Khas Land Redistribution Programme, programmes of national NGOs such as BRAC, Proshika and Nijera Kori) in order to identify and recommend ways in which such projects can be used to support households whose land has been acquired (e.g., by providing new homestead sites nearby; by making credit available; and through skill development and training programmes) and to help them become socially and economically viable and self-sustaining in their new location;
- (i) review (in consultation with engineers working on other activities under the Action Plan) the design criteria used for embankments and other physical works with a view to recommending ways in which projects could be built so as to minimize land acquired while, at the same time, suggesting ways in which embankments could be constructed (e.g., with roads and associated new settlements for displaced households) to facilitate the rehabilitation of those whose land is acquired;
- (j) review the system for the allocation and use of funds for land acquisition and recommend changes needed to ensure the timely availability of adequate funds for land acquisition and resettlement.
- (k) recommend criteria, guidelines and approaches to be used in project planning, appraisal and implementation of projects under the Action Plan. These should make it possible for project management to assess whether the arrangements proposed or being implemented are adequate and feasible and whether, when implemented, they are likely to ensure that displaced households are adequately resettled and that adequate support services will be provided to enable them, largely through their own efforts, to rebuild their livelihoods.
- (l) recommend ways in which these criteria and guidelines can be incorporated in the planning and implementation of water resource development programmes of government outside the Action Plan.
- (m) organize a workshop of national experts to review specific aspects of the land acquisition and resettlement process and to review the draft report and recommendations of the study. Members of the Implementation Committee, Panel of Experts, professionals taking part in other activities under the Action Plan, other government official and representatives of non-governmental organizations would be invited to participate in the workshop.

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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF LAW LAND ADMINISTRATION AND LAND REFORMS
(Law and Parliamentary Affairs Division)

NOTIFICATION
Dacca, the 13th April, 1982

No. 229-Pub.-The following Ordinance made by the Chief Martial Law Administrator of the People's Republic of Bangladesh, on the 13th April, 1982, is hereby published for general information :-

THE ACQUISITION AND REQUISITION OF IMMOVABLE PROPERTY
ORDINANCE, 1982

ORDINANCE NO.II OF 1982
AN
ORDINANCE

to consolidate and amend the law relating to acquisition and requisition of immovable property.

WHEREAS it is expedient to consolidate and amend the law relating to acquisition and requisition of immovable property and to provide for matters connected therewith and ancillary thereto;

Now, THEREFORE, in pursuance of the Proclamation of the twenty-fourth day of March, 1982, and in exercise of all powers enabling him in that behalf, the Chief Martial Law Administrator is pleased to make and promulgate the following Ordinance :-

PART I
PRELIMINARY

1. Short title.- This Ordinance may be called the Acquisition and Requisition of Immovable Property Ordinance, 1982.

2. Definition. - In this Ordinance, unless there is anything repugnant in the subject or context, -

(a) "Arbitrator" means an Arbitrator appointed under section 27;

(b) "Deputy Commissioner" includes an Additional Deputy Commissioner and any other officer specially appointed by the Government to perform the functions of the Deputy Commissioner under this Ordinance;

- (c) "Owner" includes the occupier;
- (d) "person interested", in relation to any property, includes all persons claiming, or entitled to claim, an interest in the compensation payable on account of the acquisition or requisition of that property under this Ordinance;
- (e) "prescribed" means prescribed by rules made under this Ordinance;
- (f) "property" means immovable property and includes any right in or over such property; and
- (g) "requiring person" means any person for whom any property is, or is proposed to be, acquired under this Ordinance.

PART II ACQUISITION

3. Publication of preliminary notice of acquisition property. - Whenever it appears to the Deputy Commissioner that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, he shall cause a notice to be published at convenient places on or near the property in the prescribed form and manner stating that the property is proposed to be acquired :

Provided that no property used by the public for the purpose of religious worship, graveyard and cremation ground shall be acquired.

4. Objections against acquisition. -

- (1) Any person interested in any property which has been notified under section 3 as being needed or likely to be needed for a public purpose or in the public interest may, within fifteen days after the publication to the notice, object to the acquisition of the property.
- (2) Every objection under sub-section (1) shall be made to the Deputy Commissioner in writing, and the Deputy Commissioner shall give the objector an opportunity to being heard either in person or by an agent and shall after hearing all such objections and after making such further inquiry, if any, as he thinks necessary, prepare a report containing his opinion on the objections.
- (3) The Deputy Commissioner shall then submit the record of the proceedings held by him, together with his report, for the decision of the Government.

5. Final decision regarding acquisition. -

- (1) The Government, after considering the report submitted by the Deputy Commissioner under section 4(3), shall make a decision about the acquisition of the property and such decision of the Government shall be final.
- (2) When the Government makes a decision for acquisition of the property under sub-section (1), such decision shall be conclusive evidence that the property is needed for a public purpose or in the public interest.

6. Notice to persons interested. -

- (1) When the Government has made a decision for acquisition of any property under section 5, the Deputy Commissioner shall cause public notice to be given in the prescribed manner at convenient places on or near such property stating that the Government has decided to acquire the property and intends to take possession thereof and that claims to compensation for all interests in such property may be made to him.
- (2) Such notice shall state the particulars of the property to be acquired and taken possession of, and shall require all persons interested in the property to appear personally or by agent before the Deputy Commissioner at a time, not being earlier than fifteen days after the date of publication of the notice, and place mentioned therein and to state the nature of their respective interests in the property and the amount and particulars of their claims to compensation for such interests.
- (3) The Deputy Commissioner shall also serve notice to the same effect in the prescribed form on the occupier, if any of such property and on all persons known or believed to be interested therein.
- (4) The Deputy Commissioner may also, by notice, require any such person to make or deliver to him at a time, not being earlier than fifteen days after the date of service of the notice, and place mentioned therein a statement containing, so far as may be practicable, the name of every other person possessing any interest in the property or any part thereof as co-sharer, mortgagee or otherwise, and of the nature of such interest and profits, if any, received or receivable on account thereof.
- (5) Every person required to make or deliver a statement under this section shall be deemed to be legally bound to do so within the meaning of sections 175 and 176 of the Penal Code (XLV of 1860).

7. Award of Compensation by Deputy Commissioner

- (1) On the date so fixed, or on any other date to which the enquiry has been adjourned, the Deputy Commissioner shall proceed to enquire into the statement, if any, which any person has made pursuant to a notice given under section 6 and into the value of the property at the date of the publication of the notice under section 3, and into the respective interests of the persons claiming the compensation and shall make an award of -
 - (a) the compensation which, in his opinion, shall allowed for the property; and
 - (b) the apportionment of the said compensation among all the persons known or believed to be interested in the property, of whom, or of whose claims, he has information.
- (2) The award made by the Deputy Commissioner shall, except as hereinafter provided, be final.
- (3) The Deputy Commissioner shall give immediate notice of his award to the persons interested.

8. Matters to be considered in determining compensation

- (1) In determining the amount of compensation to be awarded for any property to be acquired under this Part, the Deputy Commissioner shall take into consideration -
 - (a) the market value of the property at the date of publication of the notice under section 3 :

Provided that in determining such market value, the Deputy Commissioner shall take into account the average value, to be calculated in the prescribed manner, of the properties of similar description and with similar advantages in the vicinity during the twelve months preceding the date of publication of the notice under section 3;
 - (b) the damage that may be sustained by the person interested, by reason of the taking of any standing crops or trees which may be on the property at the time of taking possession thereof by the Deputy Commissioner;
 - (c) the damage that may be sustained by the person interested, at the time of taking possession of the property by the Deputy Commissioner, by reason of severing such property from his other property;

- (d) the damage that may be sustained by the person interested, at the time of taking possession of the property by the Deputy Commissioner, by reason of the acquisition injuriously affecting his other properties, movable or immovable, in any other manner, or his earnings;
 - (e) if, in consequence of the acquisition of the property, the person interested is likely to be compelled to change his residence or place of business, the reasonable expenses, if any, incidental to such change; and
 - (f) the damage that may be resulting from diminution of the profits of the property between the date of service of notice under section 6 and the date of taking possession of the property by the Deputy Commissioner.
- (2) In addition to the market value of the property as provided in sub-section (1), the Deputy Commissioner shall in every case award a sum of twenty per centum on such market value in consideration of the compulsory nature of the acquisition.

9. Matters not to be considered in determining compensation.- In determining the amount of compensation to be awarded for any property to be acquired under this Part, the Deputy Commissioner shall not take into consideration -

- (a) the degree of urgency which has led to the acquisition;
- (b) any disinclination of the person interested to part with the property to be acquired;
- (c) any damage that may be sustained by him which, if caused by a private person, would not render such person liable to a suit;
- (d) any damage which is likely to be caused to the property to be acquired, after the date of service of notice under section 6, by or in consequence of the use to which it will be put;
- (e) any increase to the value to the property to be acquired likely to accrue from the use to which it will be put when acquired; or
- (f) any alteration or improvement in, or disposal of, the property to be acquired, made or effected without the sanction of the Deputy Commissioner after the date of publication of the notice under section 3.

10. Payment of compensation.-

- (1) On making an award under section 7, the Deputy Commissioner shall, before taking possession of the property, tender payment of the compensation awarded by him to the persons entitled thereto according to the award, and shall pay it to them unless prevented by some one or more of the contingencies mentioned in sub-section (2).
- (2) If the persons entitled to compensation do not consent to receive it, or if there be no person competent to receive the compensation, or if there be any dispute as to the title to receive the compensation or as to the apportionment of it, the Deputy Commissioner shall keep the amount of the compensation in a deposit account in the Public Account of the Republic which shall be deemed payment for the purpose of taking over possession of the property without any prejudice to the claim of the parties to be determined by the Arbitrator :

Provided that any person admitted to be interested may receive such payment under protest as to the sufficiency of the amount:

Provided further that no person who has received the amount otherwise than under protest shall be entitled to make any application under section 28:

Provided further that nothing herein contained shall affect the liability of any person, who may receive the whole or any part of any compensation awarded under this Part, to pay the same to the person lawfully entitled thereto.

11. Acquisition and possession.-

- (1) When the compensation mentioned in the award has been paid or is deemed to have been paid in pursuance of section 10, the property shall stand acquired and vest absolutely in the Government free from all encumbrances, and the Deputy Commissioner shall thereupon take possession of the property.
- (2) Immediately after the acquisition of the property under sub-section (1), a declaration by the Deputy Commissioner in the prescribed form to that effect shall be published in the official Gazette.

12. Abatement or revocation of acquisition proceedings.-

- (1) Notwithstanding anything contained in this Ordinance, where in any case compensation has not been paid or

deposited within a period of six months from the date of decision of the Government for acquisition of any property under section 5 for no fault of the person interested, all proceedings in respect of such acquisition shall, on the expiry of that period, stand abated and a declaration by the Deputy Commissioner to that effect shall be published in the official Gazette.

- (2) The Deputy Commissioner, with the prior approval of the Government, may, by notification in the official Gazette, revoke all proceedings in respect of acquisition of any property at any time before the payment of compensation.
- (3) When any proceedings stand abated or any revoked, the Deputy Commissioner shall make an award determining the amount of compensation due to the damage suffered by the owner in consequence of the notice or of any proceedings thereunder and the costs reasonably incurred by him in the prosecution of the proceedings under this Part relating to the said property and shall pay the compensation accordingly.

13. Acquisition of part of a house or buildings.- The provisions of this Part shall not be applied for the purpose of acquiring a part only of any house, manufactory or other building, if the owner desires that the whole of such house, manufactory or building should be so acquired.:

Provided that the owner may, at any time, before the Deputy Commissioner has made his award under section 7, by notice in writing withdraw or modify his expressed desire that the whole of such house, manufactory or building should be so acquired;

Provided further that, if any question arises as to whether any property proposed to be taken under this Part does or does not form part of a house, manufactory or building within the meaning of this section, the decision of the Deputy Commissioner shall be final.

14. Acquisition of property at the cost of a person other than the Government.- Where the provisions of this Part are applied for acquiring any property at the cost of any fund controlled or managed by a person other than the Government, the charges of an incidental to such acquisition shall be defrayed from or by such fund or person.

15. Transfer of acquired land to the requiring person other than the Government.-

- (1) When any property is proposed to be acquired for any person other than the Government, such person shall enter into an agreement with the Government in such form as may

be prescribed before a notice under section 3 is published.

- (2) When the property in respect of which an agreement has been entered into with a person under sub-section (1) is acquired under section 11, the Government shall, on the performance by such person of his part of the agreement, transfer the property to the person by executing a deed in such form as may be prescribed and in accordance with the law for the time being in force.

16. Recovery of compensation in certain cases.- When any compensation paid is in excess of the amount payable or when any compensation is paid to a person other than the rightful owner, the amount of such excess or wrong payment shall be recoverable as a public demand.

17. Use of acquired property.-

- (1) No property acquired under this Part shall, without the prior approval of the Government, be used for any purpose other than the purpose for which it is acquired.
- (2) If any requiring person uses any acquired property in contravention of the provision of sub-section (1), or does not use it for the purpose for which it is acquired, he shall be liable to surrender the property to the Deputy Commissioner on being directed by him to do so.

PART III REQUISITION

18. Requisition of property.-

- (1) When any property is required temporarily for a public interest, the Deputy Commissioner may, with the prior approval of the Government, by order in writing, requisition it;

Provided that no such approval shall be necessary in the case of emergency requirement of any property:

Provided further that, save in the case of emergency requirement for the purpose of maintenance of transport or communication system, no property which is bona fide used by the owner thereof as the residence of himself or his family or which is used either for religious worship by the public or as an educational institution or orphanage or as a hospital, public library, graveyard or cremation ground shall be requisitioned.

- (2) Where an order made under sub-section (1) has been served, the Deputy Commissioner may take possession of

the requisitioned property-

- (a) in the case of emergency requirement for the purpose of maintenance of transport or communication system, at any time after the date of service of the order;
- (b) in any other case, after the expiry of thirty days from the date of service of the order,

and may use the property for the purpose for which it has been requisitioned.

- (3) Except with the prior approval of the Government, no property shall be kept under requisition for a period exceeding two years from the date of taking over possession of such property.

19. Revision.- The Government may, of its own motion or on application filed by an agrieved person, revise an order made under section 18 (1):

Provided that no such application shall be entertained unless it is filed within thirty days from the date of service of the order.

20. Award of compensation by Deputy Commissioner.-

- (1) Where any property is requisitioned under this Part, shall be paid compensation the amount of which shall be determined in the manner and in accordance with the principles set out in this section.
- (2) The Deputy Commissioner shall, after giving the persons interested opportunity of being heard in respect of their respective interests in the property and the amount and particulars of their claims to compensation for such interests and having regard to the provisions of sub-section (5), make an award of-
 - (a) the compensation in the manner as may be prescribed; and
 - (b) the apportionment of the said compensation among all the persons known or believed to be interested in the property, of whom, or of whose claims, he has information.
- (3) The award made by the Deputy Commissioner shall, except as herein after provided, be final.
- (4) The Deputy Commissioner shall give immediate notice of his award the persons interested.

- (5) The amount of compensation payable for the requisition of any property shall consist of-
- (a) a recurring payment in respect of the period of requisition, of a sum equal to the rent which would have been payable for the use and occupation of the property, if it had been taken on lease for that period; and
 - (b) such sum, if any, be found necessary to compensate the persons interested for all or any of the following matters, namely:-
 - (i) expenses on account of vacating the requisitioned property;
 - (ii) expenses on account of reoccupying the property upon release from requisitioned; and
 - (iii) damages, other than normal wear and tear, caused to the property during the period of requisition, including the expenses that may have to be incurred for restoring the property to the condition in which it was at the time of requisition.
- (6) Where any property is kept under requisition for more than two years, the Deputy Commissioner shall revise his award regarding the amount payable as compensation under sub-section (5)(a).

21. Payment of compensation.-

- (1) On making an award under section 20, the Deputy Commissioner shall tender payment of the compensation awarded by him to the persons entitled thereto according to the award, and shall pay it to them unless prevented by someone or more of the contingencies mentioned in sub-section (2).
- (2) If the persons entitled to compensation do not consent to receive it, or if there be no person competent to receive the compensation or as to the apportionment of it, the Deputy Commissioner shall keep amount of the compensation in a deposit account in the Public Account of the Republic which shall be deemed payment of the compensation for the requisitioned property without any prejudice to the claim of the parties to be determined by the Arbitrator:

Provided that any person admitted to be interested may receive such payment under protest as to the sufficiency of the amount:

Provided further that no person who has received the amount otherwise than under protest shall be entitled to make any application under section 28:

Provided further that nothing herein contained shall affect the ability of any person who may receive the whole or any compensation awarded under this Part, to pay the same to the person lawfully entitled thereto.

22. Recovery of money from allottees of requisitioned property.- Where any requisitioned property is allotted to, and placed in possession of, any person, the Deputy Commissioner may recover from such amount of money and in such manner as may be prescribed.

23. Repair of requisitioned property.-

- (1) During the period of requisition, the Deputy Commissioner shall be responsible for the proper maintenance of a requisitioned property.
- (2) If the Deputy Commissioner is satisfied that repairs are necessary to prevent deterioration of the property, he may, after giving the owner an opportunity of making the repairs himself, cause the repairs to be made at a cost not exceeding one-sixth of the compensation payable to the owner and such cost, shall be recovered out of such compensation.

24. Release from requisition.-

- (1) Where any requisition property is to be released from requisition, the Deputy Commissioner may restore it to the person from whom the property was requisitioned or to his successor-in-interest or such other person as may appear to the Deputy Commissioner to be entitled to such restoration.
- (2) The delivery of possession of the requisitioned property to the person referred to in sub-section (1) shall be a full discharge of the Deputy Commissioner from all liability in respect of such delivery, but shall not prejudice any right in respect of the property which any other person may be entitled by the process of law to enforce against the person to whom possession of the property is so delivered:

Provided that when the person to whom the requisitioned property is to be restored on release from requisition wilfully neglects or refuses to take delivery of the requisitioned property on being directed in writing to take possession of such requisitioned property by the Deputy Commissioner, such requisitioned property shall be

deemed to have been restored to such person within the meaning of this sub-section with effect from the date and time specified in the aforesaid direction.

- (3) Where the person to whom possession of any requisitioned property is to be delivered cannot be found and has no agent or other person empowered to accept delivery on his behalf, the Deputy Commissioner shall cause a notice declaring that the property is released from requisition to be affixed on some conspicuous part of the property and shall also publish the notice in the official Gazette.
- (4) When a notice referred to in sub-section (3) is published in the official Gazette, the property specified in such notice ceases to be subject to requisition from the date of such publication and is deemed to have been delivered to the person entitled to possession thereof: and Deputy Commissioner shall not be liable for any compensation or other claim in respect of the property for any period after the said date.

25. Eviction of allottees.- Notwithstanding anything contained in any other law for the time being in force, if any property under requisition, which has been allotted to any person or is in unauthorised occupation of any person, is required by the Deputy Commissioner for any other use or purpose during the period of requisition or for restoring the property under section 24 on its release from requisition, or if the allottee of such property under section 24 on its release from requisition, or if the allottee of such property has defaulted in payment of any sum due from him in respect of such property, the Deputy Commissioner, may, at any time, by order in writing, direct such person or allottee to vacate the property by such date as may be specified in such order, and if such person or allottee does not vacate the property by the date so specified, the Deputy Commissioner may evict such person or allottee from such property and may use or cause to be used such force for the purpose as may be necessary.

26. Part not to apply to Cantonment.- Nothing in this Part shall apply to any property within the limits of a Cantonment.

27. Appointment of Arbitrator.- For the purposes of this Act, the Government shall, by notification in the official Gazette, appoint a Judicial Officer, not below the rank of Subordinate Judge, to be Arbitrator for such area as may be specified therein.

28. Application to Arbitrator.-

- (1) Any person interested who has not accepted any award made by the Deputy Commissioner under this Act may, within

forty-five days from the date of service of notice of the award, make an application to the Arbitrator for revision of the award.

- (2) The application shall state the grounds on which objection to the award is taken.

29. Notice for hearing.- The Arbitrator shall, on receipt of an application under section 28, cause a notice specifying the date on which he will proceed to hear the application, and directing their appearance before him on that day, to be served on the following persons, namely:-

- (a) the application;
- (b) all persons interested in the objection;
- (c) the Deputy Commissioner; and
- (d) the requiring person.

30. Scope of proceedings.- The scope of the enquiry in every proceedings before the Arbitrator shall be restricted to a consideration of the interests of the persons affected by the objection.

31. Arbitrator to be guided by sections 8, 9 and 20.- In determining the amount of compensation to be awarded for any property acquired or requisitioned under this Act, the Arbitrator shall be guided by the provisions of sections 8 and 9 or 20, as the case may be.

32. Form of award of Arbitrator.-

- (1) Every award under this Part shall be in writing signed by the Arbitrator, and shall specify the amounts awarded under different clauses of section 8(1) or section 20 (5), as the case may be, together with the grounds of awarding each of the said amounts.
- (2) Where the amount of compensation determined by an Arbitrator is higher than the amount specified in the award of the Deputy Commissioner, an additional compensation at the rate of ten per annum on such additional amount shall, subject to the decision of an Appellate Arbitration Tribunal, if any, be payable till that amount is paid or offered for payment.
- (3) Every such award shall be deemed to be a decree and the statement of the grounds of every such award a judgment within the meaning of section 2(2) and section 2(9) respectively of the Code of Civil Procedure, 1908 (v of 1908).

33. Costs.- Every such award shall also state the amount of costs incurred in the proceedings under this Part, and by what persons

and in what proportions they are to be paid.

34. Appeal against the award of Arbitrator.-

(1) An appeal shall lie to the Arbitration Appellate Tribunal, constituted under sub-section (2) against an award of the Arbitrator.

(2) The Government shall, by notification in the official Gazette, constitute one or more Arbitration Appellate Tribunals for such areas as may be specified therein.

(3) An Arbitration Appellate Tribunal shall consist of a member who shall be appointed by the Government from among persons who are or have been District Judges.

(4) A decision of the Arbitration Appellate Tribunal shall be final.

(5) Where the amount of compensation determined by an Arbitration Appellate Tribunal is higher than the amount specified in the award of the Arbitrator, an additional compensation at the rate of ten per cent per annum on such additional amount shall be payable till that amount is paid or offered for payment.

35. Act X of 1940 not to apply.- Nothing in the Arbitration Act, 1940(X of 1940), shall apply to arbitrations under this part.

PART V
MISCELLANEOUS

36. Deputy Commissioner and Arbitrator to have certain powers of Civil Court.- The Deputy Commissioner and the Arbitrator, while holding any enquiry or proceedings under this Act, shall have the same powers as are vested in Civil Court under the Code of Civil Procedure, 1908 (V of 1908), for the purpose of--

(a) summoning and enforcing the attendance of any person, and examining him on oath;

(b) compelling the production of any document or record;

(c) reception of evidence on affidavit;

(d) issuing commission for examination of witnesses;

(e) requisitioning any public record from any court or office.

37. Power to enter and inspect.-

(1) With a view to acquiring or requisitioning any property or determining the compensation payable in respect thereof or securing compliance with an order made under this Ordinance, the Deputy Commissioner or any officer, generally or specially authorised by the Deputy Commissioner in this behalf, any of the assistants and workmen may -

- (a) enter upon and survey and take levels of any property;
- (b) inspect any property or anything therein;
- (c) measure and set out the boundaries and prepare a plan if any property and the intended line of the work if any proposed to be made thereon;
- (d) mark such levels boundaries and line by placing marks and cutting trenches, and, where otherwise the survey cannot be completed and the levels taken and the boundaries and line marked, cut down and clear away any part of any standing crop, tree or jungle:

Provided that no person shall enter upon any property without the consent of the thereof unless at least twenty-four hours, previous notice in writing of his intention to do so has been given.

(2) The Deputy Commissioner or the officer authorised by him under sub-section (1) shall, at the time of entry upon any property, pay or tender payment for all necessary damage to be done in such property, and, in case of dispute as to the sufficiency of the amount so paid or tendered, the decision of the Deputy Commissioner shall be final.

38. Power to obtain information.- With a view to acquiring or requisitioning any property or determining the compensation payable in respect thereof, the Deputy Commissioner may, by order in writing, require any person to furnish to such officer or authority, as may be specified in the order, such information in his possession as may be specified relating to any property which is acquired or requisitioned, or intended to be acquired or requisitioned, under this Ordinance.

39. Service of notices and orders.-

(1) Save as otherwise expressly provided in this Ordinance and subject to rules made thereunder, every notice or order issued or made under this Ordinance shall be served by delivering or tendering it to the person on whom it is

required to be served under this Ordinance.

- (2) When such person cannot be found or the notice or order cannot be so delivered or tendered, the service of the notice or order may be made by delivering or tendering it to any officer of such person or to any adult male member of the family of such person residing with him or, if no such officer or member can be found, by affixing a copy thereof on the outer door or on some conspicuous part of the premises in which that person ordinarily resides or carries on business or personally works, for gain, and also by affixing a copy thereof in some conspicuous place in the office of the authority or officer issuing or making it and, where possible, in some conspicuous part of the property to which it relates:

Provided that, if such authority or officer so directs, the notice or order may be sent by registered post in a letter addressed to the person named therein, or on whom it is required to be served, at his last known residence, address or place of business or work.

40. Penalty.- Any person who contravenes or attempts to contravene or abets or attempts to abet a contravention of any order made under this Ordinance or who wilfully instructs any person in doing any of the acts authorised or permitted under this Ordinance or any rule made thereunder shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one thousand taka, or with both.

41. Enforcement of surrender.- If the Deputy Commissioner is opposed or impeded in taking possession of any property under this Ordinance, he shall enforce the surrender of the property to himself, and may use or cause to be used such force for the purpose as may be necessary.

42. Exemption from stamp duty and fees.- No award made under this Ordinance shall be chargeable with stamp duty, and no person claiming any interest under such award shall be chargeable with stamp duty, and no person claiming any interest under any such award shall be liable to pay any fee for a copy of the same.

43. Indemnity.- No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of this Ordinance or any order or rule made thereunder.

44. Bar to jurisdiction of Court.- Save as otherwise expressly provided in this Ordinance no Court shall entertain any suit or application against any person or passed or any action taken under this Ordinance, and no injunction shall be granted by any Court in respect of any action taken or to be taken in pursuance of any power conferred by or under this Ordinance.

45. Delegation of powers.- The Government may, by order notified in the official Gazette, direct that any power conferred or any duty imposed on it by this Ordinance shall, in such circumstances and under such conditions, if any, as may be specified in the order, by exercised or discharged also by such officer or authority as may be so specified.

46. Power to make rules.-

- (1) The Government may, by notification in the official Gazette, make rules for carrying out the purposes of this Ordinance.
- (2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely :-
 - (a) the procedure to be followed in taking possession of any property acquired or requisitioned under this Ordinance;
 - (b) the procedure to be followed by the Arbitrators and Arbitration Appellate Tribunals;
 - (c) the manner of enforcement of surrender of any property under section 41;
 - (d) any other matter which has to be or may be prescribed.

47. Special savings relating to expired E.B. Act XIII of 1948.- Notwithstanding the cesser of the Emergency Requisition of Property Act, 1948 (E.B. Act XIII of 1948), on the expiry of the period of its operation, all proceedings and matters, including all notices, notifications and orders, relating to requisition or acquisition of any property or compensation or award in respect of any property requisitioned or acquired and all applications and appeals pending before any authority, arbitrator or court under that Act shall be continued, enforced, heard or disposed of as if that Act had not ceased to have effect and were continuing in operation.

48. Repeals and savings.-

- (1) The Land Acquisition Act, 1894 (I of 1894), is hereby repealed.
- (2) Notwithstanding such repeal, all proceedings and matters, including all notices, notifications and orders, relating to requisition or acquisition of any property or compensation or award in respect of any property requisitioned or acquired and all applications and appeals pending before any authority, arbitrator or court under the said Act shall be continued, enforced, heard or

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disposed of as if this Ordinance had not been made and promulgated.

- (3) Subject to the provisions of sub-section (2), the provisions of the General Clauses Act, 1897 (X of 1897), shall apply to the repeal and re-enactment of the said Act by this Ordinance.

Dacca;
The 13th April, 1982.

HUSSAIN MUHAMMAD ERSHAD, ndc, psc.
LIEUTENANT GENERAL
Chief Martial Law Administrator

MANIRUZZAMAN
Deputy Secretary

UNOFFICIAL
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The following Act, passed by the Parliament, which has been approved by the President on the 24th February, 1989 (12th Falgun, 1395 BS) is hereby published for general information.

Act No. IX of 1989

Act for Acquisition and Requisition of immovable property on emergency basis.

Whereas it is expedient to Acquisition and Requisition of immovable property on an emergency basis with a view to taking permanent measures against flood and upsurge caused by flood and natural calamities and to prevent erosion of river. Now, therefore, the following Act is promulgated :

1. Short title and duration :-

- (1) This Act may be called the Emergency Acquisition and Requisition of Immovable Property Act.
- (2) The Act will remain in force for five years with effect from the date of its publication.

2. Definitions : In this Act , unless there is anything repugnant in the subject or context, -

(KA) "Arbitrator" means an Arbitrator appointed under section 17.

(KHA) "Arbitration Appeal Tribunal" means formation of an Arbitration Appeal Tribunal under section 23(2).

(GA) "Property" means all movable or immovable properties.

3. Predominance of this Act : Irrespective of any provision in any existing of legislation, this Act and its provisions under different sections will prevail.

4. Emergency Acquisition of Property :

- (1) With a view to preventing flood and upsurges or stopping river erosion, if it becomes necessary to acquire any property for taking permanent measures, the Deputy

Commissioner, with the order or prior approval of the Government, can acquire such property by issuing order in writing :

Provided that no property used by the public for the purpose of religious worship, graveyard and cremation ground shall be acquired.

(2) The Deputy Commissioner will give notice for the acquisition of the property under sub-section (1) furnishing particulars of the property and notify all persons interested in the acquired property or any part thereof to apply to the Deputy Commissioner with justification within 10 days of serving the notice.

5. Notice for Acquisition : The notice of the Deputy Commissioner under section 4 is required to be served to the owner of the acquired property in person, or in his absence, to any adult male member of his family, or in case of non-availability of such persons, notice shall be served at his last known place of residence or work; and another copy of the notice shall also be served on the occupier of the property, and at the same time another copy of the notice shall be served on the property, or any nearby public place, and any public places of the office of concerned Union Parishad, Upazila Parishad, Zila Parishad and Municipality office; and these will be considered sufficient proof for serving the notice by the Deputy Commissioner.

6. Fixation of the ownership and their shares of the acquired properties for payment of compensation : After serving notice for acquiring the property, within 10 days, as per sub-section (1) under section 5, for those who claimed ownership of the property, the Deputy Commissioner will decide on the claimants' ownership and their shares after a hearing within 7 days of their claims.

7. Decision on Interim Compensation :

Within 10 days of giving notice for the acquisition of any property, pending the determination of the amount of the final payable compensation of the acquired property, the Deputy Commissioner will determine its payable interim compensation on the basis of the approximate market value.

8. Acquisition and Possession :

(1) After fixation of Interim Compensation, the Deputy Commissioner will serve full payment of the Interim Compensation to the persons entitled thereto under section 6, on the basis of their ownership and share, and then will take over possession of the acquired property.

(2) If the persons entitled to compensation under section 6, on the basis of their ownership of shares do not consent to receive the interim compensation or if there be no person competent to receive the interim compensation, or if there be any dispute as to the title to receive the compensation, or as to the apportionment of it, the Deputy Commissioner shall keep the amount deposited against their names in the Public Account of the Republic. The Deputy Commissioner thereafter can takeover the possession of the acquired property.

(3) The compensation, fixed under sub section (1) or deposited under sub-section (2) will not be invalidated by the decision of the Arbitrator appointed under this ordinance on the fixation of compensation or person's ownership or authority.

(4) In case any obstacles arise in taking possession of any property under this Section, the Deputy Commissioner, if necessary, may give orders to use force.

9. Possession of Acquired Property by the Government :

(1) After payment of interim compensation for the acquired property or otherwise after the deposit of the compensation to the Government treasury the Government will be the owner of the property with any liabilities, and the original owner or any other person shall lose all ownership and interest on the property.

(2) Within 7 days after taking over the possession of the property by the Government, under sub-section (1), order regarding acquisition of property, details of property and date of taking over the possession by the Government, shall be published in the Government Gazette for general information.

10. Appeal against the Acquisition : In case of dissatisfaction against the acquisition under section 4, any person can appeal to the Government against acquisition within 10 days of the issue of the acquisition order; after giving opportunity to the appellant, the Government will give the decision to the appeal, and the Government decision will be considered as final.

11. Final Compensation : The Deputy Commissioner will give decision on the final compensation of the property within 3 months of taking over the acquisitioned property under this ordinance.

12. Matters to be considered in Determining Compensation :

(1) In determining the amount of compensation to be awarded

for any property to be acquired under this part, the Deputy Commissioner shall take into consideration :

- (a) the market value of the property at the date of publication of the notice;

Provided that in determining such market value, the Deputy Commissioner will consider the average price of the properties of similar description and with similar advantages in the vicinity during the twelve months preceding the date of publication of the notice;

- (b) the damage that may be sustained by the person interested, by reason of the taking of any standing crops or trees which may be on the property at the time of taking possession thereof by the Deputy Commissioner;

- (c) the damage that may be sustained by the person interested, at the time of taking possession of the property by the Deputy Commissioner, by reason of revering such property from his other property;

- (d) the damage that may be sustained by the person interested, at the time of taking possession of the property by the Deputy Commissioner, by reason of the acquisition injuriously affecting his other properties, movable or immovable, in any other manner, or his earnings;

- (e) if, in consequence of the acquisition of the property, the person interested is likely to be compelled to change his residence or place of business, the reasonable expenses, if any, incidental to such change.

(2) In addition to the market value of the property as provided in sub-section (1) (KA), the Deputy Commissioner shall in every case awarded a sum of twenty five percent on such market value.

- 13. Matters not to be considered in determining, compensation: In determining the amount of compensation to be awarded for any property to be acquired under this Part, the Deputy Commissioner shall not take into consideration :

- (a) the degree of urgency which has led to the acquisition;
- (b) any disinclination of the person interested to part with the property to be acquired;

- (c) any damage sustained by him which, if caused by a private person, would not render such person liable to suit;

(d) any increase of the value of the property to be acquired likely to accrue from the use to which it will put when acquired;

(e) after the service of the notice of the acquisition, any change, development or any other allocation of the acquired property cannot be admissible without the approval of the Deputy Commissioner.

14. Payment of Balance Compensation after Determining Final Compensation :

(1) Within 14 days after determining the final compensation, the Deputy Commissioner will make payment of the balance of the final compensation money, excluding the interim compensation money or the money deposited in the treasury under section 8, to the persons/claimants according to their title and shares of the acquired property under the section 6.

(2) If the persons entitled to compensation do not consent to receive it, or if there be no person competent to receive the compensation, or if there be any dispute as to the title to receive the compensation or as to the appointment of it, the Deputy Commissioner shall keep the amount of the compensation in a deposit account in the Public Account of the Republic.

(3) Any person admitted to be interested under section 6 may receive such payment under protest as to the sufficiency of the amount and any person who has received the amount without protest shall not be entitled to make any application under section 18.

15. Cases of Payment of Excess Compensation : If payment is made in excess of the amount of compensation or payment is made to any person other than the lawfully entitled person, then such excess compensation amount or amount paid by mistake shall be realised as 'Public Demand'.

16. Use of Acquired Property : No property acquired under this part shall, without the prior approval of the Government, be used for any purpose other than the purpose for which it is acquired.

17. Appointment of Arbitrator : For the purpose of this Act, the Government shall, by notification in the Official Gazette, appoint a Judicial Officer, not below the rank of subordinate Judge, to be Arbitrator for such area as may be specified therein.

18. Application to Arbitrator : Any person interested who has not accepted an award made by the Deputy Commissioner, under this Act may, within forty five days from the date of service of notice of the award, make an application to the Arbitrator for revision of the award.
19. Notice for hearing : The Arbitrator shall on receipt of an application under section 18, cause of notice specifying the date on which he will proceed to hear the application, and directing their appearance before him on that day, to be served on the following persons, namely -
 - (a) the applicant;
 - (b) all persons interested in the objection; and
 - (c) the Deputy Commissioner.
20. Scope of proceedings : The scope of the inquiry in every proceedings before the Arbitrator shall be restricted to a consideration of the interests of the persons affected by the objection.
21. Arbitrator to be guided by sections 12 and 13 : In determining the amount of compensation to be awarded for any property acquired or requisitioned under this Act, the Arbitrator shall be guided by the provisions of sections 12 and 13.
22. Form of award of Arbitrator :
 - (1) Every award under this part shall be in writing and signed by the Arbitrator under section 18, and shall specify the amounts awarded with justification under section 21.
 - (2) Where the amount of compensation determined by an Arbitrator is higher than the amount specified in the award of the Deputy Commissioner, an additional compensation at the rate of ten percent per annum on such additional amount shall, subject to the decision of an Appellate Arbitration Tribunal, if any, be payable till that amount is paid or offered for payment.
 - (3) Every such award shall also state the amount of costs incurred in the proceedings under this part, and by what persons and in what proportions they are to be paid.
 - (4) Every such award shall be deemed to be a decree and the statement of the grounds of every such award a judgment within the meaning of section 2(2) and section 2(9) respectively of the Code of Civil Procedure, 1908 (Act V of 1908).

23. Appeal against the award of Arbitrator :

(1) An appeal shall lie to the Arbitration Appellate Tribunal, constituted under sub-section (2), against an award of the Arbitrator.

(2) The Government shall, by notification in the Official Gazette, constitute one or more Arbitration Appellate Tribunals for such areas as may be specified therein.

(3) An Arbitration Appellate Tribunal shall consist of a member who shall be appointed by the Government from among persons who are or have been District Judges.

(4) A decision of the Arbitration Appellate Tribunal shall be final.

(5) Where the amount of compensation determined by an Arbitration Appellate Tribunal is higher than the amount specified in the award of the Arbitrator, an additional compensation at the rate of ten percent per annum on such additional amount shall be payable till that amount is paid or offered for payment.

24. Act X of 1940 not to apply : Nothing in the Arbitration Act, 1940 (X of 1940), shall apply to arbitration under this part.

25. Deputy Commissioner and Arbitrator to have certain powers of Civil Court: The Deputy Commissioner and the Arbitrator, while holding any enquiry of proceedings under this Act, shall have the same powers as are vested in a Civil Court under the Code of Civil Procedure, 1908 (V of 1908), for the purpose of :

(a) summoning and enforcing the attendance of any person, and examining him on oath;

(b) compelling the production of any document or records;

(c) receiving of evidence on affidavit;

(d) issuing commission for examination of witnesses;

(e) requisitioning any public record from any court or office.

26. Power to enter and inspect :

(1) With a view to acquiring or requisitioning any property and determining the compensation payable in respect thereof or securing compliance with an order made under this ordinance, the Deputy Commissioner or any other officer,



generally or specially authorised by the Deputy Commissioner in this behalf, and any of the assistants and workmen may -

- (a) enter upon and survey and take levels of any property;
- (b) inspect any property or anything therein;
- (c) measure and set out the boundaries and prepare a plan of any property and the intended line of work, if any, proposed to be made thereon;
- (d) mark such levels, boundaries and lines by placing marks and cutting trenches, and where otherwise the survey cannot be completed and the levels taken and the boundaries and line marked, cut down and clear away any part of any standing crop, tree or jungle.

Provided that no person shall enter upon any property without the consent of the occupier thereof unless at least seventy two hours' previous notice in writing of his intention to do so has been given.

(2) The Deputy Commissioner or the officer authorised by him under sub-section (1) shall, at the time of entry upon any property, pay or tender payment for all necessary damage to be done in such property, and, in case of dispute as to the adequacy of the amount so paid or tendered, the decision of the Deputy Commissioner shall be final.

27. Power to obtain information : With a view to acquiring or requisitioning any property or determining the compensation payable in respect thereof, the Deputy Commissioner may, by order in writing, requiring any person to furnish to such officer or authority, as may be specified in the order, such information in his possession as may be specified relating to any property which is acquired or requisitioned, or intended to be acquired or requisitioned, under this ordinance.

28. Service of notices and orders :

(1) same as otherwise expressly provided in this ordinance and subject to the rules made thereunder, every notice or order issued or made under this ordinance shall be revealed by delivering or tendering it to the person named therein or the person on whom it is required to be served under this ordinance.

(2) when such person cannot be found or the notice or order cannot be so delivered or tendered, the service of the notice or order may be made by delivering or tendering it to any officer of such person or to any adult male member of

the family of such person residing with him or, if no such officer or member can be found, by affixing a copy thereof on the outer door or on some conspicuous part of the premises in which that person ordinarily resides or carries on business or personally works for gain, and also affixing a copy thereof in some conspicuous place in the office of concerned Union Parishad, Upazila Parishad, Zila Parishad and Municipality office.

29. Penalty : Any person who contravene or attempts to contravene or attempts to abet a contravention of any order made under this ordinance or who willfully obstructs any person in doing any of the acts authorised or permitted under this ordinance or any rule made thereunder shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one thousand takas, or with both.
30. Exemption from stamp duty and fees : No award made under this ordinance shall be chargeable with stamp duty, and no person claiming any interest under any such award shall be liable to pay any fee for a copy of the same.
31. Indemnity : No suit prosecution or other legal proceedings shall lie against any person for anything which is in good faith done or intended to be done pursuance of this ordinance or any order or rule made thereunder.
32. Bar to jurisdiction of court : Save as otherwise expressly provided in this ordinance, no court shall entertain any suit or application against any order passed or action taken under this ordinance, and no injunction shall be granted by any court in respect of any action taken or to be taken in pursuance of any power conferred by or under this ordinance.
33. Power to make rules :
 - (1) The Government may, by notification in the official Gazette, make rules for carrying out the purposes of this ordinance.
 - (2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely -
 - (a) the procedure to be followed in taking possession of any property acquired or requisitioned under this ordinance.
 - (b) the procedure to be followed by the Arbitrators and the Arbitration Appellate Tribunals.

PROPOSAL FOR A PILOT PROJECT ON
THE MODERNISATION OF LAND RECORDS IN BANGLADESH

1. Background

Land records in Bangladesh are poor and the system antiquated,

- There is an illogical separation between records of rights (RoR) and records of transfer
- Seller's ownership is not verified, hence transfer deeds do not give right to title
- Antiquated and highly labour intensive technologies cause delays and backlogs in completing settlement surveys and printing of Khatians and maps.

So, neither from records of rights, nor from the land register can ownership, sub-divisions and partition be safely determined.

As a result,

- land based fraudulence is rampant, usually at the expense of the poor and the destitute;
- litigation is endemic (almost 80% of all civil court cases are land based), at high social cost;
- the land market is weak and 'black';
- land acquisition for important public works gets delayed;
- optimal alignment of embankments, roads etc become difficult to determine accurately;
- an equitable and rational land taxation system is virtually impossible;
- land use planning can not be done properly;
- and many other aspects of land reform, including ceiling control and sharecroppers security, cannot be achieved.

A recent study on Land Acquisition and Resettlement under the Flood Action Plan specifically concluded that

- A modernized Land Record System is one of the most fundamental requirements for a successful Flood Action Plan.

2. Proposal

It is proposed that a Pilot Project is initiated on the Modernisation of Land Records in one of the experimental areas under the Flood Action Plan, such as Tangail.

Two alternative modernization schemes may be tried as follows, in two separate Thanas of Tangail.

Scheme 1 : Partial Modernisation within the Existing Framework

This would consist of the following

- Rationalisation of the transfer deed to one standardised page with essential information;
- Transfer of this standardised deed to a much reduced 'Balam' book with a certified photocopy, an improvement over the present Land Transfer (LT) notice, to the land administration office (AC, Land);
- Compulsory updating of record of rights on the basis of the transfer deeds within set time limits;
- Introduction of a system of checking of title before registration of transfer, by reference to the record of rights updated on the basis of transfer deeds as mentioned above.
- Gradual computerisation of the land records, starting initially with those plots which are involved in a transfer;
- Physical location of the office of the Sub-Registrar in close proximity of the Land Administration Office.

Scheme 2 : Full Modernisation within the Frame of a Changed System

This would consist of

- Revision of records of rights, following procedures similar to the existing revisional settlement, but introducing more efficient survey methods including the use of GPS (Geographic Positioning System) and aerial photographs; standardisation of Khatian keeping provision for previous and subsequent owners;
- Computerisation of the records of rights at the Thana level with a standard one-page sheet for Khatians and the use of digitisers and plotters to produce computerized maps, which can be subsequently updated on a real time basis;

- Making registration of all land transfers, including bequests, obligatory under law, within a stipulated time period;
- Institution of a new system of transfer of ownership which uses records of rights to specify the transfer; this ensures an automatic verification of title ownership of the seller;
- Computerized recording (updating) of all land transfer events, including bequests;
- Training of modern professionals who can run and maintain a computerized Land Records System;
- Merger of the function of land registration with land administration.

A third Thana will have to be monitored as a 'control' Thana.

Needless to say, all three Thanas should be selected to ensure that there is in the near future comparable land acquisition programmes preferably under the Flood Action Plan.

The modernization schemes are to be completed in two years, after which all three Thanas will be monitored for a period of nine months for the purpose of evaluation, particularly with regard to reduction in costs and disbenefits mentioned earlier.

3. The Final Output

- A fully modernized and a partially modernized land record system in two separate but comparable Thanas in the same district;
- Demonstration of the benefits of full and partial modernization on all land related development activities, including land revenue administration, land acquisition and resettlement, etc; and
- A comprehensive strategy for the modernization of land records in the entire country, with a realistic assessment of costs and benefits, and a fully worked out activity plan, time table and budget.

4. Inputs needed

- Blessings of the Prime Minister and her Cabinet;
- Approval of the Government, possibly involving an Ordinance, providing the legal cover for the proposed procedural and administrative changes in the Thana selected for a complete modernization of land records;

- Approval of the Ministry of Land (MoL) regarding the selection of Thanas and involvement of DGLRS's office in the Pilot scheme;
- Manpower from DGLRS's office for revision settlement in the three selected Thanas;
- Involvement of college students from Thana HQ for revisional settlement after appropriate training;
- Computer hardware, software and supplies including digitizers and plotters;
- Trainers on computer software and hardware;
- Other instruments/equipment;
- Technical Assistance from local and external experts;
- Office, transportation and overhead expenses;
- Coordination and management of the entire pilot scheme by Multidisciplinary Action Research Centre (MARC).

5. Budget : Tentative estimate (3 years duration)

	US\$
a. Personnel : International level - 45 mm	1,250,000
Local level - 150 mm	
Other staff -	
Field workers (survey)	
b. Computer hardware, software & supplies	50,000
c. Vehicle, fuel, office space etc	350,000
Sub-total	1,660,000
d. Overhead (10% of above)	160,000
Total	1,820,000
say US\$ 1.8 million	

(further details can be provided when required)

LIST OF SITES AND VILLAGES AND SIZE OF SAMPLES UNDER
SOCIO-ECONOMIC HOUSEHOLD SURVEY

Project	Upazila	Union	Villages	Module 1 Total h'h	Module 2 Affected h'h	Module 3 Intensive Survey h'h
1. Kurigram Irrigation Project	Rajarhat	Senai	Joykumar Purba Debuttar Kuliar Char Chatur Bhuz	780	191	50
		Barabari	Budaru			
2. Brahmaputra Right Flood Embankment Project	Shahzadpur	Khukni Jalalpur	Rupshi Sayedpur Dadpur Changterchar	239	218	62
	Chowhali	Sodia- Chandpur	Enayetpur Khamargram			
3. Kalidas- khali Arpara Project	Shalika	Arpara	Dari Salai Anandanagar Chukinagar	404	186	50
4. Dhaka City Flood Pro- tection Project	Mirpur	Mirpur Pourashava	Nababer bagh Goranchatbari Alopdi	586	223	50
5. MDIP	Matlab	Baganbari	Rayer kandi Dhonagoda Nabipur	1324	353	56
		Eklaspur	Eklaspur			
6. Monu River Project	Moulvi- bazar	Akhailkura	Shampashi Norai Akhail kura Khargoa Pakuria	523	236	50
Total	7	10	26	3858	1407	318

THE FAP-15 STUDY TEAM

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|-----|-----------------------------|--|
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| 7. | Dr. Hussain Zillur Rahman | Socio-Economist |
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| 31. | Mr. Md. Zakir Hossain | " |
| 32. | Mr. Md. Moazzem Hossain | " |
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