

YANGTZE BASIN FLOOD CONTROL PROJECT
CHINA

RETTLEMENT ACTION PLAN

DRAFT REPORT

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with assistance from

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GENERAL TABLE OF CONTENTS

PREFACE

GENERAL TABLE OF CONTENTS

ABBREVIATIONS

EXECUTIVE SUMMARY

PART A

REPORT CHAPTERS

1. PROJECT INTRODUCTION AND BACKGROUND
2. INFLUENCE OF THE PROJECT
3. LEGAL FRAMEWORK AND RESETTLEMENT STRATEGY
4. RESETTLEMENT PROGRAM
5. RESETTLEMENT BUDGET
6. ORGANIZATIONAL STRUCTURE AND ADMINISTRATION
7. PUBLIC CONSULTATION AND SOCIAL ADJUSTMENT
8. RESETTLEMENT CONTRACTS AND AGREEMENTS
9. MONITORING AND SUPERVISION
10. RESETTLEMENT IMPLEMENTATION SCHEDULING
11. SUMMARY AND CONCLUSIONS
12. REFERENCES

PART B

COLOUR MAPS AND FIGURES TO SUPPORT THE RAP

ABBREVIATIONS

CC	Construction Contractor
CiRO	City RO
CoRO	County RO
CWRC	Changjiang (Yangtze) Water Resources Commission
ECI	Environmental Construction Inspector
EIA	Environment Impact Assessment
EMO	Environmental Management Office
EPM	Environmental Protection Measures
ERP	Embankment Resettlement Project
ES	Environmental Supervisor
HbPPI	Hubei Water Conservancy and Hydropower Survey and Design Institute
HnPPI	Hunan Water Conservancy and Hydropower Survey and Design Institute
IMEO	Independent Monitoring and Evaluation Organization
JPPI	Jiangxi Water Resources Planning and Design Institute
MWR	Ministry of Water Resources
ORC	Overall Resettlement Coordinator
PLG	Project Leading Group
PMO	Project Management Office
POE	Panel of Experts
PPI	Provincial Planning Institute
PRO	Provincial Resettlement Office
RAP	Resettlement Action Plan
RO	Resettlement Office
RPO	Resettlement Planning Organization
RS	Resettlement
SR	Supervisor of Resettlement
VEO	Village Environmental Officer
WB	World Bank
YBFCP	Yangtze Basin Flood Control Project

PART B

MAPS AND DRAWINGS

- Figure 1 General Location Map of the Yangtze Basin
- Figure 2.1 Impact Area of the YBFCP
- Figure 2.2 Project Area and Project Features of the YBFCP
- Figure 3.1 Land Acquisition and Resettlement for the YBFCP – Hunan Province
- Figure 3.2 Land Acquisition and Resettlement for the YBFCP – Jiangxi Province
- Figure 3.3 Land Acquisition and Resettlement for the YBFCP – Hubei Province
- Figure 4 Type A Houses for Internal Resettlement
- Figure 5 Type B Houses for Internal Resettlement
- Figure 6 Type C Houses for Internal Resettlement
- Figure 7 Typical Resettlement House Design – Brick and Wood Structure, Hunan
- Figure 8 Typical Resettlement House Design – Brick and Concrete Structure, Hunan
- Figure 9 Resettlement Township Layout, (Luohuoxinqu, Tuanfeng County, Hubei)
- Figure 10 Resettlement Township Layout, (Fuchi Township, Yiangxin County, Hubei)
- Figure 11 Type A Houses for Resettlers at Relocation Townships, Hubei Province
- Figure 12 Type B Houses for Resettlers at Relocation Townships, Hubei Province
- Figure 13 Overview of Safety Platform Layout for YBFCP Resettlement
- Figure 14 Layout of Safety Platform at Daqingjiang, Hunan Province
- Figure 15 Layout of No. 1 Safety Platform at Caijiazhuang Village, Hunan
- Figure 16 Resettlement Planning Chart for Honghu City
- Figure 17 Layout of Residential Area at Honghu, Hubei Province
- Figure 18 Plane Figure of Resettlement Planning (Section A), Honghu City
- Figure 19 Resettlement Housing Types for Section A, Honghu City
- Figure 20 Road Planning for Section A, Honghu City
- Figure 21 Power and Telecommunication
- Figure 22 Location Figure for Collective Resettlement Site in Jiujiang City, Jiangxi
- Figure 23 Typical House Design for Collective Sites in Jiujiang City, Jiangxi

**YANGTZE BASIN FLOOD CONTROL PROJECT
RESETTLEMENT ACTION PLAN
DRAFT FINAL REPORT**

EXECUTIVE SUMMARY

Chapter 1 Project Introduction and Background

Yangtze River, the largest river in China, stretches over a length of 6,300 km with a basin coverage of 1.80 million km². The basin is home to some 19 million people, approximately 58% of which live in the rural areas with agriculture being their main source of income. The annual per capita income in rural areas is approx. 2,189 yuan compared to 5,403 yuan in urban areas. In addition to being the rice basket of China the project area is also a major center for industry and commerce.

Flooding is frequent in the Yangtze basin with floods occurring in the middle and lower basins resulting in huge losses to people's property and lives and serious damage to the local ecology and environment. The Government is undertaking several initiatives in flood management, and the present Yangtze Basin Flood Control Project (YBFCP) is a major step in that direction. The project aims to upgrade and strengthen the dike system in the three provinces of Hunan, Hubei and Jiangxi. The project will result in a significant number of people being resettled and hence a detailed Resettlement Action Plan has been prepared to implement the resettlement component of the project.

The project will consist of reinforcement of 575.6 km of main dykes of the Yangtze in Hunan, Hubei and Jiangxi provinces (Hunan: 142.05 km, Hubei: 317 km and Jiangxi: 116.53 km); and rehabilitation of 114.57 km of dangerous sections of the dyke (Hubei: 70.99 km and Jiangxi: 43.58 km). Construction will include heightening and widening dyke body, slope protection, bank protection, dyke body and dyke foundation treatment, building of platforms, improvement in dyke operating facilities and equipment, and land compensation and resettlement.

In each of the project provinces, work is underway, beginning soon after the floods of 1998, with resettlement representing the initial task before construction commencement. Flood protection provided by the YBFCP will benefit a land area 21,731.97 km² including cultivated land of 13.7261 million mu and a population of 15.4148 million will gain from this. The project on completion will also provide protection to key urban and rural areas as well as vital infrastructure such as airports, ports, rail routes (Beijing - Guangzhou, Beijing - Jiulong) and important national highway No.107. It is estimated that the annual benefit from the project will be 1.257 billion yuan (Hunan 229 million, Hubei 810 million and Jiangxi 218 million). The internal economic return rate is around 17 to 36 percent.

Whereas the project brings substantial economic benefits to the people of the Yangtze basin, it also displaces a total of 52,859 people from 12,599 households that will require resettlement, including acquisition of almost 38,000 mu of land. The affected population represents 9 percent of the total population in the project area, and thus an elaborate Resettlement Action Plan has been prepared to minimize all the related impacts. The project feasibility study has taken into account the impacts from resettlement and the

design has been prepared to avoid/minimize resettlement as much as possible. This has been a result of numerous site investigations and alternatives sites' analysis before preparing the final plan.

The total project investment is \$732 million with domestic counterpart fund of: Hunan: 1,600 million Yuan; Jiangxi: 683 million Yuan and Hubei 1448 million Yuan. Hunan will use World Bank loan equivalent to \$70 million, Jiangxi: \$80 million and Hubei \$150 million. Construction term of the project is estimated at 4 years for the work in Hunan and Hubei provinces and 2 years for Jiangxi province.

Chapter 2 Influence of the Project

A total of 52, 859 people from 29 counties, 63 townships and 172 villages, within the three provinces of Hunan, Hubei and Jiangxi will be affected.

		Hubei	Hunan	Jiangxi	Total
Affected Populations	Households	4,464	5,400	2,735	12,599
	People	19,213	22,100	11,546	52,859
	Reduced Means of Production (persons)	6,081	5,826	4,972	16,879
Land and Assets	Land (mu)	18,577	11,334	7,786	37,698
	Buildings (10 ³ m ²)	1,029	802	472	2,303
	Enterprises	67	321	102	490
	Graves	4,408	250	1,381	6,039
	Temporary Land Loss	8,788	11,220	2,100	22,108

Due to the linear and elongate nature of the project affected area, impacts on local social and economic systems will be minor. The project will however involve considerable impacts on local population, primarily through structural and land losses and economic adjustment associated with reduced available cultivated land following re-allocation of village lands. **Table ES-1** lists the populations and assets affected by land acquisition for the YBFCP, and **Table ES-2** indicates the proportion of the project areas affected.. These impacts have been quantified as follows:

- (a) Land Acquisition - a total 37,968.28 mu of occupied land, of which 65 percent (24,565 mu) is arable land, approximately half of which is irrigated. Reservoirs/ponds, and trees/orchards represent the next largest component of the acquired land at 10 percent (3,822.4 mu), and 9.5 percent (3,579.63 mu) respectively. Of the total occupied land, 18,577.68 mu is in Hunan Province, which is 49.3 percent of the total land, 11,334 mu (30.1%) in Hubei Province, and 7,786.6 mu (20%) in Jiangxi Province respectively. A total of 22,108 mu of land will be required for temporary lease.
- (b) Building Acquisition - 2,303,200 m² of houses and buildings will be acquired, of which 38.4 percent are enterprise buildings of 884,600m², and 61.6 percent private houses of 1,418,700 m². Of the 490 enterprises affected enterprises many will be able relocate partial operations, extend on current sites or absorb land losses with no production loss. Affected enterprise structures includes housing for staff who will relocate locally. Affects of lost private buildings and staff housing is considered under resettlement.

<i>Province</i>	<i>Private Housing Affected</i>	<i>Enterprises and Public Buildings Affected</i>
Hubei	<ul style="list-style-type: none"> Total rural area housing = 317,427m² Total urban area housing = 84,458m² 	<ul style="list-style-type: none"> Total enterprises (321 to be affected, 125 wholly and 196 partially) = 400,331m²
Hunan	<ul style="list-style-type: none"> Total private housing area = 779,700m² 	<ul style="list-style-type: none"> Total enterprise and public building area (76 units) = 249,300m²
Jiangxi	<ul style="list-style-type: none"> Total rural area housing = 181,865m² Total urban area housing = 55,194m² 	<ul style="list-style-type: none"> Total enterprises area (102 to be affected) = 23,5015m²

- (c) Infrastructure Losses - The project will require rebuilding or restoration of some 80.39 km of simple roads, 122.68 km of broadcasting lines, 517.87 km of telephone lines, 85.88 km of 10 kV transmitting line, and 3.6 km of 35 kV transmission lines.
- (d) Resettlement - As a result of land acquisition, 52,859 people from 12,599 households (including resettlers from enterprise housing) will require resettlement. As the project is a linear/corridor type development, while many villages are affected, in most instances this affects only a small portion each village, overall an average of 9 percent of the total population of 560,285 in the 172 affected villages.
- (e) Economic Effects - Land acquisition impacts on production for enterprises will be minor with few of the 490 affected establishments requiring complete relocation. An estimated 16,879 people will be required to readjust their means of income generation as a result of agricultural land loss. Estimated post-resettlement land areas are approximately 5 percent below existing levels. Some 85 percent of the income and production restoration programs are land based, providing for recovery and improvement of the affected workers, primarily within existing or related agricultural practices.
- (f) Hosts – Re-allocation of lands within resettlement villages, and in some cases in adjacent villages which may sell their land to the affected villages, will result in land area reductions for all agricultural households in the village. In both scenarios, land compensation (or purchase costs) should be utilized for the development of all remaining village lands.

Chapter 3 Legal Framework and Resettlement Strategy

The YBFCP RAP has been prepared within the national Chinese legal framework, and in accordance with the World Bank's Operational Directive 4.30 Involuntary Resettlement.

Appropriate national regulations pertain to land and water resource management. Key regulations studied and used for design of RAP include the Land Management Act of People's Republic of China, 1998, Water Act of People's Republic of China, 1998, the Land Compensation and Resettlement Regulation for Large and Medium Sized Water Conservancy and Hydropower Projects, 1991 and other national and provincial ordinances and decrees of Hunan, Hubei and Jiangxi provinces on land management.

The key principles of YBFCP resettlement compensation have been designed based on these laws and regulations. The guiding principle has been to award compensation costs to the resettlers such that their original standard of living is maintained at the least. A matrix of the entitlements for the people and assets affected by the YBFCP is presented in **Table ES-3**. Compensation standards (presented in **Table ES-4**) have been determined for (i) land, (ii) housing, (iii) auxiliary buildings and trees, (iv) relocation and transfer, (v)

public utilities in settlements, (vi) relocation allowances, (vii) vulnerable and economically weaker groups, and (viii) infrastructure and special facilities.

Average compensation costs for private housing range from 50-70 yuan/m² for auxiliary structures to a maximum of 270-320 yuan/m² for brick-concrete housing. Enterprises and public/institutional buildings' compensation range from a minimum of 60 yuan/m² to a maximum of 500 yuan/m² between the three provinces. Land compensation has been calculated for each resettled family on a per mu basis for two categories of land, one for per capita cultivated land holdings of less than 1mu and another for more than 1 mu. The compensation ranges from 3,000 yuan/mu. (for other miscellaneous land) to 8,409 yuan/mu. (for paddy field) in the former category to 3,000 yuan/mu. (forest land) to 8,096 yuan/mu. in the latter.

Use of these procedures is essential for contributing to achieving the basic resettlement goal, namely that all families involved in resettlement will not be disadvantaged by the project and instead, to the extent feasible, will share in project benefits.

Chapter 4 Resettlement Program

Chapter 4 presents the Resettlement Program for the Yangtze Basin Flood Control Project. The chapter outlines the various housing and economic restoration measures which have been developed in order to; (i) minimize disturbance to resettlers by providing local resettlement options, familiar production/income restoration alternatives, necessary support in the period of transition, (ii) be acceptable to both resettlers and host populations, (iii) maintain or improve income levels and standards of living of people in the affected areas. Chapter 4 also describes the mechanisms for restoration of enterprises and infrastructure and utilities affected by the project.

(a) Household Restoration

Some 12,599 families with 52,859 people in the project area will have to be resettled, of which 4,464 families with 19,213 people come from Hunan, 5,400 families with 22,100 people from Hubei and 2,715 families with 11,546 people from Jiangxi.

In accordance with the guidelines for minimizing distance to alternative resettlement sites, and with resettler preferences, the following resettlement alternatives were developed, based on available land area and its capacity for increased production, and the viability of industry expansion.

Resettlement Type	Number of HH	Number of People
Internal Resettlement (resettlement of rural households within the existing village area)	5,670	25,499
Collective Resettlement (relocation to new residential areas in rural and urban sites (as appropriate), urban resettlement to apartment blocks and rural safety platform sites)	5,712	22,760
Cash Compensation (when urban resettlers opt to relocate to another area or for alternative accommodation)	1,217	4,600

(ai) Internal Resettlement

Almost 45 percent of resettlers will be relocated within their existing village administrative areas, minimizing disturbance to existing social and economic systems.

This type of rural resettlement will be require land improvement and the redistribution of village productive lands, and in eleven instances, the transfer of lands from adjacent villages to supplement lands currently available within the village. Environmental and economic capacity investigations identified the 136 villages as feasible for this means of resettlement, in light of the production restoration measures proposed.

In most cases of internal resettlement, infrastructure and service displacement will be minor, and the restoration of all impacted services is included in the resettlement program and budget. House reconstruction will be undertaken by the villagers themselves, in accordance with relevant standards.

(aii) Collective Resettlement

Collective resettlement shall involve 5,712 families with 22,760 people to 35 sites. These sites are of three types for collective resettlement. These sites will be of three types:

1. Towns or Communities – where new housing areas can be constructed in existing communities
2. Township Blocks – where new residential blocks will be developed for resettlers
3. Safety Platforms – elevated platforms will be built nearby to villages, on top of dykes where residential housing will be constructed.

In Hunan and Hubei seven residential sites will be developed for rural resettlers in towns or communities, providing for a total of 637 households with 2,625 people. Through land re-allocation and land development, the RAP provides for the largely rural resettlers to maintain agricultural livelihoods.

In project affected townships of Hubei, 12,021 urban residents from 389 households will be relocated into purpose built residential apartment blocks.

In Hunan, 11 residential safety platforms are proposed for the resettlement of 1,715 rural households totaling 7,331 people.

In each instance, minimum housing and living space standards will be met, and where adequate infrastructure and facilities including water supply and sanitation, drainage, power will be provided.

(aiii) Purchase of Replacement Housing

Purchase of commercial housing in four apartment blocks, will be undertaken to replace the housing of 752 people in 171 households. The people involved are urban residents whose original houses are concentrated in the bank section in Jiujiang City where no opportunity exists for them to move back. Each of the replacement housing blocks are located within a radius of 5 km of the original sites, and thus current employment will be able to be maintained despite relocation.

(aiv) Direct Cash Compensation

In Jiangxi, 1,217 urban residents from 4,600 households have selected direct cash compensation for their lost residence. Compensation rates budgeted are adequate for the purchase of comparable housing at commercial prices, and provides resettlers with the choice to relocate to housing and locations according to their requirements.

(b) Production Resettlement

The income and production restoration program described in Chapter 4 was developed according to guidelines of:(i) providing a variety of restoration alternatives, with land as

the primary means of support, (ii) utilizing local resources and development activities without adverse impact to the environment, and (iii) development of secondary and tertiary village run industries.

Target net income per capita rates have been set by the program as a target and measure for successful implementation of the program. An analysis of the land capacity in the affected villages, examined land availability and level of development of existing lands in the identification of the selected sites where reduced land holdings, with appropriate investment an development would not compromise carrying capacity.

Production plans for each province are detailed in **Table ES-5** outlined below:

- (a) **Hunan Province** - Improve 52,762 mu of land to support 5,077 resettlers and transfer 1,277 mu of foreign village tilled land to support 893 resettlers, among which 623 mu is irrigated tilled land and 604 mu is non-irrigated tilled land.
- (b) **Jiangxi Province** - Adjust and transfer 4,987 mu village arable land. The rearrangement will mainly concentrated on market gardening, with the development of timber/orchards, animal husbandry activities and village-run industries to supplement the primary agricultural pursuits. Improved productivity of lands will be facilitated by; soil improvement for 125,000 mu of land, 193 mu of barren field brought under cultivation, construction of 107 irrigation stations, improvement of 420 mu of fruit and tea fields, and development of 1,776 mu for intensive fish breeding. Some 35 village-run enterprises are also proposed.
- (c) **Hubei Province** – support 5,968 rural resettlers, among which 3,516 persons will be involved in improving low-output land, 264 persons in animal husbandry, and 2,189 persons in village-run enterprises and tertiary industry.

Implementation of these programs will require an estimated investment of 153,784,100 yuan, distributed as 54,623,700 yuan for Hunan Province 53,916,400 yuan for Hubei Province and 45,254,000 yuan for Jiangxi Province, which will be met by use of the land compensation and resettlement funds.

The average investment per capita for rearrangement is 9,000 yuan.

(d) Occupation of Temporary Lands

Total affected lands have been identified as 23,108 mu. Compensation will be provided based on annual output (for lost production), and to meet restoration costs. These costs are not included in the RAP as they are met by the project construction costs.

(d) Infrastructure and Enterprise Recovery

Chapter 4 identifies affected infrastructure which will be relocated or reconstructed as a result of the project, at a cost of approximately 33.34 million yuan.

Affected enterprises total 490, with a land area of 884,501m². In many instances land acquisition will result in only partial relocation or loss of land with minimal impact to production. Investment for their relocation and lost production is estimated at 401.8962 million yuan.

Chapter 5 Resettlement Budget

Chapter 5 presents detailed estimates of costs for implementing the resettlement program in the project regions which comprise the costs for the three participating provinces. The text discussion covers the following items, (i) compensation costs, (ii) planning and management costs, (iii) costs for contingencies, including basic contingency and

contingency for price difference, (iv) budget program, including fund disbursement and fund sources, and annual investment plan.

Overall project cost is approximately 1.3211292 billion yuan, with 0.501665 billion yuan for Hunan province, 0.488691 billion yuan for Hubei province, and 0.331196 billion yuan for Jiangxi province (as summarized in **Table ES-6**).

These costs incorporate compensation for relocation (including houses and assets), land compensation and compensation for public utilities, etc. Based on inventories undertaken and compensation standards, total compensation costs are estimated to be 1.0244412 billion yuan (almost 78 percent of the total resettlement budget), including 725.3142 million yuan (56 percent) relocation compensation for resettlers, 231.1723 million yuan (16 percent) land acquisition compensation, and 67.9546 million yuan (5 percent) compensation for public utilities.

Contingencies for compensation, planning and management costs are 39.8175 million yuan in Hunan, 42.371 million yuan in Hubei, and 41.3633 million yuan for Jiangxi. Based on the annual investment plan and the price indexes, the contingency cost for price difference is estimated to be 91.2945 million yuan.

In addition, a contingency of 5 percent of the housing compensation value has been included in overall project contingency to provide a safety net fund for vulnerable groups (Hunan 0.576 million yuan, Hubei 0.663 million yuan, and Jiangxi 0.3464 million yuan).

The World Bank loan will furnish 278.5 million, with the remainder coming from domestic funds, including:

- (a) Hydrological Construction Fund: 456.773 million yuan;
- (b) Provincial Governments Agricultural Development Fund : 68.85 million yuan;
- (c) Provincial, city and county finance: 269.233 million yuan;
- (d) National fund for construction on large rivers/lakes: 199.14 million yuan;
- (e) Other sources: 48.9642 million yuan.

Chapter 6 Organizational Structure and Administration

The institutional structure for resettlement aspects of the YBFCP is illustrated in Figure ES-1 and ES-2, showing the agencies and organizations responsible for management, planning, implementation, supervision and monitoring of all aspects of resettlement at the provincial level, independent external inputs, and recommendation for appointment of a Overall Resettlement Coordinator to operate as a linkage between the three provinces, the Ministry of Water Resources, and the World Bank.

In each province the PMO, as project owner, has contracted the relevant provincial Hydropower Planning and Design Institute to develop the RAP, including undertaking inventory, modifying design for resettlement minimization, identification and evaluation of alternative resettlement and production sites and income generation activities in consultation with relevant agencies and affected populations.

The PROs, through counterpart offices at the County level and through representatives in each of the affected townships and villages, are responsible for the implementation of the plan. Supervision of implementation will be provided through furnishing an SR in each province to ensure quality and timely progress on resettlement works.

In addition, as noted in the YBFCP EIA, each province will establish an EMO to have

primary responsibility for ensuring that the resettlement program design and implementation will comply with the EPMs specified in the YBFCP EIA. The PMO will arrange for appointment in each village of a VEO to be responsible for environmental management and reporting on resettlement progress, while the provincial EMO and ECIs will supervise planning and development public health infrastructure and waste management practices in the resettled villages.

Monitoring will be provided by an IMEO to regularly evaluate the progress of resettlement, including the social and economic rehabilitation of affected populations, and to provide direction and advice to the SR and PMO for adequate performance and in the resolution of outstanding problems. IMEO reports will be furnished to both the PMO and the World Bank.

Successful implementation of the resettlement program will require sizeable investment in training of resettlement staff in resettlement technology, and of resettlers in undertaking new production techniques and industry skills. The budgets for these training programs total approximately 7.0268 million yuan (3.9008 for resettlers and 3.126 for resettlement staff).

Chapter 7 Public Consultation and Social Adjustments

The resettlement program includes provisions for public consultation and social adjustments to ensure achievement of the goal that the affected parties (resettler families and the host communities) involved in the Resettlement Operation are not disadvantaged by the project and to the extent feasible will share with the project benefits.

Preferential policies specified by the Government and additional policies included in the YBFCP RAP will be available to resettlers. Policies of primary importance to YBFCP resettlers will be:

- (a) tax and levy deduction for acquired lands, and for exemptions or reductions in the associated grain quotas, thereby supporting both the resettlers and host communities.
- (b) industrial, agricultural and animal husbandry taxes and levies at the county and township levels will be adjusted in accordance with the magnitude of impact in each administrative area.
- (c) The resettlement budget includes a contingency for the support of vulnerable groups if they are disadvantaged by the project, and due to unforeseen circumstances, unable to restore their livelihood under the proposed RAP.
- (d) In the year of resettlement, resettlers will be exempted from the requirement for contribution of annual labor to dike maintenance.

Consultation and participation of affected people and their representatives has been an integral component of the development of the RAP. Essential to the success of the planning and assurance of resettler acceptance and understanding of the resettlement program is the issuance of resettlement entitlement booklets (as utilized in the Xiaolangdi Resettlement Project), and the undertaking of agreements with all affected parties.

Grievance redress mechanisms in China are clear and comprehensive, yet the publication of the existence and use of this mechanism to affected people through incorporation in the resettlement entitlement booklets will be essential to its effective use, and thus management of resettlement implementation. Comprehensive recording of grievance and responses and actions at all levels will also be undertaken.

Chapter 8 Resettlement Contracts and Agreements

The PMO in each of the three provinces has lead responsibility for implementing the provincial resettlement program component of YBFCP. This work involves participation and cooperation between numerous agencies including the PMO Chief, PRO, SR engaged by the PRO, EMO, CiROs and CoROs, township governments, the resettlement Villages including their.

In order for these various agencies/officials to work together efficiently, a number of contracts/agreements are needed which spell out clearly the roles of the participating parties. Primary contracts/agreements to be undertaken between the involved parties include; (i) letter of Agreement between PRO and City RO, (ii) Agreement on Land Sharing between Host Community and Resettlement Village, (iii) Agreement on Resettler Family Compensation between Resettling Family and Township Government, (iv) Agreements on Land and Asset Acquisition with Counties, Townships and Villages, and (v) Contract for Construction of Resettlement Project, including specific constraints relating to environmental protection.

Chapter 9 Monitoring and Supervision

In YBFCP resettlement, the PMOs will be responsible for internal monitoring of land acquisition and resettlement work. The responsible PMO staff will have appropriate experience and will facilitate coordination between different agencies involved in resettlement. A training program is included in the RAP which provide staff training in monitoring and supervision. The PMOs will monitor the performance of ROs at various levels (cities, counties, and village) during project implementation, coordinating resettlement work by all parties, and keeping abreast of resettlement implementation status. Key activities will include (i) resettler relocation, sites allocation and housing progress, (ii) quality of production reestablishment projects, (iii) recommendation on any problems encountered in implementation, (iv) income restoration, (v) infrastructure and community facility construction, (vi) reestablishment of vulnerable groups, (vii) timely disbursement of funds, (viii) maintaining public consultation, (viii) resettlement training services, and (ix) project and organization management. The PMO will submit monitoring summary reports to the Overall Resettlement Coordinator and World Bank twice a year.

An Independent Monitoring and Evaluation Organization (IMEO) viz., the Yellow River Resettlement Monitoring and Evaluation Co. Ltd. will be retained by the PMOs for monitoring and evaluation of land acquisition and resettlement work under the YBFCP. Responsibilities of the IMEO will include technical consultation services, monitor and supervise overall resettlement implementation, evaluate the resettlement supervision organizations (SRs), and report resettlement to the PMOs/PROs and the ORC on the status of resettlement progress. The IMEO will also take part in periodic public consultation meetings at village and township levels. During its periodic site visits the IMEO will evaluate public complaints and monitor the efficiency of grievance redress process and make recommendations as necessary on any possible change to the process. The duration of independent monitoring and evaluation will cover the project construction period and a two-year period after project completion. A common IMEO is expected to be contracted by each of the project provinces by the end of 1999.

Supervision of resettlement will be delegated to a Supervisor of Resettlement (SR) who will supervise resettlement implementation, resettlement project cost, and identify any

and report to ROs and PMOs for early solution with construction contractors, thus avoiding the intensification and evolution of such problems. The SR will exercise schedule, quality and cost control of resettlement implementation and community infrastructure reestablishment, arrange acceptance of completed works, in order to facilitate smooth completion of the resettlement component according to quality and schedule requirements. The SR will include head office staff and field supervision teams. Typical staff profile will include a chief engineer, and 2 full-time staff to be responsible for office and field work. Supervision work will start no later than December 1999, and financial estimates put the total cost at 10.8081 million yuan and have been included in the total resettlement cost estimate.

A position of an Overall Resettlement Coordinator (ORC) will be created at the Central Project Coordination Office (CPCO), who will coordinate the resettlement operations in all the three provinces. The ORC will work with an overall resettlement coordination committee comprising one representative from each of the three PROs. The ORC will report to the Ministry of Water Resources, the Yangtze Water Resource Commission (CWRC) and the World Bank on matters pertaining to YBFCP resettlement. The ORC, working with each PRO, will prepare reports describing the overall status of the YBFCP resettlement, incorporating the results of each province's monitoring and reporting to the Panel of Experts (POE), the World Bank missions and MWR and CWRC officials as required. This support will involve furnishing these regular reports to the missions, facilitating field visits and meetings with relevant agencies, and responding to various queries as required.

A Panel of Experts (POE) on Resettlement will be established to make periodic evaluations of project resettlement performance and provide recommendation on measures which may need to be taken so that project resettlement performance will comply with requirements specified in the Government-Bank Loan Agreement for the project. The POE is to be an independent panel, reporting both to the Government and the Bank and is expected to provide guidance in planning/implementing the overall resettlement program. Two Panel meetings, of 12 days duration have been planned each year from 2000 to 2002, covering the period of project construction. At a later time the Government and Bank will evaluate the possible need for Panel function during the operation period. The cost for POE has been estimated at \$116,000 per year and is included in the foreign currency component of the resettlement budget.

Chapter 10 Resettlement Implementation Scheduling

Resettlement schedules for the three have been developed in order to ensure; (i) avoiding timing of construction which will disrupt agricultural production, (ii) ensuring compensation and land allocation to resettlers a minimum of 3 months in advance of relocation, (iii) provision or replacement of infrastructure and utilities in advance of resettlement, (iv) scheduling resettlement construction to minimize impacts on the overall YBFCP works, and (v) scheduling resettler training in production ebb period. The overall YBFCP resettlement schedule is presented in **Figure ES-3**.

Resettlement for the YBFCP is scheduled for implementation following the floods of 1998 through to the end of 2002. Resettlement activities have commenced in each of the provinces. The implementation of these activities in respect to the standards outlined in the RAP, and the agreed measures to rectify any shortfalls are described below.

As involvement of the World Bank and confirmation of the YBFCP as a separate project within the overall program is yet to be confirmed, resettlement is being undertaken

according to a wide range of compensation standards and modes of disbursement within the project area, a situation governed primarily by the availability of funds.

In general, adequacy of currently implemented compensation standards was noted as follows:

- Urban resettlement in Jiangxi, for both house-for-house and cash compensation is close to conformance with the standards set out in this RAP, and sufficient for replacement of lost housing
- Compensation for enterprise structures is below the required standard, being provided only for structures, and not for lost production and wages, or associated facilities, causing loss in employment, and in some cases stalling restoration of enterprises or public buildings.
- Compensation standards for land, where proposed, are below standard, and in most instances have not yet been disbursed, preventing rural land development and consequent land re-allocation and livelihood restoration programs.
- Where compensation was provided for lost crops, this was below the standards proposed in the RAP.

The PMOs have committed to complying with the compensation standards stated in the YBFCP RAP in accordance with the appropriate local and national regulations by the end of November 1999. In doing so, current compensation standards for all project areas will be made uniform, and supplementary compensation to resettlers already compensated at the lower standards will be made to the YBFCP RAP standards.

Housing Restoration

- Urban housing provided in Jiangxi under the house-for-house program was in accordance with the RAP (sufficient area, amenities, siting from original location), and resettlers were satisfied with the new conditions.
- Rural houseplot allocations have been provided in conformance with standards described in the RAP. In each internal resettlement area visited these were less than 300 meters from the original sites, and all of the resettlers interviewed were satisfied with the location of the new sites.
- Rural housing reconstruction has been managed by resettlers, based on both recommended layouts and individual preferences. In most instances, resettlers have made significant increase in size and quality of housing.
- While no resettlement to townships has yet been undertaken, sites have been identified, and resettlers interviewed in Hubei were aware of, and satisfied with the relocation sites and proposed conditions.

Urban housing resettlement thus appear to be well implemented, with sufficient compensation and timely implementation. However issues in the effective implementation of the rural households restoration program were also noted:

- Compensation for rural structures has been less than adequate for housing replacement, leaving resettlers to rely on personal savings and loans.
- Disbursement scheduling in most instances has been linked to the commencement of demolition of existing houses, leaving no time for resettlers to construct replacement housing in advance of relocation and thus extending periods of temporary

accommodation.

In addition to application of the proposed compensation standards as described above, the following measure is proposed to improve rural housing restoration:

Commencement of disbursement a minimum of three months in advance of demolition to allow for house completion before demolition, thus avoiding (or at least minimizing) any need for temporary accommodation.

Enterprises and Public Buildings

As noted above compensation for enterprises is low, only allowing for the affected structures, with no provision for lost production and lost wages for employees.

Similar to issues of rural housing restoration, enterprise reconstruction is further stifled by the lateness of disbursement. Rectification of the compensation standards (including compensation for lost production and wages) and disbursement timing as recommended above would address these shortcomings.

Land Development and Income Restoration

Currently proposed land compensation standards are far below those of the RAP, and even so, few of the visited affected villages had received compensation for lost land. No agricultural land development or alternative income restoration measures have been undertaken, and in most cases village lands have not been re-allocated.

This situation is primarily linked to the availability of funds, which will be resolved on the disbursement of funds in compliance with the compensations standards recommended in the RAP.

The County/Township ROs have agreed to carry out land readjustment and provide land/productive compensation as soon as possible in accordance with the guidelines and standards specified in the RAP which will fund land improvement and agricultural extension activities to improve the productivity of the land available to resettlers after relocation.

Infrastructure

In the rural and urban sites visited, infrastructure restoration was minor or not required. In the affected areas visited, infrastructure restoration had been completed and was of acceptable standards.

Resettlement Organization and Management

Consultation with Provincial, City, and County ROs, and relevant township and village officials highlighted the necessity for immediate implementation of the training program, and staffing levels proposed in the RAP.

Management of resettlement information at all levels was poor, insufficient levels of permanent staff are allocated to the resettlement task, and little coordination between the various levels was evident.

The PMOs have committed to the following

Confirm establishment of project specific ROs at all levels, with staffing in accordance with the requirements outlined in the RAP.

Commencement of the proposed training programs for the ROs by the end of December

1999, and issuance of guidelines on the management of funds to all ROs.

Appointment of Independent Monitoring and Evaluation Organizations and Supervisors for Resettlement by the end of 1999.

Public Consultation and Social Adjustment

In urban areas, public consultation and information dissemination was undertaken well, with distribution of posters within the project affected area, and bulletins and interviews with affected households and enterprises. Agreements were also made, and interviews with resettlers confirmed their satisfaction and awareness of the resettlement process and compensation policies.

In rural areas, resettlers had participated in inventories, and signed off on their affected assets, however they did not hold agreements in regard to compensation, and although they felt compensation standards were too low, did not see any avenues for redress.

Commensurate with the application of the compensation standards recommended in the RAP, the following actions will be taken:

Agreements to be made with all affected households, enterprises and villages (for both future resettlement and in areas where resettlement has already commenced).

Arrangement of relevant land tax, levy and grain quota reductions where appropriate for resettlers.

Arrangement for the exemption of resettlers from the requisite annual labor on dike maintenance in the year of resettlement.

Immediate preparation and issuance of the resettlement entitlement booklets which describe compensation standards and other entitlements, the grievance process, income restoration programs, and the responsibilities of both resettlers and resettlement implementing organizations in realizing the RAP.

Table ES - 1 Summary of Affected Structures, Fixed Assets and Population

Item	Unit	Hubei	Hunan	Jiangxi	Total
<i>General</i>					
Affected Counties	Units	16	7	6	29
Affected Township	Units	31	13	19	63
Affected Village	Units	84	52	36	172
<i>A. Resettlement</i>					
A1. Households to be resettled	HH	5,400	4,464	2,735	12,599
Urban Households	HH	3,216		1,556	4,772
A2. Population to be resettled	People	22,100	19,213	11,546	52,859
Urban Resettler	People	12,871		6,037	18,908
A3. Houses needed to be resettled	m ²	802,216	1,028,956.76	472,074.18	2,303,247
A3.1 House of enterprises	m ²	400,331	249,215.44	235,014.73	884,561.20
Frame-structure	m ²	41,555		22,601.10	64,156.10
Brick-concrete-structure	m ²	201,509	125,724.25	174,010.50	501,243.80
Brick-wood structure	m ²	152,814	111,571.20	37,240.80	301,626
Wood(earth) structure	m ²		530.40		530.40
Miscellaneous	m ²	4,453	11,389.59	1,162.33	17,004.92
A3.2 Private house	m ²	401,885	779,741.32	237,059.45	1,418,686
Brick-concrete structure	m ²	160,454	210,157.43	132,198.75	502,810.20
Brick-wood-structure	m ²	201,534	373,483.28	90,510.10	665,527.40
Wood(earth) structure	m ²		9,485.00		9,485.00
Miscellaneous	m ²	39,897	186,615.61	14,350.60	240,863.20
<i>A4. Other fixed Assets</i>					
Fence wall	m ²	60,254	87,386.00	43,137.90	190,777.90
Ground	m ²	97,881	160,030.70	77,926.50	335,838.20
water pool	m ²		4,927.90		4,927.864
Tower	m ²	66		35.30	101.30
Water well	pc.	122	1240	25	1386.937
Pressed-water well	pc.	227		444	671.40

Item	Unit	Hubei	Hunan	Jiangxi	Total
Tomb	pc.	250	4408	1381	6039
Simple building	pc.	500		1364	1864.20
A5. Trees (inc. fruits, timber)	mu	56783	143903	8812	209497.80
<i>B. Land</i>	mu	11334	18577.68	7786.60	37698.28
B1. Irrigation land	mu	2649	3054.16	5162.40	10865.56
B2. Dry soil	mu	3876	7085.53		10961.53
B3. Vegetable land	mu		2738.48		2738.48
B4. Water pond	mu	2246	1213.44	362.60	3822.04
B5. Frost	mu	844	2442.63	293.0	3579.63
B6. Hacienda	mu		466.25		466.25
B7. Land for house	mu		1577.19		1577.19
B8. Miscellaneous	mu	1719		1968.60	3687.60
<i>C. Infrastructure</i>					
C1. Traffic facilities					
a. Concrete road surface	km	12.67			12.67
b. Simple road	km	11.15	69.24		80.39
c. Machine-plough road	km		43.62		43.62
C2. Electrical facilities					
a. Low voltage transmission line	km	118.03	124.72	7.98	250.73
b. 10 kV electrical transmission line	km	30.09	49.60	6.19	85.88
c. 35 kV electrical transmission line	km	3.60			3.60
d. transformation device	pc		9.70		9.70
C3. telephone line		379.50	109.59	28.78	517.87
C4. broadcasting line	km	99	23.68		122.68
C5. water mains	km	5.63	3.90		9.530

Table ES-2 Impacts in the Project Area due to Land Acquisition and Resettlement

Province	County	Villages effected	Information of effected area			Occupied land and resettlement			Percentage of occupied		
			Household	Population	arable land	Household	Population	arable land	Household	Population	arable land
Hunan	7	52	16405	72898	114815.6	4464	19213	10780.07	27%	26%	9%
	Linxiang	9	4725	20250	35870	1738	7447	2763.25	37%	37%	8%
	Yunxi	8	2461	10753	15301	541	2326	1397	22%	22%	9%
	Junshan	9	2123	7446	13159	729	2556	917.07	34%	34%	7%
	Huanggai	4	1069	5214	3732.61	314	1539	437.6	29%	29%	12%
	Junshan	7	1915	11524	17004	234	1408	1350.35	12%	12%	8%
	Huarong	14	4112	17684	29749	899	3871	3528	22%	22%	12%
	Jianxin	1				9	29	387			
Jiangxi	6	38	16112	69528	67939	2735	11546	5184	17%	17%	8%
	Ruichang	4	1755	6940	5743	9	52	321	1%	1%	6%
	Jiyoujiang	12	5059	22071	17018	414	2134	1292	8%	10%	8%
	Lushan	2	929	3565	4843	263	1185	586	28%	33%	12%
	Hukou	9	2941	12547	13810	90	448	1668	3%	4%	12%
	Pengze	11	5428	24405	26525	785	3338	1296	14%	14%	5%
	Xunyang					1174	4389	21			
Hubei	15	84	114165	417859	147235	5400	22100	6524.1	5%	5%	4%
	Zhijiang	15	40326	169370	30091	484	1728	1503	1%	1%	5%
	Jingzhou	3	1029	4411	1801	178	735	806.2	17%	17%	45%
	Songzi	1	647	2633	4171	8	33	70	1%	1%	2%
	Gongan	4	1287	6345	8677	25	98	195	2%	2%	2%
	Shishou	10	3179	14547	19307	286	1276	705	9%	9%	4%
	Jianli	12	3945	16572	22248	39	384	491.9	1%	2%	2%
	Honghu	3	40542	133827		2168	8671		5%	6%	
	Xinzhong	3	1468	5423	3580	31	128	36	2%	2%	1%
	Huangpo	5	1248	4189	6365	80	400	368	6%	10%	6%
	Hannan	2	835	2823	7497	162	689	240	19%	24%	3%
	Jiangxia	2	10509	24605	1169	226	808	300	2%	3%	26%
	Ezhou	12	4200	14636	23907	659	3430	1612	16%	23%	7%
	Huangzho	4	2529	8307	8050	795	2581	165	31%	31%	2%
	Tuanfeng	7	2049	8607	6947	218	912		11%	11%	0%
	Yangxin	1	372	1564	3425	41	209	32	11%	13%	1%
Total	28	174	146682	560285	329989.6	12599	52859	22488.17	9%	9%	7%

Table ES-3: YBFCP Resettlement Entitlement Matrix

<i>Project Impact</i>	<i>Affected Population/Entity</i>	<i>Compensation Policy</i>	<i>Other Measures</i>
Loss of arable land resulting from permanent land acquisition	Arable land, vegetable garden, trees and orchard areas, reservoirs/ponds, located in the path of dyke strengthening and the farmer and worker population working these land areas	<input type="checkbox"/> Provision of equivalent land nearby (if available); <input type="checkbox"/> Cash compensation to village for arable land for both more and less than 1 mu/family categories (compensation unit prices based on output value of cultivated land, land compensation times and relative land management regulations); <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Readjustment of village land within affected villages and host villages where applicable; <input type="checkbox"/> Use of cash compensation for farm intensification, crop diversification and other land development and agricultural extension techniques for more efficient use of land.
Loss of land from temporary land acquisition	Arable and cultivable land located in the path of dyke strengthening	<input type="checkbox"/> Compensation for temporary land acquisition based on the annual output of the leased land plus the costs associated with land preparation and re-cultivation; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Return of temporary land to the land user after use.
Loss of settlements (including housing, auxiliary buildings, scattered trees and transfer subsidy)	Housing and auxiliary buildings in the path of dyke strengthening and the residential population living in the houses	<input type="checkbox"/> Compensation for housing including private housing (rural and urban); <input type="checkbox"/> Replacement land for households to be provided within the original village (internal settlement), if available; <input type="checkbox"/> If replacement land not available provide alternative household/enterprise location as close to the original location as possible (collective resettlement); <input type="checkbox"/> House-for house replacement in urban areas; <input type="checkbox"/> Cash compensation based on original house area to urban resettlers; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Building materials may be salvaged from old housing or enterprise building to be utilized in new structures; <input type="checkbox"/> Assistance to be provided to the resettlers in procurement of labor and material for construction of new housing; <input type="checkbox"/> Provisions to be made for temporary housing and financial assistance accorded where rental support needed for temporary accommodation; <input type="checkbox"/> Transportation/relocation allowance to be provided to the resettlers on household basis.
Loss of crops	Crops located in the path of dyke strengthening	<input type="checkbox"/> Cash compensation to affected farmers based on the average of the previous three years production value	<input type="checkbox"/> Crop loss to be minimized to the extent possible by avoiding acquisition during harvesting

Table ES-3: YBFCP Resettlement Entitlement Matrix

<i>Project Impact</i>	<i>Affected Population/Entity</i>	<i>Compensation Policy</i>	<i>Other Measures</i>
Loss of enterprises	Enterprise and workers employed with the enterprises	<input type="checkbox"/> Compensation for land and reconstruction of enterprises' structure/buildings and facilities; <input type="checkbox"/> Compensation for loss in production and relocation of enterprises; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Provision for continuance of employment of workers affected from enterprise relocation during the transition period through provision of temporary premises, or compensation for lost wages.
Loss of settlement utilities	Water supply, power and sanitation in resettled houses and enterprises	<input type="checkbox"/> Compensation for reconstruction /reconnection to water supply/ electricity/ sanitation (previous infrastructure); <input type="checkbox"/> Detailed compensation rates in Table 3-2.	
Loss of public infrastructure	Roads, power supply, water supply, telecommunication and media broadcast facilities in the affected areas	<input type="checkbox"/> Compensation to owners/operators for infrastructure replacement; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Prompt allocation of land for reconstruction of public infrastructure including labor and material.
Impact to vulnerable groups	Elderly, orphans, widows, and female headed households being resettled	<input type="checkbox"/> Additional cash allowances provided to vulnerable and economically disadvantaged groups; <input type="checkbox"/> Detailed compensation rates in Table 3-2	<input type="checkbox"/> Prompt payment to vulnerable and economically disadvantaged groups early in the resettlement process.
Loss of cultural property	No significant impacts arising from the project	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable

Based on:

- (a) Land Management Act of the People's Republic of China 1998
- (b) Water Act of the People's Republic of China 1988
- (c) Land Compensation and Resettlement Regulation for Large and Medium-Sized Water Conservancy & Hydropower Projects, State Council promulgated Order No. 74, February 15, 1991
- (d) Design Regulation for Flooded Reservoir Area Treatment at Water Conservancy and Hydropower Projects, 1985, the Ministry of Hydropower
- (e) Investigation Details for the Reservoir-flooded Physical Substances at Water Conservancy and Hydropower Project, the Ministry of Hydropower, 1986
- (f) Standards for Village/Town Planning, the Ministry of Construction, September 27, 1993, 2) Classification of Villages and Towns; 4) Standards for Construction-occupied Land
- (g) Hunan Province Land Management Implementation Method, Hunan Province, April 28, 1992, Chapter 4, Land for National Construction
- (h) Hubei Province Land Management Implementation Method, Hubei Province, September 3, 1987
- (i) Jiangxi Province Implementation of Land Management Act, July 15, 1989, Chapter 4 – Land for use in State Construction

Table ES-4: List of Compensation Investment Unit Price for YBFCP

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
1. Settlement					
1.1 Buildings					
1.1.1 Public Buildings					
Framework	m ²		500	358	
Brick-concrete	m ²	345	360	250	
Brick-wood	m ²	260	270	185	
Clay/wood	m ²	195			
Miscellaneous	m ²	60	75	68	
1.1.2 Private house					
			Rural/urban		
Brick-concrete	m ²	269	270/320	230	
Brick-wood	m ²	203	240/260	165	
Clay/wood	m ²	153			
Miscellaneous	m ²	50	60/70	58	
1.2. Auxiliaries					
1.2.1 Private-owned					
			Rural area/town		
Fence	m ²	20	24/26	23	
Sun-drying ground	m ²	12	20/22	20	
Water pond	m ³	80			
Well	pce		1,000/1,000	1,000	
Pressure well	pce	70		250	
Simple structure	pce		50/50	50	
Tomb	pce	100	190/190	185	
1.2.2 Public-owned					
Concrete Fence	m ²		28	25	
Concrete Ground	m ²		25	22	
Water Tower	m ³		6,000 (per structure)	2,500	
Well	pce		2,000	1,500	
Simple Structures	pce		60	50	
1.3 Tree	pce	20	30	30	

Table ES-4 (Cont.)

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
1.4 Resettlement Subsidy			Rural/ Town		Hubei for each household
Materials Relocation	person	50	500/550	100	
Materials Loss	person	50	350/450	60	
For work delay	person	100	400/500	200	
For housing during relocation	person			60	
1.5 Reconstruction of Public Facilities					FOR HUBEI: TOWNSHIP BUILDING IN HOST AREA/TOWNSHIPS
Land acquisition in resettlement area	mu		7,000/ 10,000	6,328	
Land leveling	HH		800/1320	1,028	
Roads	HH		280/1280	240	
Tap water	HH		280/800	6,400	
Drainage	HH		200/640	200	
Power supply	HH		320/720	280	
Others	HH		240/820		
1.6 Other Compensation	person			120	
RS area township construction	HH		300		
Subsidy for moving to towns	HH		350		
1.7 Vulnerable Groups Housing	HH				
Elderly orphans and widows	HH		3,000	3,000	
Female headed households and inadequate male labor force communities	HH		4,000	4,000	
1.8 Vulnerable Groups Livelihood Subsidy	person	600	600	600	

Table ES-4 (Cont.)

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
2. LAND COMPENSATION	HH				
2.1 Per capita cultivated land less than 1 mu				7,460	
(1) Paddy field	mu	8,409	8,096		
(2) Dry land	mu	5,007	5,275		
(3) Market garden	mu	8,409			
(4) Water pond	mu	8,409	4,950	4,500	
(5) Forest land	mu	3,835	3,000	3,500	
(6) Garden plot	mu	5,990			
(7) House Plot	mu	3,456			
(8) Other land	mu		3,000	3,500	
2.2 Per capita cultivated land more than 1 mu	mu				
(1) Paddy field	mu	6,932	8,096		
(2) Dry land	mu	3,854	5,275		
(3) Market garden	mu	6,932			
(4) Water pond	mu	6,932	4,950		
(5) Forest land	mu	3,835	3,000		
(6) Garden plot	mu	3,835			
(7) House Plot	mu	4,425			
2.3 Temporary land requisition	mu				
Cultivated land	mu		1,800	3,500	

Table ES-4 (Cont.)

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
3. Special facilities					
3.1 Roads	km		250,000		
3.2 Simple Roads	km	169,038	170,000		
3.3 Tractor Road	km	12,531			
3.4 Power facilities	km				Overhead transmission line will take Jiangxi's as the Unit
(1) Low-voltage lines	km				
380v transmission line	km		12,000	1,000	
220v transmission line	km	9,127	9,000	1,000	
(2) High-voltage lines	km				
35kv transmission line	km		35,000		
10kv transmission line	km	22,525	23,000	2,000	
(3) Transforming facilities	set	3,000			
4. Telecommunication Lines	km	12,860	13,000	1,000	
5. Broadcasting Lines	km	8,000	8,000		
6. Cable T.V Lines	km		10,000		
7. Steel Tower	pole		150,000		
8. Tap Water Trunk Lines	km	50,000	70,000		

Table ES-5 YBFCP Resettler Income Restoration Planning

Province	County (city, district, farm)	Resettled by production (person)	Improvement of Village Lands		Improvement of Lands (including land transfer from other villages)		Resettlement into Animal Husbandry (person)	Resettled into Village Enterprise and Tertiary Industry(person)	Total
			Area (mu)	Population resettled (person)	Area (mu)	Population resettled (person)			
Hubei	13	5,968	52,871	3,516			264	2,188	5,968
	Zhijiang city	940	13,326	889			22	30	941
	Jingzhou district	936	3,667	244			40	651	935
	Songchi county	45	678	45					45
	Gongan county	152	2,278	152					152
	Shishou city	562	8,148	544			20		564
	Jianli county	374	5,606	374					374
	Xinzhou county	23	341	23					23
	Huangpo county	248	2,953	197			22	29	248
	Hannan distric	93	1,393	93					93
	Jiangxia district	336	695	47			20	269	336
	E'zhou city	2,112	11,577	762			140	1,209	2,111
	Huangzhou distric	131	1,968	131					131
	Yangxin county	16	240	16					16
Hunan	6	6,208	52,763	5,077	1,227	893		238	6,208
	linxiang city	1,692	16,636	1,368	378	286		38	1,692
	Yunxi district	1,058	9,291	776	284	280		2	1,058
	Junshan farm	234	3,161	234					234
	Huanggaihu farm	166	1,350	166					166
	Junshan district	753	7,975	753					753
	Huarong county	2,305	14,350	1,780	565	327		198	2,305
Jiangxi	5	4,972			4,987	4,972	170	163	5,305
	Ruichang city	357			299	357		3	360
	Jiujiang county	1,316			1,344	1,316	18	38	1,372
	Lushan district	547			658	547	13	42	602
	Hukou district	1,540			1,435	1,540	111	45	1,696
	Pengze county	1,212			1,251	1,212	28	35	1,275
Total of Project Area		17,148	105,633	8,593	6,214	5,865	434	2,589	17,481

Table ES-6 Summary Resettlement Costs (1,000 yuan)

	Hunan		Hubei		Jiangxi		Total	
	Cost	%	Cost	%	Cost	%	Cost	%
1. Relocation Costs	259,076.70	52	299,751.20	61	171,211.30	52	730,039.20	55
1.1 Houses	143,131.60		97,144.10		52,402.20		292,677.90	
1.2 Enterprises	73,170.40		138,647.40		105,458.20		317,276.00	
1.3 Attachments	4,482.20		20,523.40		3,330.80		28,336.40	
1.4 Subsidy for the Poor	669.00		1,191.00		142.00		2,002.00	
1.5 Infrastructure			31,239.60		3,515.00		34,754.60	
1.6 Other	37,623.50		11,005.70		6,363.10		54,992.30	
2. Land Compensation	94,869.30	19	80,890.80	17	55,412.20	17	231,172.30	17
3. Public Utilities	16,790.70	3	13,678.00	3	29,939.00	9	60,407.70	5
4. Planning + Management	33,198.50	7	29,391.00	6	21,498.20	6	84,087.70	6
4.1 Survey + Planning	9,268.40		7,886.00		7,697.00		24,851.40	
4.2 Implementation Management	11,122.10		11,830.00		7,697.00		30,649.10	
4.3 Technical Training	3,539.50		1,972.00		972.80		6,484.30	
4.4 Supervision	3,707.40		3,943.00		2,565.70		10,216.10	
4.5 Monitoring + Evaluation	2,595.20		2,760.00		1,796.00		7,151.20	
4.6 Resettlement Panel	1,112.20		1,000.00		769.70		2,881.90	
4.7 Other	1,853.70						1,853.70	
5. Contingency Costs	97,729.40	19	64,980.40	13	53,058.90	16	215,768.70	16
5.1 Basic	39,817.50		41,708.00		41,363.30		122,888.80	
5.2 Weak Group Subsidy	576.00		663.00		346.40		1,585.40	
5.3 Price Difference	57,335.90		22,609.40		11,349.20		91,294.50	
TOTAL	501,664.60		488,691.40		331,119.60		1,321,475.60	

Figure ES-1: Provincial Resettlement Management Structure

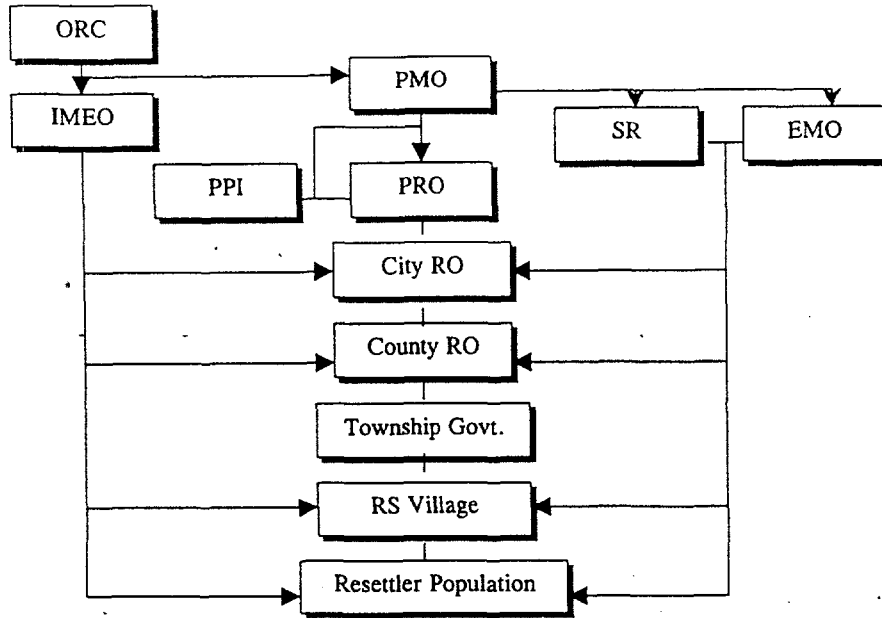
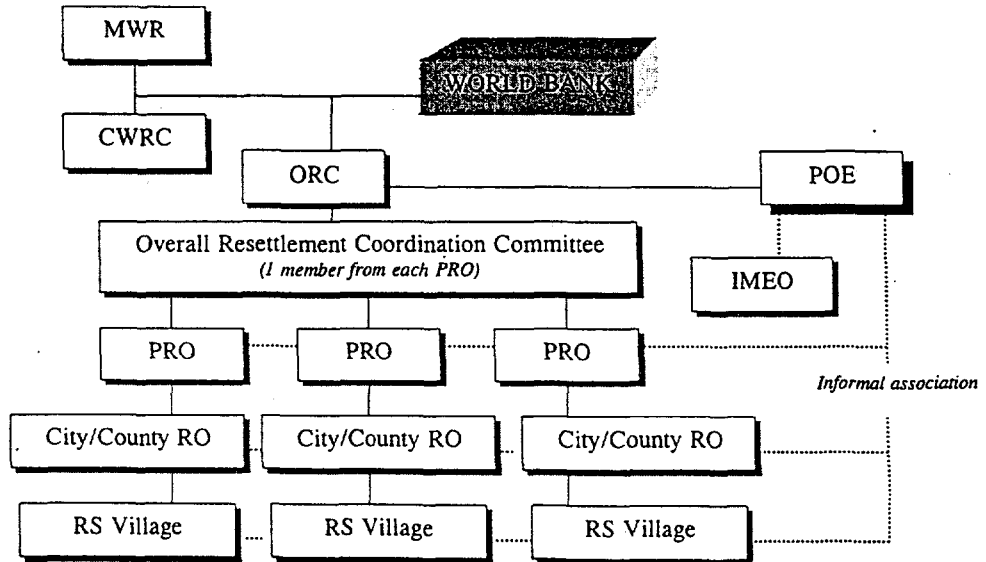


Figure ES-2: Coordination and External Monitoring (ORC and POE)



Note: ORC: Overall Resettlement Coordinator; RO: Resettlement Office; MWR: Ministry of Water Resources; PRO: Provincial Resettlement Office; CWRC: Yangtze Water Resource Commission; IMEO: Independent Monitoring and Evaluation Organization; RS: Resettlement; SR: Resettlement Supervisor; EMO: Environmental Management Office; PMO: Project Management Office; PPI: Project Planning Institute; POE: Panel of Experts

Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998												1999												2000												2001												2002											
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
1	J. Implementation Plan - Hunan	945 days	[Solid bar]																																																											
2	Project Preparation	150 days	[Solid bar]																																																											
3	Project Design and Assessment	150 days	[Hatched bar]																																																											
4	Project Implementation	945 days	[Solid bar]																																																											
5	Huarong County	697 days	[Solid bar]																																																											
6	Livelihood Resettlement	672 days	[Solid bar]																																																											
7	House Dismantling and Relocation	429 days	[Solid bar]																																																											
8	House Compensation	414 days	[Hatched bar]																																																											
9	House Rebuilding	542 days	[Hatched bar]																																																											
10	Move to Concentrated Area	175 days	[Solid bar]																																																											
11	Back-off Relocation	324 days	[Hatched bar]																																																											
12	Production Resettlement	623 days	[Solid bar]																																																											
13	Land Acquisition	115 days	[Hatched bar]																																																											
14	Agricultural Resettlement	595 days	[Solid bar]																																																											
15	Improvement of Low Output Farmland	590 days	[Hatched bar]																																																											
16	Transformation of Dry Land into Irrigation Land	415 days	[Hatched bar]																																																											
17	Allocate Land from Other Villages	328 days	[Hatched bar]																																																											
18	Secondary & Tertiary Industry Resettlement	609 days	[Solid bar]																																																											
19	Hospitality Industry	282 days	[Hatched bar]																																																											
20	Shops	414 days	[Hatched bar]																																																											
21	Rearrange Land within Village	435 days	[Hatched bar]																																																											
22	Recovery of Infrastructure	701 days	[Solid bar]																																																											
23	Transportation	308 days	[Hatched bar]																																																											
24	Power Supply	308 days	[Hatched bar]																																																											
25	Telecommunications	306 days	[Hatched bar]																																																											
26	Broadcasting Facilities	303 days	[Hatched bar]																																																											
27	Others	306 days	[Hatched bar]																																																											
28		0 days																																																												
29	Junshan District	615 days	[Solid bar]																																																											
30	Livelihood Resettlement	615 days	[Solid bar]																																																											
31	House Dismantling and Relocation	329 days	[Hatched bar]																																																											
32	House Compensation	567 days	[Hatched bar]																																																											
33	House Rebuilding	588 days	[Hatched bar]																																																											
34	Back-off Relocation	332 days	[Hatched bar]																																																											

◆ 5/1

Oct. 27, 1999

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Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998												1999												2000												2001												2002											
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
35	Production Resettlement	570 days	[Solid bar]																																																											
36	Land Acquisition	108 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
37	Agricultural Resettlement	567 days	[Solid bar]																																																											
38	Improvement of Low Output Farmland	345 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
39	Transformation of Dry Land into Irrigation Land	344 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
40	Rearrange Land within Village	132 days																									[Hatched bar]																																			
41	Recovery of Infrastructure	591 days	[Solid bar]																																																											
42	Transportation	261 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
43	Power Supply	309 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
44	Telecommunications	262 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
45	Broadcasting Facilities	262 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
46	Others	262 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
47		0 days																																																												
48	Junshan Farm	659 days	[Solid bar]																																																											
49	Livelihood Resettlement	658 days	[Solid bar]																																																											
50	House Dismantling and Relocation	347 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
51	House Compensation	598 days	[Hatched bar]																																																											
52	House Rebuilding	658 days	[Solid bar]																																																											
53	Concentrated Relocation	262 days													[Hatched bar]												[Hatched bar]																																			
54	Dispersed Back-off Relocation	285 days	[Hatched bar]																								[Hatched bar]																																			
55	Production Resettlement	614 days	[Solid bar]																																																											
56	Land Acquisition	348 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
57	Agricultural Resettlement	614 days	[Solid bar]																																																											
58	Improvement of Low Output Farmland	325 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
59	Transformation of Dry Land into Irrigation Land	263 days	[Hatched bar]												[Hatched bar]																																															
60	Allocate Land from Other Villages	132 days																									[Hatched bar]																																			
61	Recovery of Infrastructure	569 days	[Solid bar]																																																											
62	Transportation	303 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
63	Power Supply	304 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
64	Telecommunications	304 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
65	Broadcasting Facilities	304 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
66	Others	304 days	[Hatched bar]												[Hatched bar]												[Hatched bar]																																			
67		0 days																																																												
68	Yunxi District	685 days	[Solid bar]																																																											

◆ 4/1

◆ 11/27

Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998				1999				2000				2001				2002												
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
69	Livelihood Resettlement	678 days	[Solid bar]																												
70	House Dismantling and Relocation	384 days	[Hatched bar]																												
71	House Compensation	374 days	[Hatched bar]																												
72	House Rebuilding	648 days	[Solid bar]																												
73	Dispersed Back-off Relocation	384 days	[Hatched bar]																												
74	Production Resettlement	620 days	[Solid bar]																												
75	Land Acquisition	282 days	[Hatched bar]																												
76	Agricultural Resettlement	590 days	[Solid bar]																												
77	Improvement of Low Output Farmland	325 days	[Hatched bar]																												
78	Transformation of Dry Land into Irrigation Land	263 days	[Hatched bar]																												
79	Allocate Land from Other Villages	132 days	[Hatched bar]																												
80	Secondary & Tertiary Industry Resettlement	44 days	[Solid bar]																												
81	Shops	44 days	[Hatched bar]																												
82	Rearrange Land within Village	132 days	[Hatched bar]																												
83	Recovery of Infrastructure	679 days	[Solid bar]																												
84	Transportation	263 days	[Hatched bar]																												
85	Power Supply	384 days	[Hatched bar]																												
86	Telecommunications	263 days	[Hatched bar]																												
87	Broadcasting Facilities	263 days	[Hatched bar]																												
88	Others	263 days	[Hatched bar]																												
89		0 days	[Point]																												
90	Linxiang City	801 days	[Solid bar]																												
91	Livelihood Resettlement	801 days	[Solid bar]																												
92	House Dismantling and Relocation	348 days	[Hatched bar]																												
93	House Compensation	338 days	[Hatched bar]																												
94	House Rebuilding	589 days	[Solid bar]																												
95	Concentrated Relocation	323 days	[Hatched bar]																												
96	Dispersed Back-off Relocation	323 days	[Hatched bar]																												
97	Production Resettlement	639 days	[Solid bar]																												
98	Land Acquisition	282 days	[Hatched bar]																												
99	Agricultural Resettlement	594 days	[Solid bar]																												
100	Improvement of Low Output Farmland	328 days	[Hatched bar]																												
101	Transformation of Dry Land into Irrigation Land	328 days	[Hatched bar]																												
102	Allocate Land from Other Villages	263 days	[Hatched bar]																												

Oct. 27, 1999

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Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998												1999												2000												2001												2002											
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
103	Secondary & Tertiary Industry Resettlement	389 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
104	Hospitality Resettlement	197 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
105	Shops	257 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
106	Rearrange Land within Village	329 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
107	Recovery of Infrastructure	634 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
108	Transportation	284 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
109	Power Supply	328 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
110	Telecommunications	284 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
111	Broadcasting Facilities	284 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
112	Others	263 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
113		0 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
114	Huanggai Lake Farm	512 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
115	Livelihood Resettlement	451 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
116	House Dismantling and Relocation	171 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
117	House Compensation	157 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
118	House Rebuilding	307 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
119	Moving to Townships	174 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
120	Dispersed Back-off Relocation	174 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
121	Production Resettlement	368 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
122	Land Acquisition	174 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
123	Agricultural Resettlement	328 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
124	Improvement of Low Output Farmland	328 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
125	Transformation of Dry Land into Irrigation Land	328 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
126	Allocate Land from Other Villages	88 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
127	Rearrange Land within Village	92 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
128	Recovery of Infrastructure	351 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
129	Transportation	129 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
130	Power Supply	88 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
131	Telecommunications	88 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
132	Broadcasting Facilities	88 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
133	Others	88 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
134		0 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
135	Jianxin Farm	405 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											
136	Livelihood Resettlement	154 days	[Progress]												[Progress]												[Progress]												[Progress]												[Progress]											

◆ 4/1

◆ 4/1

Oct:27, 1999

Task [Progress] Progress [Point] ◆ Abstract [Abstract]

Resettlement Implementation Schedule for the YBFCCP

No.	Item	Duration	1998												1999												2000												2001												2002																
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
137	House Dismantling and Relocation	66 days													██████████																																																				
138	House Compensation	66 days													██████████																																																				
139	House Rebuilding	98 days													██████████																																																				
140	Dispersed Back-off Relocation	98 days													██████████																																																				
141	Recovery of Infrastructure	405 days	██████████												██████████												██████████												██████████												██████████																
142	Transportation	74 days	██████████																																																																
143	Power Supply	92 days	██████████												██████████																																																				
144	Telecommunications	65 days	██████████												██████████																																																				
145	Broadcasting Facilities	84 days	██████████												██████████																																																				
146	Others	84 days	██████████												██████████																																																				
147		0 days																																																																	
148	II. Implementation Plan - Hubei	1214 days	██████████												██████████												██████████												██████████												██████████																
149	Resettlement Implementation Plan of Hubei Province	1214 days	██████████												██████████												██████████												██████████												██████████																
150	Project Preparation	351 days	██████████												██████████												██████████												██████████												██████████																
151	Physical Index Investigation	64 days	██████████																																																																
152	Verification of Physical Index	16 days													□ □																																																				
153	Project Design and Assessment	90 days													██████████																																																				
154	Project Implementation	1214 days	██████████												██████████												██████████												██████████												██████████																
155	Barizhou Bank	885 days													██████████												██████████												██████████												██████████																
156	Livelihood Resettlement	717 days													██████████												██████████												██████████												██████████																
157	Dispersed Back-off Relocation	717 days													██████████												██████████												██████████												██████████																
158	Compensation Disbursement	60 days													□												□												□												□																
159	House Dismantling and Relocation	340 days													██████████												██████████												██████████												██████████																
160	Assign Land for Accommodation	90 days													██████████																																																				
161	House Rebuilding	315 days													██████████												██████████												██████████												██████████																
162	Public Utilities and Infrastructure	91 days													██████████												██████████												██████████												██████████																
163	Production Resettlement	830 days													██████████												██████████												██████████												██████████																
164	Planting and Animal Farming	830 days													██████████												██████████												██████████												██████████																
165	Village Owned Enterprises	100 days													██████████																																																				
166	Production Recovery of Enterprises	701 days													██████████												██████████												██████████												██████████																
167	Recovery of Infrastructure	604 days													██████████												██████████												██████████												██████████																
168	Transportation	250 days													██████████												██████████												██████████												██████████																
169	Power Supply	180 days													██████████												██████████												██████████												██████████																
170	Telecommunications	180 days													██████████												██████████												██████████												██████████																

Oct. 27, 1999

Task ██████████ Progress ██████████ Point ◆

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Resettlement Implementation Schedule for the YDFCP

No.	Item	Duration	1998												1999												2000												2001												2002																
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
171	Broadcasting Facilities	180 days																																																																	
172	Others	180 days																																																																	
173	Jingnan Bank	1123 days																																																																	
174	Livelihood Resettlement	667 days																																																																	
175	Dispersed Back-off Relocation	667 days																																																																	
176	Compensation Disbursement	60 days																																																																	
177	House Dismantling and Relocation	307 days																																																																	
178	Assign Land for Accommodation	90 days																																																																	
179	House Rebuilding	265 days																																																																	
180	Public Utilities and Infrastructure	91 days																																																																	
181	Concentrated Resettlement in Townships	197 days																																																																	
182	Compensation Disbursement	28 days																																																																	
183	Relocation Area Construction	186 days																																																																	
184	House Dismantling and Relocation	129 days																																																																	
185	Production Resettlement	830 days																																																																	
186	Planting and Animal Farming	830 days																																																																	
187	Village Owned Enterprises	100 days																																																																	
188	Production Recovery of Enterprises	701 days																																																																	
189	Recovery of Infrastructure	604 days																																																																	
190	Transportation	250 days																																																																	
191	Power Supply	180 days																																																																	
192	Telecommunications	180 days																																																																	
193	Broadcasting Facilities	180 days																																																																	
194	Others	180 days																																																																	
195	Jianli Bank	736 days																																																																	
196	Livelihood Resettlement	152 days																																																																	
197	Dispersed Back-off Relocation	61 days																																																																	
198	Compensation Disbursement	13 days																																																																	
199	House Dismantling and Relocation	27 days																																																																	
200	Assign Land for Accommodation	13 days																																																																	
201	House Rebuilding	41 days																																																																	
202	Public Utilities and Infrastructure	20 days																																																																	
203	Concentrated Resettlement in Townships	127 days																																																																	
204	Compensation Disbursement	28 days																																																																	

Oct. 27, 1999

Task Progress Point

Abstract

Resettlement Implementation Schedule for the YBFPCP

No.	Item	Duration	1998			1999			2000			2001			2002													
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12						
205	Relocation Area Construction	116 days																										
206	House Dismantling and Relocation	68 days																										
207	Production Resettlement	197 days																										
208	Planting and Animal Farming	89 days																										
209	Production Recovery of Enterprises	192 days																										
210	Recovery of Infrastructure	604 days																										
211	Transportation	250 days																										
212	Power Supply	180 days																										
213	Telecommunications	180 days																										
214	Broadcasting Facilities	180 days																										
215	Others	180 days																										
216	Honghu Bank	1131 days																										
217	Livelihood Resettlement	1111 days																										
218	Concentrated Resettlement in Townships	1111 days																										
219	Compensation Disbursement	85 days																										
220	Relocation Area Construction	681 days																										
221	House Dismantling and Relocation	211 days																										
222	Production Resettlement	701 days																										
223	Production Recovery of Enterprises	701 days																										
224	Recovery of Infrastructure	604 days																										
225	Transportation	250 days																										
226	Power Supply	180 days																										
227	Telecommunications	180 days																										
228	Broadcasting Facilities	180 days																										
229	Others	180 days																										
230	Wuhan Bank	850 days																										
231	Livelihood Resettlement	707 days																										
232	Dispersed Back-off Relocation	707 days																										
233	Compensation Disbursement	60 days																										
234	House Dismantling and Relocation	295 days																										
235	Assign Land for Accommodation	90 days																										
236	House Rebuilding	360 days																										
237	Public Utilities and Infrastructure	91 days																										
238	Concentrated Resettlement in Townships	202 days																										

Oct. 27, 1999

Task Progress Point

Abstract

Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998			1999			2000			2001			2002											
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
307	Production Recovery of Enterprises	701 days																								
308	Recovery of Infrastructure	369 days																								
309	Transportation	180 days																								
310	Power Supply	141 days																								
311	Telecommunications	119 days																								
312	Broadcasting Facilities	134 days																								
313	Others	136 days																								
314	Resettler Training	630 days																								
315	Training Arrangement	90 days																								
316		0 days																								
317	III. Implementation Plan - Jiangxi	485 days																								
318	Verification of Physical Index	88 days																								
319	Determine Compensation Criteria and Disburse Compensation	174 days																								
320	Allocate Land for Accommodation	176 days																								
321	Assign Land to Resettlers of Agricultural Resettlement	259 days																								
322	Build/Purchase Houses, Decoration	367 days																								
323	Infrastructure Construction at the New Location	334 days																								
324	Resettler Relocation	307 days																								
325	Go through Formalities, Certificate of Land for Accommodation	1 day																								
326	Resettler Training and Employment	1 day																								
327	Dealing with Particular Issues and Complaints	1 day																								
328		0 days																								

TABLE OF CONTENTS

1. PROJECT INTRODUCTION AND BACKGROUND	1-1
1.1 INTRODUCTION.....	1-1
1.1.1 <i>Project Objective</i>	1-1
1.1.2 <i>RAP Task</i>	1-1
1.1.3 <i>Report Components</i>	1-1
1.2 PROJECT AREA DESCRIPTION.....	1-1
1.2.1 <i>Natural Conditions in the Project Area</i>	1-1
1.2.2 <i>Population</i>	1-2
1.2.3 <i>Economic Status</i>	1-2
1.2.4 <i>Flooding in the Project Area</i>	1-2
1.3 THE PROJECT	1-3
1.3.1 <i>Flood Control Strategy in the Yangtze River</i>	1-3
1.3.2 <i>Main Construction Items</i>	1-4
1.3.3 <i>Implementation Status</i>	1-4
1.3.4 <i>Project Investment and Construction Term</i>	1-4
1.3.5 <i>Project Affected Area</i>	1-5
1.4 MEASURES FOR MINIMIZING RESETTLEMENT	1-6
1.5 TECHNICAL AND ECONOMIC FEASIBILITY	1-6
1.6 PROJECT MANAGEMENT INSTITUTIONS.....	1-6
1.6.1 <i>Provincial Management</i>	1-6
1.6.2 <i>Overall Project Coordination</i>	1-6
1.7 RESETTLEMENT FAMILY INVESTIGATION.....	1-7
1.7.1 <i>Studies in March and July 1999</i>	1-7
1.7.2 <i>Purpose</i>	1-7
1.7.3 <i>Investigation Scope</i>	1-7
1.7.4 <i>Investigation Methods and Procedure</i>	1-8
1.7.5 <i>Results of Sample Analysis</i>	1-8
1.7.6 <i>Income Model of Rural Resettlement Family</i>	1-11
1.8 WORLD BANK RESETTLEMENT POLICY GUIDELINES	1-11
1.9 SUMMARY AND CONCLUSIONS.....	1-11

TABLES

<i>Table 1-1 Summary of Main Project Components, Benefits and Impacts</i>	1-14
<i>Table 1-2 Population Status in Project Area</i>	1-15
<i>Table 1-3 Family Status of Project Area</i>	1-16
<i>Table 1-4 Rural Family Income Model</i>	1-17

See Maps in Part B

1. Project Introduction and Background

1.1 Introduction

1.1.1 Project Objective

The purpose of the Yangtze Basin Flood Control Project (YBFCP) is to upgrade and strengthen the dike system which protects the peoples and properties in the three provinces of Hubei, Hunan, and Jiangxi, so the system will be able to manage river flood flows of the magnitude of the 1954 flood. This project will require a significant component for resettlement of a considerable number of people. The purpose of the present report is to describe the proposal Resettlement Action Plan (RAP) which will accomplish the needed resettlement in a cost effective and efficient manner which meets the resettlement requirement of both the Government and the World Bank (WB).

1.1.2 RAP Task

The RAP described here represents the integration of three separate RAPs, one for each participating province, prepared by the relevant provincial planning institutes (PPIs) in each province [Ref 1,2,3]. The integration of these three plans into a comprehensive project resettlement plan has been carried out by the Hunan Water Conservancy and Hydropower Survey and Design Institute (HnPPi), with the assistance of the Hubei Water Conservancy and Hydropower Survey and Design Institute (HbPPi), and the Jiangxi Water Resource Planning and Design Institute (JPPi), and with the assistance of a team of consultants furnished by the World Bank.

1.1.3 Report Components

The overall report composes two parts:

Part A: This comprehensive YBFCP RAP

Part B: Maps and Drawings: containing the drawings which support Part A

1.2 Project Area Description

1.2.1 Natural Conditions in the Project Area

The Yangtze River, 6,300 km in length, with its basin covering 1.80 million km² of acreage, is the biggest river in China (see **Part B Figure 1**), annually discharging 960 billion m³ of water into the east sea. The Yangtze basin covers the East, Central and Southwest China, with the project area located in the plain areas of the middle and lower reaches, characterized by a subtropical monsoon wet climate. Temperature in the project area is moderate with abundant sunshine and rainfall. Annual mean temperature range from 16.5-17.5°C with a minimum of -18.9°C, and maximum of 40.3°C. Mean annual rainfall ranges from 1,300-1,600 mm, unevenly distributed within a year, with 40-50% of rainfall is concentrated in a few months.

1.2.2 Population

Of the 19,419 million total population of the project area, approximately 58% live in rural areas, drawing their primary income from agriculture (Table 1-2). The per capita annual income in the projects' rural areas is approximately 2,189 yuan, compared with 5,403 in urban areas. Average household size varies marginally from 4.2 to 4.3. Further discussion of the demographic and economic status of the project area is given in Section 1.7.5.

1.2.3 Economic Status

The plain area along the middle and lower reaches of the Yangtze are the “life blood” of the Yangtze valley. The project area is the main national commodity grain, cotton and oil production base, but also the main national industrial production base, including the Wuhan Steel Works, which occupies a very important position in the national economy. The total industrial and agricultural production value in the Project Area in 1997 is 188.557 billion yuan (respectively Hunan 16.984 billion and Hubei 159.1 billion and Jiangxi 12.473 billion). This gross output value of industry and agriculture accounts for approximately 40% of the nation's total, making the basin is one of the most economically developed and important regions of China.

Wuhan City it is one of the four largest economic center of the Yangtze Valley. Yueyang and Jiujiang are the key centers for Hunan and Jiangxi provinces respectively.

1.2.4 Flooding in the Project Area

Flooding is frequent in the Yangtze River Basin. Flood disasters are usually widely distributed in the basin. Especially the 126,000 km² of plains area in the middle and lower basins frequently suffer from serious flood and waterlog damages as the ground elevations there are commonly several to more than 10 meters lower than the flood water levels. These flood disasters occur with the frequency of once in every ten years.

The characteristics of the Yangtze flooding phenomena are rather complicated. The maximum flood peak discharge is not only related to the scope, intensity, moving direction of the rainstorm, but also the timing and distribution of local floods in various parts of the river systems. The regional composition of floods is quite different in different years because of the variation of rainstorm distribution. There are mainly two types of floods that usually cause damages in the basin. Flood of the first type occurred in 1860, 1870 and 1935. These are caused by extra-high rainstorms in some reaches of the mainstream and some tributaries. This type of flood is usually huge in discharge and high in peak level. The second, such as occurred in 1931, 1954 and 1998, is caused by basin-wide rainstorm where floods in the tributaries are similar to that of the mainstream.

These historical deluges have caused huge losses to people's property and lives, serious damages to the local ecology and environment, which seriously restricts the development of economy.

1.3 The Project

1.3.1 Flood Control Strategy in the Yangtze River

In order to solve the flood problem in the Yangtze middle and lower reaches, Changjiang (Yangtze) Water Resources Commission (CWRC) of the Ministry of Water Resources of PRC compiled a report, "Summary Report on Comprehensive Utilization Planning for the Yangtze Basin" [Ref.4], in 1990, which was subsequently approved by the state council. The report points out that flood control in the middle-and-lower reaches of the Yangtze should follow the principles of considering flood release and storage at the same time. Releasing ranks first because this is beneficial to flood control both in the rivers and the lakes, both the banks, and both the upstream and the downstream. These measures include:

- (a) properly raising and rehabilitating the bodies of the dykes;
- (b) harnessing the river channel;
- (c) planning and constructing diversion areas;
- (d) construction of reservoirs on the Yangtze mainstream and its tributaries; and
- (e) enlarging the diversion and storage capabilities of the Yangtze floodplain lakes

Implementation of these flood control plans will involve significant resettlement in the middle reaches of the Yangtze.

In the past, flood events have lead to the frequent collapse of polders within the floodplains, causing economic loss and temporary and permanent displacement of resident populations. The program for enlarging the diversion capabilities of the flood storage lakes, such as Dongting Lake and Poyang Lake and for alleviating flooding damages involves flattening of the polder areas and resettlement of resident populations. Begun in late 1998, this resettlement program will continue over a five year planning horizon, involving resettlement of an estimated 1.2 million people in Hunan alone, 900,000 in 1998/1999 in Hubei and a parallel program in Jiangxi. Where possible, resettlement only of housing will be undertaken allowing residents to continue cultivation of their existing lands, alternatively resettlement planning includes provision of relocation to township areas.

Development of the Three Gorges Project is ongoing, involving the resettlement of 1,105,630 people (154,278 in Hubei, and 951,335 in Chongqing City) [Ref. 5]. Resettlement began in 1993, and over 40 percent of the total resettlement is expected in the next 4 years, with completion anticipated in 2009.

After these measures are taken, flood control for the middle and lower reaches can be maximized, with the Yangtze Three Gorges reservoir playing the role of the backbone, adding the reservoirs, diversion works, river channel improvement and non-engineering flood control measures. In the overall system, dyke construction is one of the most important measures to tackle the flood problem in the Yangtze middle and lower reaches.

As shown in **Part B Figure 1**, Hubei, Hunan and Jiangxi provinces are located in the Yangtze middle and lower basin. The Yangtze main-stem dykes in the three provinces have existed for thousands of years. For example, the Jingnan main dyke of the sub-

project of Hubei was originally constructed about 300 AD. However, these provisions for flood prevention has not been very adequate, although raising and rehabilitation of levees have been implemented several times. Although flood emergency measures were implemented during the 1998 deluge, heavy costs have also been paid. The 1988 deluge revealed that there are many obvious and hidden defects in the bodies and bases of dykes, which need urgent treatment.

1.3.2 Main Construction Items

The State Commission of Planning has put the current Yangtze Basin Flood Control Project into its executive plan, including an application to the World Bank for a loan to support construction of the project.

The project will consist of reinforcement of 575.6 km of main dykes of the Yangtze in Hunan, Hubei and Jiangxi provinces (Hunan: 142.05 km, Hubei: 317 km and Jiangxi: 116.53 km); and rehabilitation of 114.57 km of dangerous sections of the dyke (Hubei: 70.99 km and Jiangxi: 43.58 km). Construction will include heightening and widening dyke body, slope protection, bank protection, dyke body and dyke foundation treatment, building of platforms, improvement in dyke operating facilities and equipment, and land compensation and resettlement (see **Table 1-1**).

In Hunan, it is planned to reinforce 136.44 km of dyke, build 1.4 km new flood-prevention wall, build 4.21 km of new earth dyke, improve 65 dyke cross-over buildings, acquire 18,577 mu of land, and relocate 4,464 households and 19,213 people.

In Jiangxi, it is planned to reinforce 116.25 km of dyke, rehabilitate 43.28 km long dangerous sections of dyke, build 6.45 km long flood-prevention wall, improve 150 sets buildings, acquire 7,787 mu of land, and relocate of 2,735 households and 11,546 people.

In Hubei, it is planned to reinforce 317 km of dyke, reconstruct 29.3 km of flood-prevention wall, build or rehabilitate 51 sets of culvert gates and pumping stations, acquire 11,333 mu of land, relocate 5,400 households and 22,100 people.

Locations of main works are illustrated in **Part B Figure 2-2**.

1.3.3 Implementation Status

In each of the project provinces, work is underway, beginning soon after the floods of 1998, with resettlement representing the initial task before construction commencement.

Based on the findings of the World Bank Pre-Appraisal Mission in October 1999, the current status of resettlement implementation is presented in Section 10.3.

1.3.4 Project Investment and Construction Term

The un-escalated investment cost for the project is 5.006 billion yuan (Hunan: 1.209 billion, Jiangxi: 1.307 billion and Hubei: 2.49 billion). Incorporating physical and price contingencies, the total investment is 5.508 billion (Hunan: 1.468 billion, Jiangxi: 1.346 billion and Hubei: 2.693 billion).

The total investment converted into U.S dollars (1 U.S dollar = 8.3 yuan) is \$732

million. Domestic counterpart fund will be Hunan: 1,600 million yuan, Jiangxi: 683 million yuan and Hubei 1448 million yuan. Hunan will use World Bank loan \$70 million, Jiangxi: \$80 million and Hubei \$150 million. The proportion of foreign fund and domestic counterpart fund is 1:1.5.

Construction term of the project is 4 years for the work in Hunan and Hubei provinces and 2 years for Jiangxi province.

1.3.5 Project Affected Area

The primary objective of the YBFCP is the protection of the population and land areas by reducing flood hazards. Flood protection provided by the YBFCP, as illustrated in **Table 1-1**, will benefit a land area 21,731.97 km². (Hunan: 2,096 km² Hubei: 18,896.66 km². And Jiangxi: 739.31 km²), including cultivated land of 13.7261 million mu (Hunan: 1.35 million mu, Jiangxi: 0.81 million mu and Hubei: 11.5687 million mu), and a population of population of 15.4148 million (Hunan: 1.5862 million, Hubei: 12.9902 million and Jiangxi: 0.8384 million).

Main dykes of the Yangtze in the project area directly protect big cities such as Wuhan, Yueyang, and Jiujiang which are located along the dykes, and some burgeoning industrial cities such as Ezhou and Huangshi. It also protects the Beijing - Guangzhou, Beijing - Jiulong important railway lines, Tianhe international airport, National Highway No.107, as well as a number of large-sized state key industrial enterprises and some important polders.

The project area not only includes the economic developed districts of the three provinces but also supports the national commodity grain and cotton production. Along with the rapid development of the national economy, various kinds of infrastructure are being built which more and more rely on dyke protection. However, the poor structured quality of many existing dykes has lowered the dykes effective and every year, these areas suffer a lot from flooding, including the heavy losses from the flood in 1998. In the three project provinces it is estimated that some 79.6 million people were affected by the 1998 floods, 10.2 million were evacuated, and 1,384 lost their lives. Total economic losses estimated for Hubei, Hunan and Jiangxi are approximately \$6.6, \$4.0 and \$4.6 billion, respectively [Ref.6].

The project not only has significant regional economic benefit, but will also support national economic development, and also has important social benefits. Increase of the dyke's flood-prevention standard will greatly decrease the frequency of flooding and avoid losses of property and life and relieve people's physiological and mental pressure resulting from flooding.

Project implementation does however create significant negative social impacts due to the land acquisition requirements. In total 52,859 people from 12,599 households will require resettlement, almost 38,000 mu of occupied land will be acquired. The affected populations represent 9 percent of the total population in the project area, and thus extensive planning and management is required to minimize and compensate for these impacts.

1.4 Measures for Minimizing Resettlement

The proposed project dyke reinforcement scheme is the result of many studies with continuing improvements in the project plan. The goal has been to avoid/minimize resettlement as much as possible by considering all feasible alternatives, in order to select the optional scheme. The optional scheme is planned to reduce project cost and facilitate project execution, including reduction of resettlement problems and costs. To achieve the goal of preparing the most appropriate RAP, the design institutes conducted many site investigations and considerate numerous alternative before preparing the final plan.

It has been decided to build protection walls in the populous city zones so as to reduce the need for heightening and widening dykes (reducing resettlement in Hubei by 1,460 people). Otherwise the project will require more land requisition and resettlement. In addition, some of the dyke routings were changed to minimize resettlement numbers(avoiding resettlement of 884 people in Hubei, 1,717 people in Jiangxi, and two enterprises in Jiangxi). According to the specific dyke foundation geological conditions, seepage-proof measures will be taken to reduce impervious blanket, which is possible resulting more relocation.

While regulations require a clearance of 50m from the dyke, standards have been adopted for 30m in Hubei, 50m in Jiangxi, and 100m in Hunan. These standards have been determined by each province, based on evaluated risks for piping hazards. International experience suggests that clearance of less than 30m is acceptable, as commonly residence and cultivation immediately adjacent to dykes occurs.

1.5 Technical and Economic Feasibility

The project plan is in accordance with the state's "Ninth-Five Plan and Development Outline of 2010-Year Plan" [Ref.7]. Preparatory work has been conducted including project surveys ready for preliminary design.

It is estimated that the annual benefit from the project will be 1.257 billion yuan (Hunan 229 million, Hubei 810 million and Jiangxi 218 million). The internal economic return rate is around 17 to 36 percent. The project also includes appropriate repayment capability.

1.6 Project Management Institutions

1.6.1 Provincial Management

Hunan, Hubei and Jiangxi provinces will set up their project leading group (PLG) and project management office (PMO) separately. PLG and PMO will be organized by local government and set up at county level in the project areas, and will be responsible for the project implementation and project management. The organization of the PMO and subsidiary resettlement organizations are described in detail in Chapter 6.

1.6.2 Overall Project Coordination

To facilitate Government/World Bank cooperation, an Overall Resettlement

Coordinator will be retained in the Central Project Coordination Office (CPCO), who will work with the three provincial PMOs for the purpose of assisting them to facilitate involvement in the project by World Bank missions and by the proposed international panel of experts on resettlement. The role and operation of the Overall Resettlement Coordinator is described in Chapter 6.

1.7 Resettlement Family Investigation

1.7.1 Studies in March and July 1999

During the period between March and July 1999, with the cooperation of local governments within project area, the water resource and power planning institutions of the three provinces conducted an investigation regarding the basic socio-economic and information and preferences of the resettlement families.

1.7.2 Purpose

- (a) Inform the resettlers of the importance of the YBFCP
- (b) Investigate project impact on the resettlers
- (c) Solicit their advice and suggestions, and make due considerations of their intentions when formulating production and livelihood resettlement plan
- (d) Analyze the income and expenditure level of the resettlers and determine the economic development target value of the project area to form a solid basis for resettlement planning
- (e) Formulate family income model of the resettlers to analyze the changes of their income level before and after resettlement.

1.7.3 Investigation Scope

The investigation is divided into two types: basic information and resettler preferences/intention.

The basic information investigation mainly consists of data on family information, property, economic income and expenditure, and contract land, as follows:

- (a) Basic information of the family includes family members, ages, sexes, educational level, workforce, accommodation area and structure, quality of drinking water, means of getting water, power usage, and transportation etc.
- (b) Family property: (i) production facilities such as contracted farmland, pond, side occupations, and production vehicles (truck and boat etc.), and (ii) ownership of appliances such as furniture, TV, refrigerator, washing machine, video player, fan, air conditioner, motorcycle, bike and telephones etc..
- (c) Family income and expenditure: family income: (i) operation income from planting crops, forestry, animal farming, aquaculture, employment etc. (ii) non-operation income from shares, gifts, subsidies and others.
- (d) Family expenditure: (i) production expenditure such as seeds, fertilizer, pesticide, saplings and animal feeds. (ii) various levies such as agricultural tax, rent for

agricultural equipment, irrigation cost, and social obligations. (iii) livelihood expenditure such as foods, clothes, daily necessities, books, magazines, tuition, power, water, fuel, and medicines.

The resettler intention investigation includes understanding of the project, attitude toward the project, acceptable means of production and livelihood resettlement, interested occupations, and preferences for relocation sites.

Data are contained within each provincial RAP and summarized below.

1.7.4 Investigation Methods and Procedure

In Hunan province, comprehensive data collection regarding family basic socio-economic information has been made and complemented by sampled analysis. The forms are filled out and signed by the resettlers. Query forms were distributed to all 4,464 resettlement households, and 4,019 of them made effective answers, a response rate of 90%. 281 answers (sampling rate of 5%) have been sampled from the affected villages for analysis, and the actual sampling rate was 6.3%. In Hubei and Jiangxi, sampling investigation was conducted regarding family basic socio-economic information, with a sampling rate of 5%. With regard to resettlement intentions, all three provinces adopted the sampling investigation method, with a sampling rate of 5%. The query forms were designed by the provincial water resource planning institute, distributed by local resettlement organizations, and filled out and signed by the resettlement families.

1.7.5 Results of Sample Analysis

As the family investigation forms differ from one province to the other, and the focus of investigation varies, the investigation results are explained separately. A summary of pertinent information is presented in **Table 1-2** and **Table 1-3**.

1.7.5.1 Hunan Province

Resettlement Family Socio-economic Information

The ratio of men to women is 1:0.92. The workforce aged between 17 to 60 accounts for 66.3% of the population. The number of resettlers below age 17 is 23.0%, and the number above age 60 is 10.7%. In the project area, 0.2% of the population have received higher education, 8% have received high school education, 40.8% have received junior high school education, and 45.9% have received elementary school education. The average annual income of urban residents is 6317 yuan, an increase of 12.6% over last year, while the average annual expenditure is 4837 yuan, an increase of 11.9%. The bumper harvest and stable price level has benefited the peasants: their average annual income is 2078 yuan, an increase of 16.8% over last year. On the other hand, the floods in the past several years have made them thrifter and increase savings, so the annual expenditure is 1,829 yuan, an decrease of 4.3% over last year.

The average family size is 4.3 people, including 2.8 workforce (aged 17 to 60), 0.8 younger than 17, and 0.7 older than 60. The average amount of contracted farmland is 7.79 mu per household, including 3.32 mu irrigation land and 4.47 mu dry land. In 100 rural households, there are 84.12 TV sets (B&W 66.91 and 17.21 color), 152.79 fans, 119.851 bikes, 6.47 motorcycles, 289.5 pieces of big furniture (sofa, wardrobe and writing desks etc.), and 286.92 pieces of other family properties.

Resettler Preferences/Intentions

Regarding housing relocation, most prefer building houses locally at back-off spots and concentrated house building, accounting for 44.5% and 33.8%, and 21.7% choose other means. Livelihood resettlement: 31% of the resettlers choose to allocate land within the village, 37% choose to deal in secondary and tertiary industries, and 32% choose land transformation and other means. All of the resettlers are supportive of this project: 75.4% believes the project has major impacts on them; 18.1% believes the impact to be small; 6.5% believes the impact to be very small.

1.7.5.2 Hubei Province

Resettler Family Socio-economic Information

Some 30% of the households have a family size of less than 4, 55% 4-5, and 15% have more than 5. The ratio of women to men is balanced. The family has an average workforce of 2 to 3. The average accommodation area of rural resettlers is 35 m², and that of urban residents is 15 m², including 55.74% brick-mix house, 39.32% brick and wood house, and 4.94% others. The drinking water is tap water in the cities, and in the rural area, 22% are from wells, 78% are from rivers, brooks, ponds, and tap water system has been set up in 70% of the villages. In the villages, 40% of fuel used is coal, 28% is natural gas, and 32% is grass and brushwood etc. Power for livelihood use is basically guaranteed, and the price in the rural area is usually higher: 0.8-0.9 yuan per kWh, while the price is about 0.4 - 0.45 yuan in the cities. All the villages have vehicle capable roads, so transportation is rather convenient. 3% of rural households have telephones installed. The hygiene in the rural households has improved over the past several years but still need improvement: 62% of the households use simple toilets and 20% use in-house ones.

Production and Livelihood Facilities

The major production facility of the rural household is farmland, and the average farmland per person is 1.24 mu. 2.7% of the households have large equipment for agricultural use, such as trucks, tractors, boats, etc. Most of the households have big furniture, bikes, fans, and 98% have color or B&W TV sets, 57% have refrigerators and washing machines, and 19% have motorcycles.

Family Income and Expenditure

(i) Classified by income sources, about 80% of family income comes from family operations, 16% from paid employment, and about 4% is from transference and financial income. Classified by types, 95.62% belongs to production income (including 73.5% agricultural income and 22.12% non-agricultural income), and 4.38% belongs to non-production income.

(ii) Family expenditure mainly comprises of operation cost and livelihood expenses, accounting for 24.42% and 67.04% of the total annual expenditure. 1.27% is used to purchase fixed assets for production use, 2.37% for taxes, 1.69% for contract obligations, and 3.2% for levies of various sorts.

Resettler Preferences and Opinions

(i) Resettlement requirement of first priority: 71% prefers good living environment, 15% prefers ample employment opportunities, 14% prefers good educational facilities and similar dialects.

(ii) The best means of resettlement: whole village together (28%), families of the same surname together (10%), same production team together (21%), and 41% doesn't care.

(iii) Best relocation spot: back-off relocation locally (46%); relocating to cities/townships (54%).

(iv) Preferred line of work: agricultural production (51%), industry and commerce (28%), temporary employment and other (21%).

(v) Almost all resettlers would like to resettle together with their relatives.

(vi) Project impact on their production and livelihood: 90% believes production and livelihood improves to some extent, and 10% believes the impact is adverse or there is no impact felt.

(vii) Resettlement information: 30% know quite a lot of it, 60% have general understanding, and 10% know very little or do not know. Almost 100% of the resettlers have a good understanding of, and support the project.

(viii) Means of project information dissemination: most of them gain their understanding of the project through TV, some from radio broadcasting and newspapers, and few from meetings and other channels.

1.7.5.3 Jiangxi Province

Resettler Family Socio-economic Information

The family size is 4-5 people, and the ratio of women to men is balanced. The average workforce is 2-3, and each worker has to support 1.5 people. The average

accommodation area of rural resettlers is 36 m², including 49.5% brick-mix houses, 43.5% brick-and-wood houses, and 7% others. The quality of drinking water meets relevant hygienic standard. In most of the villages manual pump well is used, and only several villages have began to use tap water. Power for livelihood is guaranteed, though the price is rather high - 0.7 to 1 yuan per kWh. Transportation and telecommunications are convenient, and 3-5% of the households have telephones installed.

Production and Livelihood Facility

The major production facility is farmland, and the average amount of farmland per person is 0.8-1.2 mu. The households have rather complete production tools and utensils, and 1-2% of them have large production equipment, such as trucks, motor boats, and tractors etc. 65% of the households have large furniture, bikes, fans, TV sets, sewing machines, watches and clocks. 25% of them have washing machines, refrigerators and tape recorders. 10% of them have motor bikes.

Income and Expenditure

The income and expenditure varies from household to household and village to village. Viewed from the investigation result, family income mainly consists of family operation income and work remuneration, accounting for 64% and 23% of the total annual income. Family expenditure consists mainly of family operation cost and living expenses, accounting for 33.4% and 59.6% of the total annual expenditure respectively.

1.7.6 Income Model of Rural Resettlement Family

In the rural areas of China, the production and livelihood of the people is organized and based on the unit of family, and different family members have different tasks and responsibilities. A family income model (as shown in **Table 1-4**) reflects the average living standards in the projects rural areas.

1.8 World Bank Resettlement Policy Guidelines

The present overall YBFCP/RAP report has been prepared to incorporate due attention to WB policy guidelines applicable to resettlement projects and /or components of projects which include significant resettlement components, assuming the Government and World Bank will formally agree on World Bank involvement as expressed in the Government/World Bank Loan Agreement. Following such agreement the mechanisms proposed in the present report relating to ensuring proper management of the resettlement aspects of YBFCP are to be promptly implemented.

1.9 Summary and Conclusions

Chapter 1, "Introduction and Background", (i) briefly describes the purpose and background for the proposed YBFCP, (ii) gives a brief description of the contents of the present RAP report, and (iii) explains that the report has been prepared and based on information given in the three separate provincial RAP reports, with due attention to meeting the requirement of World Bank policy guidelines on the resettlement (WB OD 4.30)

Yangtze River, the largest river in China, stretches over a length of 6,300 km with a basin coverage of 1.80 million km². The basin is home to some 19 million people, approximately 58% of which live in the rural areas with agriculture being their main source of income. The annual per capita income in rural areas is approx. 2,189 yuan compared to 5,403 yuan in urban areas. In addition to being the rice basket of China the project area is also a major center for industry and commerce.

Flooding is frequent in the Yangtze basin with floods occurring in the middle and lower basins resulting in huge losses to people's property and lives and serious damage to the local ecology and environment. Government is undertaking several initiatives in flood management, and the present Yangtze Basin Flood Control Project (YBFCP) is a major step in that direction. The project aims to upgrade and strengthen the dike system in the three provinces of Hunan, Hubei and Jiangxi. The project will result in a significant number of people being resettled and hence a detailed Resettlement Action Plan has been prepared to implement the resettlement component of the project.

The project will consist of reinforcement of 575.6 km of main dykes of the Yangtze in Hunan, Hubei and Jiangxi provinces (Hunan: 142.05 km, Hubei: 317 km and Jiangxi: 116.53 km); and rehabilitation of 114.57 km of dangerous sections of the dyke (Hubei: 70.99 km and Jiangxi: 43.58 km). Construction will include heightening and widening dyke body, slope protection, bank protection, dyke body and dyke foundation treatment, building of platforms, improvement in dyke operating facilities and equipment, and land compensation and resettlement.

In each of the project provinces, work is underway, beginning soon after the floods of 1998, with resettlement representing the initial task before construction commencement. Flood protection provided by the YBFCP will benefit a land area 21,731.97 km² including cultivated land of 13.7261 million mu and a population of 15.4148 million will gain from this. The project on completion will also provide protection to key urban and rural areas as well as vital infrastructure such as airports, ports, rail routes (Beijing - Guangzhou, Beijing - Jiulong) and important national highway No.107. It is estimated that the annual benefit from the project will be 1.257 billion yuan (Hunan 229 million, Hubei 810 million and Jiangxi 218 million). The internal economic return rate is around 17 to 36 percent.

Whereas the project brings substantial economic benefits to the people of the Yangtze basin, it also displaces a total of 52,859 people from 12,599 households that will require resettlement, including acquisition of almost 38,000 mu of land. The affected population represents 9 percent of the total population in the project area, and thus an elaborate Resettlement Action Plan has been prepared to minimize all the related impacts. The project feasibility study has taken into account the impacts from resettlement and the design has been prepared to avoid/minimize' resettlement as much as possible This has been a result of numerous site investigations and alternatives sites' analysis before preparing the final plan.

The total projects investment is \$732 million with domestic counterpart fund of: Hunan: 1,600 million yuan; Jiangxi: 683 million yuan and Hubei 1448 million yuan.

Hunan will use World Bank loan equivalent to \$70 million, Jiangxi: \$80 million and Hubei \$150 million. Construction term of the project is estimated at 4 years for the work in Hunan and Hubei provinces and 2 years for Jiangxi province.

Project management will involve Hunan, Hubei and Jiangxi provinces setting up their respective project leading group (PLG) and project management office (PMO) separately. PLG and PMO will be organized by local government and set up at county level in the project areas, and will be responsible for the project implementation and project management. The organization of the PMO and subsidiary resettlement organizations are described in detail in Chapter 6. To facilitate Government/World Bank cooperation, an Overall Resettlement Coordinator (ORC) will be retained in the Central Project Coordination Office (CPCO) at Beijing or Wuhan. The Overall Resettlement Coordinator will report to the Ministry of Water Resources and the World Bank on matters pertaining to resettlement of YBFCP. The ORC will work with the three provincial PMOs for the purpose of assisting them to facilitate involvement in the project by World Bank missions and by the proposed Panel of Experts (POE) on resettlement.

Resettlement planning has involved detailed site investigation and socio-economic surveys to establish the basic principles of resettlement planning for various compensation modes and to gauge preferences of the people and their concerns. These investigations have led to design of appropriate rural and urban livelihood models in addition to the appropriate level of compensation, which safeguards the resettler from any significant impacts.

The present overall YBFCP/RAP report has been prepared in accordance with World Bank guidelines including the World Bank Operational Directive 4.30 (Involuntary Resettlement) and the relevant national and provincial regulations, so as to incorporate due attention to WB policy guidelines applicable to resettlement projects and /or components of projects which include significant resettlement components. It has been recommended that following YBFCP project agreement, the mechanisms proposed in the present Resettlement Action Plan relating to proper management of the resettlement aspects of YBFCP will be promptly implemented thereby achieving the overall socio-economic benefit of the YBFCP.

Table 1-1 Summary of Main Project Components, Benefits and Impacts

		Hunan	Hubei	Jiangxi	Total
Project Component	Dyke Strengthening (km)	136.44	317.00	116.25	575.6
	Dyke Rehabilitation (km)	-	-	43.28	43.28
	New Works wall (km)	1.4	29.3	6.45	37.15
	Dyke (km)	4.21			4.21
Protection Benefits	Cultivated Land (10 ⁴ mu)	134.50	1156.87	80.74	1,372.21
	Population (10 ⁴ people)	158.62	1,299.02	83.84	1,541.48
	Annual Flood Control (10 ⁹ yuan)	3.56	8.10	2.18	13.84
Resettlement	Households	4,464	5,400	2,735	12,466
	People	19,213	22,100	11,546	52,859
	Houses (10 ³ m ²)	1,029	802	472	2,303
	Land (mu)	18,577	11,334	7,786	52,697
	Lost Means of Production (people)	6,081	5,825	4,972	16,878
	Enterprises	67	321	102	490

Table 1-2 Population Status in Project Area

Item	Unit	Total	Hunan	Hubei	Jiangxi	Description
1. Population	10 ³	19,419.6	158.62	1,699.50	83.54	
Agricultural population	10 ³	11,223.5	81.67	1,019.70	20.98	
Non-agricultural population	10 ³	8,224.0	19.94	679.80	62.86	
Population natural growth rate	‰	0.70	5.13		10.49	
2. Age Structure		7.79				
17~60 years	%	63.21	66.30	63.70	47.50	Hubei is age between 15~60years
Age below 17	%	26.99	23.00	27.27	29.00	Hubei is age below 15years
Age above 60 years	%	10.34	10.00	9.96	23.50	
3. Educational Level		66.91				
Above senior high school	%	15.43	0.20	17.60	0.20	
Senior high school	%	9.57	8.00	9.80	8.00	
Junior high school	%	30.70	40.80	29.20	42.0	
Primary school	%	43.44	45.90	43.40	39.70	
4. Average Income and Expense per year						
Urban resident income	yuan/Year		6,317	4,745	5,149.4	
Urban resident expenditure	yuan/Year		4,837	3,856	4,308	
Rural resident income	yuan/Year		2,078	2,234	2,256	
Rural resident expenditure	yuan/Year		1,829	1,660	1,266	

Table 1-3 Family Status of Project Area

Item	Unit	Hunan	Hubei	Jiangxi	Note
1. Mean population per family	person	4.3	4.2	4.3	
Labor force (17~60 years)	person	2.8	2.64	2.3	
Age below 17 years	person	0.8	1.26	1.2	
Age above 60 years	person	0.7	0.42	0.8	
2. Contracted farmland per family	mu	7.79	6.56	4.3	
Paddy field	mu	3.2		1.59	
Dry land	mu	4.47		2.71	

TABLE OF CONTENTS

2. INFLUENCE OF THE PROJECT	2-1
2.1 INTRODUCTION.....	2-1
2.2 AFFECTED LAND AND ASSETS.....	2-3
2.2.1 <i>Occupied Land</i>	2-3
2.2.2 <i>Affected Buildings</i>	2-4
2.2.3 <i>Infrastructure</i>	2-5
2.2.4 <i>Cultural Property</i>	2-5
2.3 AFFECTED POPULATION.....	2-5
2.3.1 <i>Resettlers</i>	2-5
2.3.2 <i>Economically Impacted</i>	2-6
2.3.3 <i>Host Population</i>	2-6
2.4 SUMMARY AND CONCLUSIONS.....	2-7

TABLES

<i>Table 2-1 Summary of Affected Structure: Fixed Assets and Population</i>	2-9
<i>Table 2-2 Impacts in the Project Area due to Land Acquisition and Resettlement</i>	2-10

2. Influence of the Project

2.1 Introduction

Chapter 2 identifies the various social impacts of YBFCP implementation on populations of the project area. While Chapter 1 identifies the social and economic benefits to be generated as a result of the improved flood control (see **Table 1-1**), Chapter 2 quantifies losses and potential negative effects due to project construction, which form the focus of the YBFCP RAP.

In the period between September 1998 and May 1999, a team composed of three Provincial Planning Institutes (PPIs) from Hunan, Hubei, and Jiangxi Provinces, together with local project administrations made a joint inventory of resettlement problems involved in the YBFCP. The inventory identified the occupied land and the establishments needed to be resettled from the project area. The team made a complete investigation and registration, village by village for the population, land type and area, and establishments, taking the county, township, and village as a unit. The structure, area and fixtures of the house and the amount of the private trees were calculated household by household.

The inventory and analysis showed that resettlement and land acquisition for the YBFCP will affect a total of 52,859 people from 29 counties, 63 townships and 172 villages, within the three provinces of Hunan, Hubei and Jiangxi (see **Part B Figures 2 and 3**). Resettlement will be required in both rural and urban areas as illustrated in the table below.

<i>Province</i>	<i>Resettler Population</i>	<i>Urban</i>	<i>Rural</i>
Hunan	19,213		Almost entirely*
Hubei	22,100	12,871 (53.3%)	9,229 (41.7%)
Jiangxi	11,546	6,073 (52.6%)	5,473 (47.4%)

* No dis-aggregated data available

The project is not expected have significant impacts on the local socio-economics given it's linear and elongate profile, resulting in the majority of resettlement to neighboring locations of existing sites. Nevertheless the project will involve relocation of a considerable number of people undergoing housing and livelihood impacts and other economic adjustment associated with reduced available cultivated land following re-allocation of village lands. These have been discussed in detail in various sections of this Chapter.

2.2 Affected Land and Assets

Details of affected land and assets resulting from implementation of the YBFCP are listed in Table 2-1, with the main components discussed below.

Land and Assets		Hunan	Hubei	Jiangxi	Total
	Land (mu)		18,577	11,334	7,786
Buildings (10 ³ m ²)		1,029	802	472	2,303
Enterprises		67	321	102	490
Graves		4,408	250	1,381	6,039
Temporary Land Loss		8,788	11,220	2,100	22,108

2.2.1 Occupied Land

Project construction will require the acquisition of a total 37,698.28 mu of productive land (as summarized in the table below, and detailed in Table 2-1). Of this required land area, 65 percent (24,565.52 mu) is arable land, approximately half of which is irrigated. Reservoirs/ponds, and trees/orchards represent the next largest component of the acquired land at 10 percent (3,822.4 mu), and 9.5 percent (3,579.63 mu) respectively. Vegetable gardens represent just over 7 percent, totaling 2,738.48 mu. Other areas include household gardens 466.25 mu, houses 1,577.19 mu and miscellaneous 3,687.6 mu.

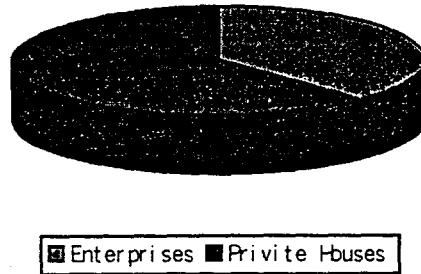
LAND	Hubei		Hunan		Jiangxi		Total	
	Area (mu)	%	Area (mu)	%	Area (mu)	%	Area (mu)	%
Permanent Loss	11,334	30	18,577.68	49	7,786.6	21	37,698.28	100
1. Arable	6,525	58	10,139.69	55	5,162.4	66	24,565	58
1.1 Irrigated	2,649		3,054.16		5,162.4		10,865.56	29
1.2 Dryland	3,876		7,085.53				10,961.53	29
2. Vegetable			2,738.48	15			2,738.48	7
3. Reservoir/ponds	2,246	20	1,213.44	7	362.6	5	3,822.04	10
4. Trees/orchards	844	7	2,442.63	13	293	4	3,579.63	9
5. Houseplots			1,577.19	8			1,577.19	4
6. Household Gardens			466.25	3			466.25	1
7. Miscellaneous	1,719	15			1,968.6	25	3,687.60	10

Of the total occupied land, 18,577.68 mu is in Hunan Province, which is 49.3 percent of the total land, 11,334 mu (30.1%) in Hubei Province, and 7,786.6 mu (20%) in Jiangxi Province respectively. In Hunan province, all resettled households are rural, and thus areas are proportionately higher for Hunan than Hubei and Jiangxi, where urban resettlers represent over half the affected population (58 and 53 percent respectively).

In addition, temporary land acquisition during construction will utilize 22,108 mu of land in the three provinces (Hunan 8,788 mu, Hubei 11,220 mu, and Jiangxi 2,100 mu). Such lands will be affected for one season of production, and compensated according to lost production and land restoration. In Hunan, almost half of this area will be on hilly uncultivated lands to avoid impacting adjacent cultivated lands.

2.2.2 Affected Buildings

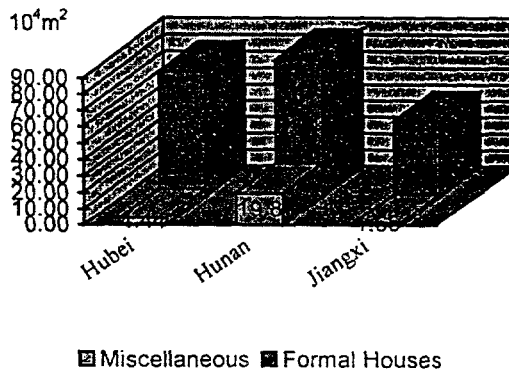
Some 2,303,200 m² of houses and buildings are planned for resettlement within the project area, including 38.4 percent enterprise buildings of 884,600 m², and 61.6 percent private houses of 1,418,700 m².



The following table summarizes the various types and areas of various category of private housing and public enterprise building for each province, that will be affected by the project:

Province	Private Housing Affected	Enterprises and Public Buildings Affected
Hubei	<ul style="list-style-type: none"> Total rural area housing = 317,427m² Total urban area housing = 84,458m² 	<ul style="list-style-type: none"> Total enterprises (321 to be affected, 125 wholly and 196 partially) = 400,331m²
Hunan	<ul style="list-style-type: none"> Total private housing area = 779,700m² 	<ul style="list-style-type: none"> Total enterprise and public building area (76 units) = 249,300m²
Jiangxi	<ul style="list-style-type: none"> Total rural area housing = 181,865m² Total urban area housing = 55,194m² 	<ul style="list-style-type: none"> Total enterprises area (102 to be affected) = 23,5015m²

Houses to be resettled included 64,100 m² frame-structure houses, 1,004,000 m² brick-concrete-structure houses, 967,100 m² wood-brick-structure houses, 500 m² wood-structure houses, and 410,800 m² miscellaneous. In Hubei and Jiangxi, informal



structures (such as fenced areas, storage structures etc) make up less than 6 percent of compensated buildings, while in Hunan, due to the rural nature of the project area, such informal structures represent approximately 19 percent, as shown below.

A total of 490 enterprises and public buildings (including some schools and clinics) will be affected by land acquisition. In many cases, acquisition will not require complete relocation, as extension or reconstruction of the affected section nearby, or alternatively direct compensation for the lost area without requiring reconstruction may be adequate.

2.2.3 Infrastructure

Losses in infrastructure due to the project are minor due to the small amount of each village affected (7 percent of arable land). The project will require rebuilding or restoration of some 80.39 km of simple roads, 122.68 km of broadcasting lines, 517.87 km of telephone lines, 85.88 km of 10 kV transmitting line, and 3.6 km of 35 kV transmitting line.

2.2.4 Cultural Property

Inventories have revealed 490 graves which will require relocation. No other cultural property or heritage items have been found to be affected.

2.3 Affected Population

Construction of flood protection works for the YBFCP will negatively impact on populations in the project area as a result of loss of land, buildings and consequent viability of existing income generating activities. The following section quantifies the impacted populations to the degree possible, and gives a brief indication of the significance of these impacts in view of the resettlement planning described in Chapter 4.

		Hubei	Hunan	Jiangxi	Total
Affected Populations	Households	4,464	5,400	2,735	12,599
	People	19,213	22,100	11,546	52,859
	Reduced Means of Production (persons)	6,081	5,826	4,972	16,879

2.3.1 Resettlers

As a result of the occupation of the land, 52,859 people from 12,599 households (including resettlers from enterprise housing) will require resettlement.

As the project is a linear/corridor type development, while many villages are affected, in most instances this affects only a small portion each village. Resettlement will affected 9 percent of the total population of 560,285 in the 172 affected villages, and acquisition of an average of 7 percent of productive lands (see **Table 2-2**). The proportion of affected people resettled in project affected areas is greatest in Hunan (26 percent on average).

As is discussed in Chapter 4, in more than 45 percent of cases, resettlement will occur within the village). In these instances, new housing will be within 2 km, and thus disruption to social and productive systems may be minimized by resettlement occurring internal to the affected village. Approximately 14 percent of resettlers will relocate to safety platforms, presenting a more densely settled residential environment, with resettlers from adjacent villages. Thus the effectiveness of land improvement and alternative income restoration measures for these populations will be of prime importance in sustaining resettlers livelihoods and avoiding resource conflicts at the sites.

Approximately one third of resettlement will be in urban areas, mostly of existing urban residents. As these populations are not dependent on the land from which they will be resettled, and will be resettled collectively with other members of their community, the psychological impacts on these communities are expected to be minimal. As discussed in Chapter 4, these resettlement sites in districts and townships will be designed to include public space and facilities amenable to active social interaction, and are mostly located within 5 km of existing sites.

2.3.2 Economically Impacted

As a result of the occupation of 24,565 mu of crop land, an estimated 16,879 workers will be required to readjust their means of income generation, comprising 6,081 affected people in Hunan, and 5,826 and 4,972 in Hubei and Jiangxi respectively. (See Chapter 4, Section 4.4.2 for details of estimate calculations)

On average for the project, this amounts to economic displacement of 30 workers per kilometer. Land based income restoration accounts for almost 85 percent of income restoration planning measures developed for the YBFCP RAP. Average contracted land areas per household are estimated to decline by less than 5 percent, and thus application of improved technology, conversion of areas to paddy and development of high value tree and orchard plantations are proposed to maintain the rural livelihood of the affected resettlers. In all but two counties (Jingzhou and Jiangxia in Hubei), lost arable land in affected villages will be at or less than 12 percent. Thus the changes to resettler production systems will be based on upgrading of existing skills, and given the adequate equipment and facilities, adjustment is expected to met without adverse disruption. The remaining adjustment programs will focus on training in tertiary and secondary industry skills, and animal husbandry.

The greatest loss of land to the project will be felt in Jingzhou, where 45 percent of land will be lost to the project, and in Jiangxia where 26 percent will be lost.

Compensation for lost production and support for lost employment is included in the Resettlement Program outlined in Chapter 4 where production losses will result from land acquisition from enterprises.

2.3.3 Host Population

Host populations in rural resettlement villages will be impacted economically as will the resettlers. In urban situations, facilities are either existing or incorporated in the

development of urban and township collective resettlement sites, and resettlers are urban dwellers, hence host impacts are not considerable. In most rural situations, resettlement will be internal to the village, thus the affected village is also the host village, and measures to be adopted for land development following any required reallocation of village lands will benefit the entire community. In only eleven instances in Hunan, have conditions within affected villages been found to be unable to support internal resettlement. In these places, plans have been made to acquire land from eleven adjacent villages with land surpluses which were willing to sell these to the affected villages. However dis-aggregated data is not available on the populations or land holdings of these villages, and thus quantification of the host populations is not possible beyond identifying them as eleven villages.

Funds provided to these host villages for purchase of the additional lands should then be used to fund the enhancement of remaining lands, or development of alternative income generating facilities. These eleven villages will be included in the YBFCP monitoring program, to see that these are undertaken successfully.

Relocation of resettlers to new residential areas of townships will also involve the acquisition of land from host populations, and is particularly relevant where this involves development of residential sites on the rural/residential fringe of townships. Consultation with hosts involved in the planning of such resettlement is described in Chapter 7. Hosts will be compensated for lost lands according to the YBFCP RAP standards, and monitoring of their livelihood and resettler/host relations post resettlement will also be a component of the resettlement monitoring program.

2.4 Summary and Conclusions

Chapter 2 identifies the land and asset acquisition requirements for the YBFCP dyke strengthening aspects, and the populations who will be affected by these losses. A total of 52, 859 people from 29 counties, 63 townships and 172 villages, within the three provinces of Hunan, Hubei and Jiangxi will be affected.

Due to the linear and elongate nature of the project affected area, impacts on local social and economic systems will be minor. The project will however involve considerable impacts on local population, primarily through structural and land losses and economic adjustment associated with reduced available cultivated land following re-allocation of village lands. These impacts have been quantified as follows:

- (a) Land Acquisition - a total 37,968.28 mu of occupied land, of which 65 percent (24,565 mu) is arable land, approximately half of which is irrigated. Reservoirs/ponds, and trees/orchards represent the next largest component of the acquired land at 10 percent (3,822.4 mu), and 9.5 percent (3,579.63 mu) respectively. Of the total occupied land, 18,577.68 mu is in Hunan Province, which is 49.3 percent of the total land, 11,334 mu (30.1%) in Hubei Province, and 7,786.6 mu (20%) in Jiangxi Province respectively. A total of 22,108 mu of land will be required for temporary lease.

- (b) Building Acquisition - 2,303,200 m² of houses and buildings will be acquired, of which 38.4 percent are enterprise buildings of 884,600m², and 61.6 percent private houses of 1,418,700 m². Of the 490 enterprises affected enterprises many will be able relocate partial operations, extend on current sites or absorb land losses with no production loss. Affected enterprise structures includes housing for staff who will relocate locally. Affects of lost private buildings and staff housing is considered under resettlement.
- (c) Infrastructure Losses - The project will require rebuilding or restoration of some 80.39 km of simple roads, 122.68 km of broadcasting lines, 517.87 km of telephone lines, 85.88 km of 10 kV transmitting line, and 3.6 km of 35 kV transmission lines.
- (d) Resettlement - As a result of land acquisition, 52,859 people from 12,599 households (including resettlers from enterprise housing) will require resettlement. As the project is a linear/corridor type development, while many villages are affected, in most instances this affects only a small portion each village, overall an average of 9 percent of the total population of 560,285 in the 172 affected villages.
- (e) Economic Effects - Land acquisition impacts on production for enterprises will be minor with few of the 490 affected establishments requiring complete relocation. An estimated 16,879 people will be required to readjust their means of income generation as a result of agricultural land loss. Estimated post-resettlement land areas are approximately 5 percent below existing levels. Some 85 percent of the income and production restoration programs are land based, providing for recovery and improvement of the affected workers, primarily within existing or related agricultural practices.
- (f) Hosts – Re-allocation of lands within resettlement villages, and in some cases in adjacent villages which may sell their land to the affected villages, will result in land area reductions for all agricultural households in the village. In both scenarios, land compensation (or purchase costs) should be utilized for the development of all remaining village lands.

Table 2-1 Summary of Affected Structure: Fixed Assets and Population

Item	Unit	Hubei	Hunan	Jiangxi	Total
<i>General</i>					
Affected Counties	Units	16	7	6	29
Affected Township	Units	31	13	19	63
Affected Village	Units	84	52	36	172
<i>A. Resettlement</i>					
A1. Households to be resettled	HH	5,400	4,464	2,735	12,599
Urban Households	HH	3,216		1,556	4,772
A2. Population to be resettled	People	22,100	19,213	11,546	52,859
Urban Resettler	People	12,871		6,037	18,908
A3. Houses needed to be resettled	m ²	802,216	1,028,956.76	472,074.18	2,303,247
A3.1 House of enterprises	m ²	400,331	249,215.44	235,014.73	884,561.20
Frame-structure	m ²	41,555		22,601.10	64,156.10
Brick-concrete-structure	m ²	201,509	125,724.25	174,010.50	501,243.80
Brick-wood structure	m ²	152,814	111,571.20	37,240.80	301,626
Wood(earth) structure	m ²		530.40		530.40
Miscellaneous	m ²	4,453	11,389.59	1,162.33	17,004.92
A3.2 Private house	m ²	401,885	779,741.32	237,059.45	1,418,686
Brick-concrete structure	m ²	160,454	210,157.43	132,198.75	502,810.20
Brick-wood-structure	m ²	201,534	373,483.28	90,510.10	665,527.40
Wood(earth) structure	m ²		9,485.00		9,485.00
Miscellaneous	m ²	39,897	186,615.61	14,350.60	240,863.20
A4. Other fixed Assets					
Fence wall	m ²	60,254	87,386.00	43,137.90	190,777.90
Ground	m ²	97,881	160,030.70	77,926.50	335,838.20
water pool	m ²		4,927.90		4,927.864
Tower	m ²	66		35.30	101.30
Water well	pc.	122	1240	25	1386.937
Pressed-water well	pc.	227		444	671.40

Item	Unit	Hubei	Hunan	Jiangxi	Total
Tomb	pc.	250	4408	1381	6039
Simple building	pc.	500		1364	1864.20
A5. Trees (inc. fruits, timber)	mu	56783	143903	8812	209497.80
<u>B. Land</u>	mu	11334	18577.68	7786.60	37698.28
B1. Irrigation land	mu	2649	3054.16	5162.40	10865.56
B2. Dry soil	mu	3876	7085.53		10961.53
B3. Vegetable land	mu		2738.48		2738.48
B4. Water pond	mu	2246	1213.44	362.60	3822.04
B5. Frost	mu	844	2442.63	293.0	3579.63
B6. Hacienda	mu		466.25		466.25
B7. Land for house	mu		1577.19		1577.19
B8. Miscellaneous	mu	1719		1968.60	3687.60
<u>C. Infrastructure</u>					
C1. Traffic facilities					
a. Concrete road surface	km	12.67			12.67
b. Simple road	km	11.15	69.24		80.39
c. Machine-plough road	km		43.62		43.62
C2. Electrical facilities					
a. Low voltage transmission line	km	118.03	124.72	7.98	250.73
b. 10 kV electrical transmission line	km	30.09	49.60	6.19	85.88
c. 35 kV electrical transmission line	km	3.60			3.60
d. transformation device	pc		9.70		9.70
C3. telephone line		379.50	109.59	28.78	517.87
C4. broadcasting line	km	99	23.68		122.68
C5. water mains	km	5.63	3.90		9.530

Table 2-2: Impact on the Affected Areas Due to Land Acquisition and Resettlement

Province	County	Villages effected	Information of effected area			Occupied land and resettlement			Percentage of occupied		
			Household	Population	arable land	Household	Population	arable land	Household	Population	arable land
Hunan	7	52	16405	72898	114815.6	4464	19213	10780.07	27%	26%	9%
	Linxiang	9	4725	20250	35870	1738	7447	2763.25	37%	37%	8%
	Yunxi	8	2461	10753	15301	541	2326	1397	22%	22%	9%
	Junshan	9	2123	7446	13159	729	2556	917.07	34%	34%	7%
	Huanggai	4	1069	5214	3732.61	314	1539	437.6	29%	29%	12%
	Junshan	7	1915	11524	17004	234	1408	1350.35	12%	12%	8%
	Huarong	14	4112	17684	29749	899	3871	3528	22%	22%	12%
	Jianxin	1				9	29	387			
Jiangxi	6	38	16112	69528	67939	2735	11546	5184	17%	17%	8%
	Ruichang	4	1755	6940	5743	9	52	321	1%	1%	6%
	Jiyoujiang	12	5059	22071	17018	414	2134	1292	8%	10%	8%
	Lushan	2	929	3565	4843	263	1185	586	28%	33%	12%
	Hukou	9	2941	12547	13810	90	448	1668	3%	4%	12%
	Pengze	11	5428	24405	26525	785	3338	1296	14%	14%	5%
	Xunyang					1174	4389	21			
Hubei	15	84	114165	417859	147235	5400	22100	6524.1	5%	5%	4%
	Zhijiang	15	40326	169370	30091	484	1728	1503	1%	1%	5%
	Jingzhou	3	1029	4411	1801	178	735	806.2	17%	17%	45%
	Songzi	1	647	2633	4171	8	33	70	1%	1%	2%
	Gongan	4	1287	6345	8677	25	98	195	2%	2%	2%
	Shishou	10	3179	14547	19307	286	1276	705	9%	9%	4%
	Jianli	12	3945	16572	22248	39	384	491.9	1%	2%	2%
	Honghu	3	40542	133827		2168	8671		5%	6%	
	Xinzhou	3	1468	5423	3580	31	128	36	2%	2%	1%
	Huangpo	5	1248	4189	6365	80	400	368	6%	10%	6%
	Hannan	2	835	2823	7497	162	689	240	19%	24%	3%
	Jiangxia	2	10509	24605	1169	226	808	300	2%	3%	26%
	Ezhou	12	4200	14636	23907	659	3430	1612	16%	23%	7%
	Huangzho	4	2529	8307	8050	795	2581	165	31%	31%	2%
	Tuanfeng	7	2049	8607	6947	218	912		11%	11%	0%
Yangxin	1	372	1564	3425	41	209	32	11%	13%	1%	
Total	28	174	146682	560285	329989.6	12599	52859	22488.17	9%	9%	7%

TABLE OF CONTENT

3. LEGAL FRAMEWORK AND RESETTLEMENT STRATEGY	3-1
3.1 INTRODUCTION.....	3-1
3.2 GUIDELINES AND REGULATION.....	3-1
3.2.1 <i>World Bank Guidelines</i>	3-1
3.2.2 <i>Governmental Acts and Regulations</i>	3-3
3.2.3 <i>Provincial Ordinances and Decrees</i>	3-4
3.3 COMPENSATION STANDARDS	3-6
3.3.1 <i>Determining Land Compensation Subsidies</i>	3-6
3.3.2 <i>Output Value Calculation of Cultivated Land</i>	3-7
3.3.3 <i>Land Compensation Unit Prices</i>	3-7
3.3.4 <i>Unit Prices for Temporarily Occupied Lands</i>	3-7
3.3.5 <i>Unit Prices for House Compensation</i>	3-7
3.3.6 <i>Unit Price for Auxiliary Buildings and Scattered Trees Compensation</i>	3-7
3.3.7 <i>Unit Price for Infrastructure Compensation</i>	3-7
3.3.8 <i>Unit Price for Resettlement Subsidy</i>	3-8
3.3.9 <i>Unit Price for Reconstruction of Public Utilities</i>	3-8
3.3.10 <i>Unit Price for Vulnerable Groups</i>	3-8
3.3.11 <i>Unit Price for Other Compensation</i>	3-8
3.4 SUMMARY AND CONCLUSIONS.....	3-8

TABLES

<i>Table 3-1 Laws and Regulations</i>	3-10
<i>Table 3-2 List of Compensation Investment Unit Price for YBFCP</i>	3-11
<i>Table 3-3 YBFCP Resettlement Entitlement Matrix</i>	3-15

ATTACHMENTS

<i>Attachment 3-1 Matrix on Compliance with WB OD 4.30</i>	3-16
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3. Legal Framework and Resettlement Strategy

3.1 Introduction

Chapter 3 outlines the principal PRC legislative and regulatory instruments governing resettlement and compensation in the project area. Both national laws and regulations, and provincial regulations are identified and applicable aspects described. Because the project will involve World Bank funding, this chapter also describes relevant World Bank policies. Compensation standards based on the legal framework described are also presented for each province in the project area.

3.2 Guidelines and Regulation

3.2.1 World Bank Guidelines

OD 4.30 – WORLD BANK OPERATIONAL DIRECTIVE (OD) ON ‘INVOLUNTARY RESETTLEMENT’ [REF 4]

The World Bank's operational policy guidelines on involuntary resettlement issued June 1990 (OD 4.30) [Ref 8].

Policy Objectives

- (a) Requires that no resettling family can be disadvantaged by the project and moreover, because the resettling families are among the "Project stakeholders", they should share in the project benefits. **Attachment 3-1** is a matrix, which lists the salient issues included in OD 4.30, and shows how these have been given due attention in the present report by citing the chapter sections which apply to each issue.
- (b) Resettlement shall be an integral part of the project engineering and is to be included in all project steps from initial stages of planning to completion of the program.
- (c) The resettlement planning must pay due attention to the following constraints:
 - i. Avoid the occurrence of, or reduce the number of non-voluntary resettlers to the extent feasible, with consideration being given to all possible alternatives.
 - ii. Prepare competent and detailed resettlement plans so that the resettling villages and associated villages and provision for family income will be ready to be operative when the resettlers are to be moved. All the non-voluntary resettlement measures shall be conceptualized and realized as development programs. Resettlers shall be provided with sufficient financial support and beneficial opportunities from the project.
 - iii. Before actual resettlement, resettlers shall obtain the whole compensation fees for their losses;
 - iv. Resettlers shall obtain assistance in the course of their resettlement and during the transition period at their resettlement areas as needed to meet the requirements stated in (a) above;

- v. Resettlers shall obtain the support as regards improving or at least restoring their previous living standards, their income-generating abilities and their production levels. Particular attention shall be paid to the needs from the poorest and most vulnerable among the resettlers.
- (d) Arrangement will be made so the resettlers will take part in resettlement planning and implementation. Appropriate social organizations shall be established. The existing cultural and social organizations among resettler communities and existing residents in the resettlement areas shall be supported and actuated as much as possible.
- (e) Resettlers shall be integrated into the existing residents in the host resettlement areas both socially and economically. This will help minimize the adverse impacts upon the said residents. The best way to realize such an integration shall be to relocate the resettlers in the areas enjoying the project benefits. Advanced negotiations with the said residents shall be necessary.
- (f) Land, housing, infrastructure and other compensation should be provided to the adversely affected population, indigenous groups, ethnic minorities, and pastoralists who may have usufruct or customary rights to the land or other resources taken for the project. The absence of legal title to land by such groups should not be a bar to compensation.

Resettlement Planning

- (g) Where large-scale population displacement is unavoidable, a detailed resettlement plan, timetable, and budget are required. Resettlement plans should be built around a development strategy and package aimed at improving or at least restoring the economic base for those relocated. Experience indicates that cash compensation alone is normally inadequate. Voluntary settlement may form part of a resettlement plan, provided measures to address the special circumstances of involuntary resettlers are included. Preference should be given to land-based resettlement strategies for people dislocated from agricultural settings. If suitable land is unavailable, non land-based strategies built around opportunities for employment or self-employment may be used.
- (h) The content and level of detail of resettlement plans, which will vary with circumstances, especially the magnitude of resettlement, should normally include a statement of objectives and policies, an executive summary, and provision for:
 - (i) organizational responsibilities; (ii) community participation and integration with host populations; (iii) socioeconomic survey; (iv) legal framework; (v) alternative sites and selection; (vi) valuation of and compensation for lost assets; (vii) land tenure, acquisition, and transfer; (viii) access to training, employment, and credit; (ix) shelter, infrastructure, and social services ; (x) environmental protection and management; and (xi) implementation schedule, monitoring, and evaluationCost estimates should be prepared for these activities, and they should be budgeted and scheduled in coordination with the physical works of the main investment project.

These provisions of OD 4.30 are described in detail in [Ref 8]. Attachment 3-1 is a matrix, which lists the salient issues included in OD 4.30, and shows how there have

been given due attention in the present report by citing the chapter sections, which apply to each issue.

OD 4.20 - WORLD BANK OPERATIONAL DIRECTIVE ON INDIGENOUS PEOPLES [REF 9]

- No such indigenous people have been identified in the project area, and thus this Directive has not been applied for the current project

OP 4.11 - WORLD BANK OPERATIONAL POLICY ON SAFEGUARDING CULTURAL PROPERTY IN BANK-FINANCED PROJECTS [REF 10]

- No known sites of significant archaeological, paleontological, historical, religious or unique natural-value are to be impacted by the proposed project and associated resettlement.

3.2.2 Governmental Acts and Regulations

A summary of the key PRC laws and regulations relevant for the YBFCP resettlement, is presented in Table 3-1.

3.2.2.1 National Requirements

(a) Land Management Act of the People's Republic of China 1998 [Ref.11]

This Act is the most authoritative in land utilization and planning in the PRC. Chapter 4 of the Act places much emphasis on the relocation of resettlers. According to clause 29, if the State-specified normal land compensation and resettlement subsidies fail to enable resettled farmers to restore their previous living standards, it shall be permissible for provinces, municipalities, and autonomous regions to increase their resettlement subsidies. However, the aggregate sum of land compensation and resettlement subsidies shall not exceed 20 times the annual average production value of the land purchased.

According to Clause 57, when project construction or geological surveys need to use State-owned land or land of collective ownership (of peasants) temporarily The land user should, according to the land ownership, signs land leasing contracts with relevant land management authorities or village committees, and pays land leasing compensations in accordance with the contract. The leasing period is one year, and the amount of compensation is based on the annual output of the leased land plus the costs associated with land leveling off and re-cultivation.

(b) Water Act of the People's Republic of China 1988 [Ref.12]

Clause 22 of the Act states that the local government shall be responsible for the production and living arrangements of resettlers in a proper way, where the national project construction requires resettlement. The costs due to such resettlement shall be included in the investment scheme for the project construction. The resettlement shall be completed as planned during the construction period.

(c) Land Compensation and Resettlement Regulation for Large and Medium-Sized Water Conservancy & Hydropower Projects, State Council promulgated Order No. 74, February 15, 1991 [Ref.13]

This Regulation is based upon the above-mentioned two Acts. It states that the State shall provide pre-construction compensations, subsidies and production support to support the development-oriented resettlement; that the relationships among the State, the collective and the individual shall be handled appropriately and the resettlement areas shall place the national interest before them; that compensations shall be provided to enable the resettlers to enjoy the same living standards as before, or even surpass them; and that higher compensation fees (to a limited extent) shall be provided to those resettlers whose life is the hardest.

(d) Design Regulation for Flooded Reservoir Area Treatment at Water Conservancy and Hydropower Projects, 1985, the Ministry of Hydropower [Ref.14]

Clause 4 in Chapter 4 of this Regulation states that economically justifiable reconstruction proposals for the flood-affected facilities such as highway, electric power, telecommunications, broadcasting and TV which are in need of reconstruction shall be presented following the guidelines of restoring their original scales and standards, or of restoring their original functions. The reconstruction-needed investment shall be included in the compensation investment for hydropower projects. Clause 4 also states that additional investments for increasing capacity or and raising standards shall be provided by the organizations concerned (i.e. not funded by compensation). Due compensations shall be provided to resettlement-affected facilities functional at the time of resettlement. The relevant authorities shall approve this.

(e) Investigation Details for the Reservoir-flooded Physical Substances at Water Conservancy and Hydropower Project, the Ministry of Hydropower, 1986, Chapters 1,2,3,5 [Ref.15]

This act describes prescribed standards for calculation of compensation values for structures affected by the project, as it applies to flood protection works in addition to reservoir projects.

(f) Standards for Village/Town Planning, the Ministry of Construction, September 27, 1993, 2) Classification of Villages and Towns; 4) Standards for Construction-occupied Land [Ref.16]

Clause 2 describes relevant planning for villages and towns, relevant for the design of new resettlement sites, while Clause 4 outlines calculation methods for unit prices of residential land, and serving infrastructure.

3.2.3 Provincial Ordinances and Decrees

(a) Hunan Province Land Management Implementation Method, Hunan Province, April 28, 1992, Chapter 4, Land for National Construction [Ref.17]

(a.i) Clause 21: Where land is purchased for construction purposes, the land user shall pay compensation fee for the land, its living crops and its belongings. The user shall also pay resettlement subsidies.

(a.ii) Clause 22: Additional resettlement subsidies shall be paid provided the amount of farmland per capita is too low so that the previous living standards of the farmers to be resettled cannot be maintained. Such conditions shall be examined by the land management authorities of the government above the county level (prefecture level)

and then submitted to the provincial government for approval. The aggregate of land compensation fee and resettlement subsidies shall not exceed 20 times the annual average production value of the land in the three years previous to land acquisition.

(a.iii) Clause 24: The owner of the land purchased shall be exempt from providing the stipulated cereals quota and agricultural tax, or provide smaller cereals quota for the State-purchased land. The above-county-level government shall handle the certified reduction and increased sales of the said quota where the construction project is located. The agricultural tax shall be exempted or reduced in compliance with the relevant regulations by the State.

(b) Hubei Province Land Management Implementation Method, Hubei Province, September 3, 1987 [Ref.18]

(b.i) Clause 6: For the State-purchased land, the new land user shall pay the purchasing fee at a rate given below. No permission shall be granted for a higher or lower rate without previous approval by the provincial government, unless otherwise specified by the State. No permission for drawing other fees or for making other requirements than those stipulated.

Compensation fees for land and attachments are required as follows:

- The resettlement subsidies to each agricultural person resettled due to farmland acquisition shall be 2-3 times the annual production value per mu farmland. These resettlement subsidies per mu farmland purchased shall not exceed 10 times the lands annual production value at its highest. The number of agricultural population to be resettled shall be calculated using the method as stipulated in clause 28 of Land Management Act.
- Resettlement subsidies for revenue generating, but shall be 2-3 times its annual production value.
- No resettlement subsidies shall be paid for non-revenue generating lands.
- Additional resettlement subsidies shall be made where the above mentioned land compensation and resettlement subsidies fail to enable the farmers to be resettled to maintain their previous living standards, upon approved by the provincial government. The aggregate of the land compensation and resettlement subsidies shall not exceed 20 times the annual production value of the purchased land.
- The land user of the purchased vegetable land in the suburbs shall pay the land development fund in compliance with the relevant specifications by the state.

(b.ii) Clause 7: The land compensation fee and resettlement subsidies shall be paid by the new land user to the landowner for planned use under the supervision of the land authorities. The landowner shall prepare the plan for use of the above fee and subsidies in compliance with the stipulations in clause 30 of Land Management Act [Ref 11]. This plan shall be examined and approved by the land management authorities of the governments at the city or county level. The compensation fee to the personal belongings and living crops on the purchased land shall be paid to the individual concerned.

(b.iii) Clause 10: After the levied land has been purchased, the reduction or exemption of its agricultural tax and specialty tax shall be handled following the agricultural tax reduction & exemption procedures, but shall be paid by the land user before their reduction & exemption.

(c) Jiangxi Province Implementation of Land Management Act, July 15, 1989, Chapter 4 – Land for use in State Construction [Ref.19]

(c.i) Clause 21: The land user shall pay the land compensation fee to the landowner for its land purchased by the State.

(c.ii) Clause 22: The land user shall pay the resettlement subsidies to the land owner for its land purchased by the State.

(c.iii) Clause 23: The land user shall pay compensation fees for belongings and living crops to the land owner for its land purchased by the State in compliance with Clauses 26 and 28 described below.

(c.iv) Clause 26: Additional resettlement subsidies can be paid where the farmland per capita is less than 2/10 mu on average and the land compensation fee and resettlement subsidies fail to enable the farmers in need of resettlement to maintain their previous living standards. This shall be approved by the provincial people's government. The aggregate of the land compensation and resettlement subsidies shall not exceed 20 times the annual production value of the purchased land.

(c.v) Clause 28: For the levied farmland, the landowner shall enjoy reduction or exemption of the agricultural tax concerned. The decreased or increased cereals quota shall be handled by the government authorities.

3.3 Compensation Standards

In accordance with the above described laws, resettlement compensation will include:

- (a) Relocation transfer compensation (four kinds: house, auxiliary facilities, scattered trees, transfer subsidy);
- (b) Land compensation(two kinds: cultivated land more than 1 mu and less than 1 mu);
- (c) Compensation for infrastructures;
- (d) Other cost (including survey and design cost, scientific research fee, project implementation management expenditure, technical training cost, supervising and monitoring cost);
- (e) Preparatory cost (including basic preparation cost, price difference preparation fee);
- (f) Total investment for resettlement (including static and dynamic investment);

3.3.1 Determining Land Compensation Subsidies

According to the Clause 5 of “Regulations on Land Compensation and Resettlement for Large and Medium-sized Water Conservancy and Hydroelectric Power Project” [Ref.13], under which the YBFCP is classified as large, compensation for cultivated

land acquisition will be three to four times the mean annual output value of the land over the previous three years. Resettlement compensation to individual farmers will be two to three times the mean annual output value/mu of that in previous three years. For large-sized flood-control and irrigation project, compensation standard may lower than the standard mentioned above.

From the Land Management Execution Method used in the three provinces, land and resettlement compensation rates, in compliance with the laws and regulations outlined above, are listed in **Table 3-2**, and described in Section 3.3.2.

A project entitlement matrix is presented in Table 3-3, defining criteria for eligibility, mode and magnitude of compensation and any other measures to mitigate project impacts.

3.3.2 Output Value Calculation of Cultivated Land

The annual output value of paddy field and dry land of the three provinces has been calculated based on the annual statistics of villages in the project area from 1996 to 1998, mean unit output of various kinds of crops, annual increase rate and current market price of agricultural products in the project areas.

3.3.3 Land Compensation Unit Prices

Lands compensated for include paddy field, dry land, market garden, water pond, forest land, garden plot, house foundation and other land. Compensation unit prices have been calculated based on the output value of cultivated land, land compensation times and relative land management regulations.

3.3.4 Unit Prices for Temporarily Occupied Lands

The leasing period is one year, and the amount of compensation is based on the annual output of the leased land plus the costs associated with land leveling off and re-cultivation.

3.3.5 Unit Prices for House Compensation

House compensation includes two kinds: one for private house (rural living house, town living house) and the other for public buildings (enterprise and government buildings).

3.3.6 Unit Price for Auxiliary Buildings and Scattered Trees Compensation

Auxiliary buildings mainly include brick wall, cement ground, water well, simple buildings, water tower, tombs. It is divided in two kinds: public houses and private houses. Table 3-2 shows the detailed unit price for auxiliary building and scattered tree compensation.

3.3.7 Unit Price for Infrastructure Compensation

Infrastructures include communication, telecommunication, power supply, broadcasting, water supply facilities and some special facilities. Compensation standard for each province has been worked out in accordance with the planning and typical design as well as corresponding project standard.

3.3.8 Unit Price for Resettlement Subsidy

The unit compensation estimated for resettlement subsidy has been calculated based on several factors. These include costs incurred for materials' relocation from original site to the new resettler area. The subsidy also includes the material loss resulting from transfer of the resettler population and any delays caused in achieving the relocation process including the time spent in temporary accommodation waiting upon the completion of resettler housing.

3.3.9 Unit Price for Reconstruction of Public Utilities

The unit prices set for reconstruction of public utilities in settlement areas have been based on land acquired in the resettlement area, the land leveling and preparation cost, construction of roads and highways, tap water supply, drainage, power supply and other utility appurtenances.

3.3.10 Unit Price for Vulnerable Groups

Additional allowance has also been made for compensation to vulnerable groups and economically disadvantaged people including the elderly, orphans, widows and female headed households and other economically disadvantaged.

3.3.11 Unit Price for Other Compensation

This includes compensation for design, plan and construction of new townships for resettlers and the cost incurred in their relocation to new township areas.

3.4 Summary and Conclusions

Chapter 3 describes the legal framework against which the YBRCP Resettlement Action Plan has been prepared. These include both the international and national guidelines and regulations. The World Bank operational directives on Involuntary Resettlement (OD 4.30), on Indigenous Peoples (OD 4.20) and the Operational Policy on Safeguarding Cultural Property in Bank-financed Projects (OP 4.11) have been studied and the RAP investigated for compliance against these. **Attachment 3-1** of Chapter 3 lists all requirements given in WB OD 4.30, and shows the numbers of the report chapter sections which describe the compliance actions.

Appropriate national regulations pertain to land and water resource management. Key regulations studied and used for design of RAP include the Land Management Act of People's Republic of China, 1998, Water Act of People's Republic of China, 1998, the Land Compensation and Resettlement Regulation for Large and Medium Sized Water Conservancy and Hydropower Projects, 1991 and other national and provincial ordinances and decrees of Hunan, Hubei and Jiangxi provinces on land management.

The key principles of YBFCP resettlement compensation have been designed based on these laws and regulations. The guiding principle has been to award compensation costs to the resettlers such that their original standard of living is maintained at the least. Compensation standards have been worked out for (i) land, (ii) housing, (iii) auxiliary buildings and trees, (iv) relocation and transfer, (v) public utilities in settlements, (vi) relocation allowances, (vii) vulnerable and economically weaker groups, and (viii) infrastructure and special facilities.

Average compensation costs for private housing range from 50-70 yuan/m² for auxiliary structures to a maximum of 270-320 yuan/m² for brick-concrete housing. Enterprises and public/institutional buildings' compensation range from a minimum of 60 yuan/m² to a maximum of 500 yuan/m² between the three provinces. Land compensation has been calculated for each resettled family on a per mu basis for two categories of land, one for per capita cultivated land holdings of less than 1mu and another for more than 1 mu. The compensation ranges from 3,000 yuan/mu. (for other miscellaneous land) to 8,409 yuan/mu. (for paddy field) in the former category to 3,000 yuan/mu. (forest land) to 8,096 yuan/mu. in the latter.

Use of these procedures is essential for contributing to achieving the basic resettlement goal, namely that all families involved in resettlement will not be disadvantaged by the project and instead, to the extent feasible, will share in project benefits.

Table 3-1 Laws and Regulations

<i>Legal Instrument</i>	<i>Date of Issue</i>	<i>Clauses</i>	<i>Applicable Chapters and Clauses</i>
I. Laws			
1. Land Management Law of China	1998.8	The primary land utilization planning law in China; Chapter 4 emphasizes resettlement issue, in Clause 29: if the nationally certified compensation could not recover the living standard of the resettler, the compensation can be increased. However, the maximum amount of compensation is 20 times the annual output of the acquired land.	Chapter 3 & 4
2. Water Law of China	1988	Clause 23: With the resettlement incurred by the construction of national hydrological projects, local governments are responsible for the arrangement of the resettlers' livelihood and production. This cost is incorporated into the project construction investment plan. The resettlement work should be completed on schedule.	Chapter 3
II. Regulations			
1. Land Acquisition and Resettlement Compensation Regulation for Medium to Large Hydropower Projects	1991.2.15	Developmental resettlement through compensation and production support; the benefits of nation, organization and individual should be balanced, with the priority on national interests; the living standard of the resettler should reach or exceed ones original level through compensation; compensation could be raised in case of genuine difficulty.	Chapter 3 & 4
2. Design Specifications for Inundation Treatment of Hydropower Projects	1985	Issued by the Ministry of Water Resources	Chapter 3
3. Investigation Guidelines for Physical Index Investigation of Hydropower Project Inundation	1986	Chapter 1, 2, 3 and 5	Chapter 3
4. Rural Planning Standard	1993.9.27	2. Scale of villages/township classified; 4. Land utilization criteria for construction	Chapter 3 & 4
5. Contractual Terms for Hydropower Project Construction		The content and usage of general terms and terms for a specific purpose	Chapter 8
6. Regulations regarding the implementation of land management by the provinces		Relevant national regulations regarding land compensation criteria	Chapter 3 & 4
III. World Bank Guidelines	1992	Operational Policy 4.12 Involuntary Resettlement	See Attachment 3-1

Table 3-2 List of Compensation Investment Unit Price for YBFCP

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
1. Settlement					
1.1 Buildings					
1.1.1 Public Buildings					
Framework	m ²		500	358	
Brick-concrete	m ²	345	360	250	
Brick-wood	m ²	260	270	185	
Clay/wood	m ²	195			
Miscellaneous	m ²	60	75	68	
1.1.2 Private house					
			Rural/urban		
Brick-concrete	m ²	269	270/320	230	
Brick-wood	m ²	203	240/260	165	
Clay/wood	m ²	153			
Miscellaneous	m ²	50	60/70	58	
1.2. Auxiliaries					
1.2.1 Private-owned					
			Rural area/town		
Fence	m ²	20	24/26	23	
Sun-drying ground	m ²	12	20/22	20	
Water pond	m ³	80			
Well	pce		1,000/1,000	1,000	
Pressure well	pce	70		250	
Simple structure	pce		50/50	50	
Tomb	pce	100	190/190	185	
1.2.2 Public-owned					
Concrete Fence	m ²		28	25	
Concrete Ground	m ²		25	22	
Water Tower	m ³		6,000	(per 2,500	
Well	pce		2,000	1,500	
Simple Structures	pce		60	50	
1.3 Tree	pce	20	30	30	

Table 3-2(Cont.)

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
1.4 Resettlement Subsidy			Rural/ Town		Hubei for each household
Materials Relocation	person	50	500/550	100	
Materials Loss	person	50	350/450	60	
For work delay	person	100	400/500	200	
For housing during relocation	person			60	
1.5 Reconstruction of Public Facilities					FOR HUBEI: TOWNSHIP BUILDING IN HOST AREA/TOWNSHIPS
Land acquisition in resettlement area	mu		7,000/ 10,000	6,328	
Land leveling	HH		800/1320	1,028	
Roads	HH		280/1280	240	
Tap water	HH		280/800	6,400	
Drainage	HH		200/640	200	
Power supply	HH		320/720	280	
Others	HH		240/820		
1.6 Other Compensation	person			120	
RS area township construction	HH		300		
Subsidy for moving to towns	HH		350		
1.7 Vulnerable Groups Housing	HH				
Elderly orphans and widows	HH		3,000	3,000	
Female headed households and inadequate male labor force communities	HH		4,000	4,000	
1.8 Vulnerable Groups Livelihood Subsidy	person	600	600	600	

Table 3-2(Cont.)

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
2. LAND COMPENSATION	HH				
2.1 Per capita cultivated land less than 1 mu				7,460	
(1) Paddy field	mu	8,409	8,096		
(2) Dry land	mu	5,007	5,275		
(3) Market garden	mu	8,409			
(4) Water pond	mu	8,409	4,950	4,500	
(5) Forest land	mu	3,835	3,000	3,500	
(6) Garden plot	mu	5,990			
(7) House Plot	mu	3,456			
(8) Other land	mu		3,000	3,500	
2.2 Per capita cultivated land more than 1 mu	mu				
(1) Paddy field	mu	6,932	8,096		
(2) Dry land	mu	3,854	5,275		
(3) Market garden	mu	6,932			
(4) Water pond	mu	6,932	4,950		
(5) Forest land	mu	3,835	3,000		
(6) Garden plot	mu	3,835			
(7) House Plot	mu	4,425			
2.3 Temporary land requisition	mu				
Cultivated land	mu		1,800	3,500	

Table 3-2(Cont.)

Description	Unit	Unit price (yuan)			Remarks
		Hunan	Hubei	Jiangxi	
3. Special facilities					
3.1 Roads	km		250,000		
3.2 Simple Roads	km	169,038	170,000		
3.3 Tractor Road	km	12,531			
3.4 Power facilities	km				Overhead transmission line will take Jiangxi's as the Unit
(1) Low-voltage lines	km				
380v transmission line	km		12,000	1,000	
220v transmission line	km	9,127	9,000	1,000	
(2) High-voltage lines	km				
35kv transmission line	km		35,000		
10kv transmission line	km	22,525	23,000	2,000	
(3) Transforming facilities	set	3,000			
4. Telecommunication Lines	km	12,860	13,000	1,000	
5. Broadcasting Lines	km	8,000	8,000		
6. Cable T.V Lines	km		10,000		
7. Steel Tower	pole		150,000		
8. Tap Water Trunk Lines	km	50,000	70,000		

Table 3-3: Project Entitlement Matrix

<i>Project Impact</i>	<i>Affected Population/Entity</i>	<i>Compensation Policy</i>	<i>Other Measures</i>
Loss of arable land resulting from permanent land acquisition	Arable land, vegetable garden, trees and orchard areas, reservoirs/ponds, located in the path of dyke strengthening and the farmer and worker population working these land areas	<input type="checkbox"/> Provision of equivalent land nearby (if available); <input type="checkbox"/> Cash compensation to village for arable land for both more and less than 1 mu/family categories (compensation unit prices based on output value of cultivated land, land compensation times and relative land management regulations); <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Readjustment of village land within affected villages and host villages where applicable; <input type="checkbox"/> Use of cash compensation for farm intensification, crop diversification and other land development and agricultural extension techniques for more efficient use of land.
Loss of land from temporary land acquisition	Arable and cultivable land located in the path of dyke strengthening	<input type="checkbox"/> Compensation for temporary land acquisition based on the annual output of the leased land plus the costs associated with land preparation and re-cultivation; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Return of temporary land to the land user after use.
Loss of settlements (including housing, auxiliary buildings, scattered trees and transfer subsidy)	Housing and auxiliary buildings in the path of dyke strengthening and the residential population living in the houses	<input type="checkbox"/> Compensation for housing including private housing (rural and urban); <input type="checkbox"/> Replacement land for households to be provided within the original village (internal settlement), if available; <input type="checkbox"/> If replacement land not available provide alternative household/enterprise location as close to the original location as possible (collective resettlement); <input type="checkbox"/> House-for house replacement in urban areas; <input type="checkbox"/> Cash compensation based on original house area to urban resettlers; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Building materials may be salvaged from old housing or enterprise building to be utilized in new structures; <input type="checkbox"/> Assistance to be provided to the resettlers in procurement of labor and material for construction of new housing; <input type="checkbox"/> Provisions to be made for temporary housing and financial assistance accorded where rental support needed for temporary accommodation; <input type="checkbox"/> Transportation/relocation allowance to be provided to the resettlers on household basis.
Loss of crops	Crops located in the path of dyke strengthening	<input type="checkbox"/> Cash compensation to affected farmers based on the average of the previous three years production value	<input type="checkbox"/> Crop loss to be minimized to the extent possible by avoiding acquisition during harvesting

Table 3-3: Project Entitlement Matrix

<i>Project Impact</i>	<i>Affected Population/Entity</i>	<i>Compensation Policy</i>	<i>Other Measures</i>
Loss of enterprises	Enterprise and workers employed with the enterprises	<input type="checkbox"/> Compensation for land and reconstruction of enterprises' structure/buildings and facilities; <input type="checkbox"/> Compensation for loss in production and relocation of enterprises; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Provision for continuance of employment of workers affected from enterprise relocation during the transition period through provision of temporary premises, or compensation for lost wages.
Loss of settlement utilities	Water supply, power and sanitation in resettled houses and enterprises	<input type="checkbox"/> Compensation for reconstruction /reconnection to water supply/ electricity/ sanitation (previous infrastructure); <input type="checkbox"/> Detailed compensation rates in Table 3-2.	
Loss of public infrastructure	Roads, power supply, water supply, telecommunication and media broadcast facilities in the affected areas	<input type="checkbox"/> Compensation to owners/operators for infrastructure replacement; <input type="checkbox"/> Detailed compensation rates in Table 3-2.	<input type="checkbox"/> Prompt allocation of land for reconstruction of public infrastructure including labor and material.
Impact to vulnerable groups	Elderly, orphans, widows, and female headed households being resettled	<input type="checkbox"/> Additional cash allowances provided to vulnerable and economically disadvantaged groups; <input type="checkbox"/> Detailed compensation rates in Table 3-2	<input type="checkbox"/> Prompt payment to vulnerable and economically disadvantaged groups early in the resettlement process.
Loss of cultural property	No significant impacts arising from the project	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable

Based on:

- (a) Land Management Act of the People's Republic of China 1998
- (b) Water Act of the People's Republic of China 1988
- (c) Land Compensation and Resettlement Regulation for Large and Medium-Sized Water Conservancy & Hydropower Projects, State Council promulgated Order No. 74, February 15, 1991
- (d) Design Regulation for Flooded Reservoir Area Treatment at Water Conservancy and Hydropower Projects, 1985, the Ministry of Hydropower
- (e) Investigation Details for the Reservoir-flooded Physical Substances at Water Conservancy and Hydropower Project, the Ministry of Hydropower, 1986
- (f) Standards for Village/Town Planning, the Ministry of Construction, September 27, 1993, 2) Classification of Villages and Towns; 4) Standards for Construction-occupied Land
- (g) Hunan Province Land Management Implementation Method, Hunan Province, April 28, 1992, Chapter 4, Land for National Construction
- (h) Hubei Province Land Management Implementation Method, Hubei Province, September 3, 1987
- (i) Jiangxi Province Implementation of Land Management Act, July 15, 1989, Chapter 4 - Land for use in State Construction

Attachment 3-1 YBFCP/RS Program Response to World Bank Operational Directive 4.30

WB Operational Directive No.	Guideline Items (Brief Description)	Not relevant for YBFCP	Entire Report Is Pertinent	Applicable Chapter Sections
OD 4.30	OPERATIONAL DIRECTIVES		X	
1	RS program must be carefully planned and implemented to achieve RS target noted in Item 4 below.			
2	Policy applies to all components of projects scheme changes in land/water use result in RS, which involve Bank financing of all or part of project.			Ch 2
3	<i>Project RS planning (by Borrower) must explore all feasible alternatives in order to avoid/minimize needs for IRs</i>			Ch1
4	RS program target is that RS families are not to be disadvantage by project and also should share in project benefits to extent feasible.		X	
5(a)	RS families must be: (i) Informed about their options and rights; (ii) Consulted on selection of feasible RS alternatives; (iii) Given prompt/full compensation for losses due to project; (iv) Where replacement farmland is applicable, its productive potential must be not less than original situation; (v) Furnished with assistance during transition period so family income level is not diminished.			Sec 3.3, Ch4, 7.4, 7.5
5(b)	RS assistance is given to RS families who have "customary" rights to land/other resources as well as to families with formal rights.	X		
5(c)	RS communities must be timely informed on RS planning and consulted with on, and offered opportunity to participate in the planning/implementation/monitoring aspects of RS program.			Sec 7.5
5(d)	Host communities involved in RS program must be timely informed and consulted with on planning/implementation/monitoring aspects of RS program.			Sec 7.8
5(e)	RS plan must preserve existing social/cultural aspects of villages to be displaced and of host communities to extent feasible.		X	
5(f)	RS families are not to be moved until after compensation for losses paid and new housing/community/income situation is ready to receive them.			Ch9, Sec 7.4, 10.2
5(g)	RS program implementation must be adequately monitored.			Ch 9
ELIGIBILITY FOR BENEFITS				
6	Borrower develops procedure, acceptable to Bank, which establishes criteria for identifying RS families eligible for compensation/RS assistance, including public consultation and census.			Sect. 7.4, Tab 3.3
7(a)	Displaced families with legal rights to their uses of land/water are eligible for RS benefits.			
7(b)	Displaced families without legal but with customary rights (at time of census) are also eligible	X		
8	Display families who have been illegally using land/water are not entitled to RS compensation but are entitled to other RS	X		
RESETTLEMENT PLANS				
9	Borrower must prepare RS plan which conforms to OD4.30 policy and which is coordinated with project EA. (OP 4.01)		X	
10	Borrower must incorporate RS plan into Project Implementation Plan			Ch 10
Organizational Responsibility				
11	(a) Borrower/implementing agency should prepare organization framework for managing RS as early as possible in project preparation period.			Sec 6.7
	(b) If necessary, RS planning/implementing capabilities of borrower/implementing agency should be strengthened in a variety of ways, including creation of special RS unit within project entity including involvement of other Govt. line agencies and non-governmental organizations (NGOs)			Sects. 6.9, 6.5
Community Participation in Relocation				
12	RS plan should move people in community groups to retain existing social patterns to extent feasible.			Ch 4
13	Public consultation with RS families and host communities is essential in RS planning/implementation including consultation with vulnerable groups			Sect. 7.4
14	RS plan should ensure that conditions in host communities do not deteriorate due to RS program.			Sec 7.8
15	Prompt and due delegation of responsibility from Resettlement offices to resettlers to inculcate a sense of self-management			Sec 7.4
Socioeconomic Survey				
16	RS plan to be based on recent socio-economic profile of the displaced population			Ch 4
Legal Framework				
17	RS plan to be based on all applicable national and provincial laws and regulations			Ch3
Alternative Sites and Selection				

Attachment 3-1 YBFCP/RS Program Response to World Bank Operational Directive 4.30

WB Operational Directive No.	Guideline Items (Brief Description)	Not relevant for YBFCP	Entire Report Is Pertinent	Applicable Chapter Sections
18	Very important in RS planning to identify feasible alternative RS sites including consideration of family income potentials, so best alternative may be selected.			Ch 4
19	Successful RS requires timely transfer of responsibility from RS agencies to resettlers.			Sec 7.4
Valuation of Compensation for Lost Assets				
20 (a)	RS family which loses farmland production less than 20% of total, is to be compensated for losses by cash and/or land replacement with potential productivity so RS family does not lose.			Sec 4.4
20 (b)	Similar provisions as in Item 5(a) where loss is over 20%.			Sec 4.4
20 (c)	Loss to intangible assets like public services, customers and supplies (trade loss) to be compensated by providing better access to RS areas			Ch 4
20 (d)	Impact on vulnerable groups to be minimized with compensation and alternative income earning strategies			Ch 4
Land Tenure, Acquisition and Transfer				
21	RS plan to review main land tenure transfer system incl. common property and nontitle-based usufruct systems in devising compensation			Ch 4
Access to Training, Employment and Credit				
22	RS plan to propose strategies for alternative employment and training in situations where resettlement results in complete loss of livelihood			Sec 4.4, 6, 8.2
Grievances				
23	RS plan must include plan for resolution of grievances which is practicable in terms of ongoing practices for settling disputes.			Sec 7.7
Shelters, Infrastructure and Social Services				
24	RS plan should allow resettlers to "self-build" houses at their option.			Sec 4.3
Environmental Protection and Management				
25	RS plan must be environmentally sound, hence most incorporate environmental protection measure as specified in project EA. as related to RS.			Sec 8.3, 6.4, Ch 9
Implementation, Schedule, Monitoring and Evaluation				
26	RS monitoring units should be adequately funded and staffed by RS specialists.			Ch 9
IMPLEMENTATION AND SUPERVISION				
27	Frequent reviews of progress including periodic in-depth reviews are highly desirable.	X		
LEGAL AGREEMENTS				
28	Legal agreements for RS program are to be reflect key elements of program and Borrower keeps Bank informed on implementation progress.			Sec 8.2
PROJECTS WITH MULTIPLE SUBPROJECTS				
Sector Investment (SI) and Financial Intermediary (FI) Loans				
29	For SI loans Borrower submits to Bank RPF(resettlement policy framework) which is consistent with OD 4.30 policy and which includes information noted in Item 14.	X		
30	For FI loans, same as for Item 14.	X		
31	For loans for subprojects under SI or FI loans, Borrower submits RS plan complying with OD 4.30 policy, before subproject appraisal.	X		
Other Projects with Multiple Subprojects				
32	For subprojects not under SI/FI loans, Borrower submits draft RS plan, before appraisal, with certain exceptions as given in Item 17.	X		
Delegation of Approval Authority				
33	Provisions for delegation of authority, for subprojects under Items 14, 16,17, to carry out RS planning.	X		
Assistance on RS Issues				
34	Bank may furnish assistance on:			
	(a) Various RS planning aspects;	X		
	(b) Various financing of technical assistance to strengthen capabilities of agencies responsible for RS;	X		
	(c) Various financing technical assistance on policies, strategies, and specific RS planning;		X	
	(d) Various financing investment costs of RS.	X		

TABLE OF CONTENTS

4. RESETTLEMENT PROGRAM.....	4-1
4.1 INTRODUCTION.....	4-1
4.2 RESETTLEMENT GUIDELINES.....	4-1
4.3 HOUSEHOLD RESTORATION.....	4-2
4.3.1 <i>Guidelines for Household Restoration.....</i>	4-3
4.3.2 <i>Guidelines and Procedures for Resettlement Sites Selection.....</i>	4-3
4.3.3 <i>Internal Resettlement.....</i>	4-3
4.3.4 <i>Collective Resettlement.....</i>	4-5
4.3.5 <i>Direct Cash Compensation.....</i>	4-9
4.4 PRODUCTION AND INCOME RESTORATION.....	4-9
4.4.1 <i>Principles.....</i>	4-9
4.4.2 <i>Tasks.....</i>	4-9
4.4.3 <i>Target for Production Restoration.....</i>	4-10
4.4.4 <i>Analysis of Production Capacity.....</i>	4-10
4.4.5 <i>Proposed Income Restoration Programs.....</i>	4-12
4.4.6 <i>Forecasting of the Resettlers' Standard of Living.....</i>	4-13
4.4.7 <i>Investment Estimation of Production Rearrangement.....</i>	4-13
4.4.8 <i>Adequacy of Land Compensation Funds for Production and Income Restoration Programs.....</i>	4-13
4.4.9 <i>Temporarily Occupied Lands.....</i>	4-14
4.5 RESTORATION OF INFRASTRUCTURE AND ENTERPRISES.....	4-14
4.5.1 <i>Principle and Standard.....</i>	4-14
4.5.2 <i>Reconstruction of Infrastructure.....</i>	4-15
4.5.3 <i>Relocation and Reconstruction Planning for Enterprises.....</i>	4-16
4.6 SUMMARY AND CONCLUSIONS.....	4-17

TABLES

Table 4-1 <i>Resettlement Planning by Counties.....</i>	4-20
Table 4-2 <i>Safety Platform Infrastructure and Main Work Quantities.....</i>	4-21
Table 4-3 <i>Resettlement Planning for Hunan Province.....</i>	4-22
Table 4-4 <i>Resettlement Planning for Hubei Province.....</i>	4-25
Table 4-5 <i>Resettlement Planning for Jiangxi Province.....</i>	4-30
Table 4-6 <i>Production Resettlement Target for Rural Resettlers.....</i>	4-32
Table 4-7 <i>Cultivated Land Capacity of Affected Townships in Hunan Province.....</i>	4-33
Table 4-8 <i>Cultivated Land Capacity for Rural Resettlers in Jiangxi Province.....</i>	4-36
Table 4-9 <i>Analysis of Cultivated Land Capacity in Hubei Province.....</i>	4-39
Table 4-10 <i>Production Resettlement Planning.....</i>	4-42
Table 4-11 <i>Family Income Level Comparison Before and After Resettlement.....</i>	4-43
Table 4-12 <i>Budget Estimate for Production Resettlement.....</i>	4-45
Table 4-13 <i>Investment Balance for Land Compensation and Production Resettlement Costs.....</i>	4-46
Table 4-14 <i>Planned Investment for Community Infrastructure.....</i>	4-47
Table 4-15 <i>Summary of Compensation Costs for Enterprises.....</i>	4-48

4. Resettlement Program

4.1 Introduction

The Yangtze Basin Flood Control Project being flood-protection project, is widely acceptable to the residents in the project area, including those in the area where their land will have to be occupied by the project resulting in their resettlement. To ensure those who will be affected by land, housing or employment losses are able to take advantage of the benefits of the project, the following program has been developed to compensate and manage resettlement impacts, with the objectives of overall providing a meaningful improvement in the economic and quality of life conditions in the affected areas, such that no affected people will be disadvantaged by the project. Chapter 4 presents the Resettlement Program, which is designed to achieve these objectives. In particular, the Resettlement Program presented in Chapter 4 is designed to meet both Chinese Government requirements, and World Bank requirements as spelled out in Operational Directive 4.30, Involuntary Resettlement [Ref 8].

4.2 Resettlement Guidelines

In compliance with relevant legislation, acts, ordinances, decrees and regulations, and drawing on resettlement experiences from the completed major water resource development projects in China, HnPP1, HbPP1 and JPPI have preliminarily prepared the following guidelines for resettlement:

- a) Affected agricultural population shall be resettled mainly on the State-owned land, but they shall also be offered various job opportunities as a supplement.
- b) Efforts shall be made to minimize the duration and potential obstacles during transition period for resettlement. During transition period, appropriate technical and financial assistance will be provided (for providing opportunities in agriculture and tertiary activities) with the objective of creating practical support to the social and economic reestablishment of resettlers. The basic social, cultural and occupational characteristics of the project-affected population shall be given due consideration in developing alternative employment opportunities, when job changes have to be made. Economic activity changes shall be made on a voluntary basis.
- c) Procedure for readjustment/reassignment of land between resettlers and hosts should be acceptable to both parties, and the necessary support for recovering production and income restoration also available to both parties.
- d) Planning of the resettlement program shall include attention to comments from the project-affected peoples.
- e) Efforts shall be made to shorten resettlement distance. Opportunities shall be provided for collective resettlement.
- f) Resettlement areas and house layouts shall be made better than before.
- g) Resettlement program shall be prepared in a way not to reduce farming income levels.
- h) Resettlement program shall be implemented in an organized way so as to ensure its timely and effective implementation under supervision and evaluation;

- i) The capital investment for the resettlement program shall be provided in time. The community and livelihood restoration plan shall be an integral component of the resettlement program;
- j) Resettlement generated social, economic and environmental impacts shall be minimized and mitigated to an acceptable level.
- k) The functions of the affected roads, telecommunications, power supply and other infrastructure shall be restored or furnished, to give similar of even standards of performance.
- l) Job opportunities shall be provided in the labor force in cases where farmland sharing is not sufficient to reach the expected income goals.

4.3 Household Restoration

From March to August 1997, the specialists from the HnPPI, HbPPI, and JPPI carried out site reconnaissance of the project resettlement area. This reconnaissance was supported by respective local governments and authorities. In response to different characteristics of villages and towns, and to the resettler preferences (see Chapter 7 section 7.4), alternative programs have been designed for livelihood and community restoration. These programs include internal resettlement, collective resettlement (to existing sites, and newly established resettlement residence districts in towns and cities, and safety platform settlements), replacement housing in urban areas, and cash compensation for houses. Infrastructure planning has also been completed to ensure a reliable and pleasing environment for the work and life of resettlers.

Some 12,599 families with 52,859 people in the project area will have to be resettled, including 4,464 families with 19,213 people in Hunan, 5,400 families with 22,100 people in Hubei and 2,715 families with 11,546 people in Jiangxi. The current plan involves alternative relocation arrangements as follows:

Resettlement Type	Number of HH	Number of People
Internal Resettlement (resettlement of rural households within the existing village area)	5,670	25,499
Collective Resettlement (relocation to new residential areas in rural and urban sites (as appropriate), urban resettlement to apartment blocks and rural safety platform sites)	5,712	22,760
Cash Compensation (when urban resettlers opt to relocate to another area or for alternative accommodation)	1,217	4,600
TOTAL	12,599	52,589

A further breakdown of modes of resettlement is provided in **Table 4-1**.

4.3.1 Guidelines for Household Restoration

- a) The infrastructure conditions (incl. water, electric power and road) shall not be at a lower level than those before resettlement.
- b) The houseplot area for countryside resettlers shall not be smaller than the State-permitted minimum requirement.
- c) The transition period for house building by resettlers shall not be longer than 3 months.

4.3.2 Guidelines and Procedures for Resettlement Sites Selection

4.3.2.1 Guidelines

Resettlement sites shall have:

- a) good topographical and geological conditions as well as reliable drinking water source;
- b) be suitable for production development;
- c) be favorable for production, convenient for living and management;
- d) preserve existing land uses by minimizing proposed use of occupied land;
- e) have sufficient capacity for potential population growth;
- f) lay out house groups to suit topography featuring lighting, ventilation, sanitation and landscaping;
- g) design house groups to suit resettlers' needs and their financial capabilities.

4.3.2.2 Procedures

In compliance with the above guidelines, the local governments and relevant staff of the PPIs undertook potential resettlement site selection, made overall assessments of the selected sites as regards their geology, topography, access, electric power, water resources, etc, taking into consideration of the resettlers' production and living requirements (farming radius) before finalization of site selection through negotiations with resettlers' representatives and local government at the host area.

4.3.3 Internal Resettlement

4.3.3.1 Resettlers and Resettlement Range

This individual, or internal resettlement to a nearby site back-set from the dyke shall be based on the resettlement guidelines, local conditions and resettlers' requirements. Such resettlement shall range within the administration area of the village, and be at a safe place at least 50-70 m away from the newly built dyke.

4.3.3.2 Resettlement Sites

According to a preliminary plan, a total of 136 villages administration areas will undergo such internal resettlement. This will include 5,670 families with 25,499 people, as outlined below.

	Sites	Households	Population
Hunan	50	2,136	9,141
Hubei	58	2,187	9,564
Jiangxi	28	1,347	6,194
Total	136	5,670	25,499

In cases of internal resettlement, the maintenance of resettler income will be based on the continuation of farming or other activities conducted before resettlement. Where land is lost, the production restoration program described in Section 4.4 accounts for re-allocation of village lands and land compensation investment in land, enterprise and industry development as relevant for each individual village.

4.3.3.3 Houseplot Areas

Standards for houseplot areas (including housing, yard and other structures) are set in accordance with relevant acts ordinances, and land management implementation methods of local authorities. Standards for this project shall be as follows:

Hunan Province	130-210 m ² /family
Hubei Province	140-200 m ² /family
Jiangxi Province	35 m ² . /person (approx. 150.5 m ² /HH)

4.3.3.4 House Reconstruction

The houses for separate resettlers shall be rebuilt by the settlers themselves. Land purchasing for such house foundations shall be handled by local resettlement authorities and national land administration. House types A, B, C, (see **Part B Figures 4-6**) have been designed in accordance with the land occupation quota, housing compensation level, resettlers' requirements and local customs. Resettlers can select the house type and rebuild their houses based on their requirement and economic capabilities. They can also design their houses on their own.

A typical house has its building area not in excess of 140 m²/family. Both front yard and backyard are provided to each house. A further layout has been designed for lower income groups, which can be developed, to a 2-storey structure to suit better economic capacities in the future.

4.3.3.5 Infrastructure and Community Services

No separate planning of infrastructure and community services shall be conducted because the above-mentioned individual resettlement program shall occur internal to the village and thus be based mainly on the existing facilities. The compensation of the project-affected infrastructure and community services shall be made in accordance with the rate derived from their typical analysis. The guidelines for restoration of their original size, original standard and original function shall be observed for reconstruction works. In addition, local authorities concerned shall concentrate capital or properly increase investment for better construction layout in a unified manner. Its aim shall improve the existing facilities to a certain extent.

4.3.4 Collective Resettlement

Collective resettlement shall involve 5,712 families with 22,760 people. Hunan, Hubei and Jiangxi have carried out overall analysis of such elements as geologic and topographic suitability and existing access, power supply, telecommunications, and water availability to select 35 sites with the necessary productive capacity and convenience of facilities for collective resettlement. These sites will be of three types:

1. Towns or Communities – where new housing areas can be constructed in existing communities
2. Township Blocks – where new residential blocks will be developed for resettlers
3. Safety Platforms – elevated platforms will be built nearby to villages, on top of dykes where residential housing will be constructed.

4.3.4.1 Resettlement in Townships

Resettlers

Resettlers will relocate into new residential areas within township areas. Resettlers will be largely from existing rural areas close to Township centers, and while some loss of productive lands will result, most resettler income restoration will be based on continued use of productive lands.

Residential Houseplot Standards

Hunan Province	180 m ² /HH
Hubei Province	30-45 m ² /person (approx. 129-193.5 m ² /HH)

Resettlement Program

Hunan has identified 4 towns or communities for collective resettlement of 513 families with 2,141 people; Hubei has selected 3 towns or communities for collective resettlement of 124 families with 515 people, totaling 637 families with 2,625 people for these two provinces. This type of resettlement will not be undertaken in Jiangxi.

House Reconstruction

House shall be rebuilt according to planning requirements. Several house types shall be designed to the needs of resettlers. For details of the typical house designs, see **Part B Figures 9-12**.

Infrastructure and Community Services

Main infrastructure and community services for resettlement purposes are in existence at the new sites. They consist of trunk roads, water supply and drainage, electric power, telecommunications system, shopping center, trading ground, school, hospital, etc. To promote the expansion of towns or communities for resettlement and ensure due implementation of the YBFCP, the resettlers will access the already completed or would-be-completed main infrastructure and community services. Land purchasing and grading, trunk road & inter-resettlement road construction, main water supply & drainage system, electric power system, etc. extension from the existing systems will be provided by the project.

4.3.4.2 Safety Platforms

Based on experience in other such projects in Hunan, 10 locations for raised residential

platforms will be developed to house resettlers in Hunan Province. Safety platforms will be located in Linxiang City and Junshan Farm (9 in Linxiang and 2 in Junshan).(see Part B Figure 13-15). Hunan is the only province where this form of resettlement will be undertaken.

Resettlers

Resettlement to safety platforms will account for 1,715 households with 7,331 people, from adjacent villages and townships. The safety platforms represent an efficient use of land resources for residential purposes, allowing resettlers to maintain use of their remaining lands following project lands acquisition and re-allocation. Here also, the production restoration program described in Section 4.4 has evaluated the capacity of each site, accounting for land, animal husbandry, enterprise, and secondary and tertiary industry development as required.

Residential Houseplot Standard

10 m²/person for housing, 30 m²/person for house foundation.

Resettlement Program

Platform	Platform Specifications				Resettlers	
	Length (m)	Width (m)	Height (m)	No. Rows	HH	People
Yalan	192	162	35	Multi	100	422
Changwangzhou	808	50	32	2	170	738
Guhuazhou	252	168	36.5	Multi	111	738
Yejiatun	616	50	32	2	126	600
Caijiazhuang-1	1,060	50	32		226	1,011
Caijiazhuang-2	1,136	50	32		253	1,156
Xiweigou	600	50	32	2	114	600
Yanpowei	564	50	32	2	144	556
Daqingjiang	240	168	35	Multi	139	608
Xinhefenchang				Multi	106	381
Luweichang				Multi	239	824

House Reconstruction

Resettlers can select from the recommended typical house type, or design their own houses. House building will be conducted by resettlers themselves.

Infrastructure and Community Services

- **Water Supply:** Piped, chlorinated water will be provided to each houseplot, sourced from nearby wells.
- **Streets:** These consist of street trunks and branches. Street trunk total length 5.31 km and branch total length 4.73 km. Trunk traffic way 10m wide and walkway 1m wide on both sides. Branch 8m wide. 10 bridges over the channel for tractor passage, bridge deck 7m wide, traffic way 4.5m wide, designed for Class 10 trucks load.
- **Water drainage:** Open ditches for water drainage, arranged around the safety island and one side of transversal road. Main ditch total length 8.58 km, branch ditch length 7.05 km.

- *Electric power*: Rehabilitation and improvement of part of power transmission facilities, one additional transformer for each safety island, totaling 970 KVA.
- *Miscellaneous*: No additional schools, hospital and other services. Existing schools and hospitals still available and adequate.

For the infrastructure planning of the safety islands and main bills of quantities, see **Table 4-2**.

4.3.4.3 Collective Resettlement in Township Blocks

Resettlers

Populations involved in house reconstruction in townships of Hubei Province are those from townships or urban areas where no land is available for “set-back” relocation and thus resettlement to a new area is required. These populations are distributed within Tiaoguan Township, Shishou County (86 persons in 23 households), Chiba Township, Jianli County (238 persons in 36 households), Xinti section, Honghu City (8,671 persons in 2,168 households), Jinkou Township, Jiangxia County, Wuhan City (766 persons in 220 households), Huangzhou Township, Huanggang City (2,036 persons in 619 households).

Standard for house reconstruction

The standard for house reconstruction varies from place to place, due to the differences in economic development conditions and levels, population density, and the resettler’s income and funds availability.

New reconstructed houses are generally two-storey brick-concrete-structure building in Tiaoguan Township, Shishou County, Chiba Township, Jianli County, Jinkou Township, Jiangxia County, Wuhan City, which are all small and medium scale cities or townships.

Houses for reconstruction in the populous city area in Xinti section, Honghu City (8,671 persons in 2,168 households), Huangzhou Township, Huanggang City, are 5-6 storey brick-concrete buildings. The base area per household is not more than 100m², in accordance with government’s regulations.

House Reconstruction

After consultation with the local government, the inhabitants in Tiaoguan Township, Shishou County, Chiba Township, Jianli County, Jinkou Township, Jiangxia County, Wuhan City made their choice on the houses, based on a selection of standard designs developed in accordance with the principles of relocating a minimum distance and encouraging decentralization.

Honghu City designed three types of mono-houses marked A, B, C and eight types of houses marked A-H, whose style is from two bed room plus one living room to four bed room plus two living room, for choice.(see **Part B Figures 19 to 20**)

The private houses of “B” style in Huangzhou Township, Huanggang City were chosen. Enterprises decide on replacement accommodation independently.

For ground plan and typical design drawings of the resettlers’ living section see **Part B Figures 16 to 19**.

Housing Block Planning

Following the guidelines of “ City Planning in People’s Republic of China” [Ref. 20] and “Rules of Township Construction” [Ref. 21], Hubei provincial urban designing and planning institution made a reasonable overall arrangement, uniform programming, matching construction to the blocks.

The key guidelines for this planning were as follows:

- a) Taking the human being as the foundation, design of the block conformed to the personal habits and behavior modes of resettlers.
- b) Taking the environment as the priority, the overall layout varied from the landform and relief and tried to make the blocks a garden with an increasing harmony between mankind and nature.
- c) Taking the convenience of daily life as the main function, guide the new service and provide new items.
- d) The classified roads with clear network and direction.
- e) The diversification of the house style to satisfy different levels.
- f) Maximize space for outdoor exercises and friendly talking.

Examples of the layout of Hubei’s Honghu City housing blocks are provided in **Part B, Figures 16 to 21.**

4.3.4.4 Replacement through Purchasing Housing

Where sufficient housing exists in nearby areas, the City RO will purchase such accommodation for replacement of housing lost by resettlers.

Resettlers

The people involved are urban residents whose original houses are concentrated in the bank section in Jiujiang City and no opportunity exists for them to move back.

Purchase of commercial housing in four centralized blocks, (namely Lijiang Block, Xiwan Block, Shengtai Block, and Binjiang Block) will be undertaken to replace the hoses 752 people in 171 households. Each of the replacement housing blocks are located within a radius of 5 km of the original sites, and thus current employment will be able to be maintained despite relocation.

Housing Area

Area of housing to be returned for each household shall be equivalent to their original housing area.

House Reconstruction

Purchasing of commercial houses shall be performed by Jiujiang City RO. The purchased houses are brick-concrete-structure with varieties of style, such as one bed room plus one living room, two bedroom plus one living room and three bed room plus one living room.

Infrastructure and Community Facilities

The residential blocks have fundamental infrastructure and public facilities available, and thus no new planning and design is required for this purpose.

4.3.5 Direct Cash Compensation

With reference to the “Resettlement Rules for Urban Flood Engineering” [Ref. 22] drawn up by the Jiujiang City, Jiangxi Province, resettlers, if they so choose, can be compensated in cash to replace their house, according to their preference and requirements. It is planned to reimburse 4,600 persons of 1,217 household with funds in this way. Compensation for lost housing is augmented by 40 percent, accounting for the reduced administrative and management required by the resettlement organizations in this form of resettlement. Compensation rates are therefore sufficient for resettlers to purchase replacement housing at commercial rates, and given them the freedom of choice in selecting the new housing.

Details of the resettlement and rearrangement programs for each province are provided in Tables 4-3 to 4-5.

4.4 Production and Income Restoration

As the result of land losses, planning for the restoration of household income generating capacity forms an integral aspect of the resettlement program. The following sections describes (i) the principles and methods utilized in determining the target restoration levels, followed by (ii) an overview of the analysis of capacities in determining viable alternatives, (iii) the proposed arrangements, and (iv) the details of financing of the proposed programs.

4.4.1 Principles

- a) *Production rearrangements* must be made on the principle that resettlers shall be rearranged with varieties of channels, types and methods providing that the resettler have some land resources to guarantee their fundamental means of livelihood. The rearrangement shall take the land as the primary means of support and thus concentrated on agriculture.
- b) *Employment rearrangement* must be incorporated with the local reconstruction, resources exploitation, economic development and environmental protection. The actual measures taken in different conditions shall be arranged in the program for the purposes of resettlers’ restoration and self-development .
- c) *Agriculture* shall be concentrated on market gardening, taking the improvement of working condition and the development of local village-run fabrication firms, transportation, restaurant, trade and commerce as key points.

4.4.2 Tasks

The population for rearrangement are those who lost their fundamental means of production as a consequence of land taking over, and need to be rearranged for production development. The planned population to be rearranged within the planned years were calculated, using the village as a basic unit. The calculation was using the total occupied tilled lands divided by the former tilled land per capita, taking into account the population growth rate.

The formula is as follows:

$$P_T = S \div A \times (1 + f)^{T-t}$$

P_T : population to be rearranged in T^{th} year

A : tilled land per capita before land taking-over

f : natural population increasing rate

T : Planned years

t : design base year

The calculation showed that the population to be rearranged is 16,876 in the design base year (among which 6,081 in Hunan Province, 5,826 in Hubei Province, 4,972 in Jiangxi Province) and is 17,218 in the planned year (in which 6,208 in Hunan Province, 5,968 in Hubei Province, 5,103 in Jiangxi Province.)

Table 4-6 provides a breakdown of the resettler population, which will require income restoration measures.

4.4.3 Target for Production Restoration

The main criteria to judge the capability of the income restoration proposal is that the production activities have been restarted and the resettlers' standard of living have been restored. It is normal that the criteria varies from place to place. In order to guarantee that the resettlers' standard of living will not be lower than before, the rearrangement program shall make a target to make the resettlers keep or exceed their net income than before. Improvements of the agriculture working condition are required in the target, especially in quality and technology, by means of supporting measures. Further the stability of rising resettlers' income year by year shall be also one target for the program.

In the period between February and May 1999, in cooperating with the local PMO's officers, the relevant PPIs made an investigation on the family properties and incomes and registered them by household. Analysis between income and spending for these families are made to get the net income per household. The average net income in the planned years have been calculated based on these analysis, taking the economic developing rate and increasing rate of net income per capita as reference.

The target annual net income per capita for resettlers' rearrangement for provinces are shown as follows:

Hunan Province: 3,412 yuan, tilled land per capita is more than one mu in the village.

3,112 yuan tilled land per capita is less than one mu in the village.

Jiangxi Province: 3,386 yuan

Hubei Province: 3,458 yuan

4.4.4 Analysis of Production Capacity

The environmental and economic capacity of the new settlement areas refers to the ability of the resettlement community, when built and functioning to provide the resources and means for resettler and host income generation activities while maintaining on overall community environment which is clean, safe, and suited to supporting an acceptable quality of life. In developing the production and income restoration program, analysis of the environmental carrying capacity, and the viability of secondary and tertiary industry

development/expansion has been undertaken, as described below.

4.4.4.1 Analysis of Land Capacity

There are ample resources in most affected villages. The tilled land per capita in most villages is about one mu or less. Before completion of the project, there are frequent floods and so the agriculture output is not constant. This leads to a lack of investment on land for such aspects as leveling, soil fertility enhancement, crop diversification, and farming and watering facilities, resulting in below average yield values. After the completion of the project, the land output value per mu will increase, because floods decrease in frequency and improvements will be made by means of investing more on land, improving the soil, making farming and watering facilities perfect. Such investments will improve the land capacity beyond current levels.

Hunan

According to the analysis of the remaining land, the tilled land per capita in most of the affected villages of Hunan Province is less than one mu. It is planned to increase the production capacity by both improving the low-output land and changing non-irrigated land to irrigated. The application of these two approaches, by calculation, shall increase the production capacity by 10,195 persons, among which 1,317 persons shall benefit from the improvement of low-output land and 8,824 persons from the change of non-irrigated land to irrigated. For the capacity calculation in the village tilled land of Hunan Province see Table 4-7.

Jiangxi

The tilled land per capita in the effected area of Jiangxi Province is relatively less, at around one mu round in most of the villages.

The analysis to the land capacity is carried out by determining population and land standard per capita in planned years first, and then calculating the production capacity in planned years. For the production capacity calculation in the village tilled land of Jiangxi Province see Table 4-8.

Hubei

An analysis was made in Hubei province to see and compare the possible amount of the remaining low or middle output land, which need some improvements, and rural population which can be rearranged from the improvements, and the rural population which need to be rearranged in every village. The analysis showed the production capacity can accommodate 4,830 of rural population if we take the affected area of the project as whole. For the production capacity calculation in the village tilled land of Hubei Province see Table 4-9.

4.4.4.2 Analysis of Secondary/ Tertiary Industry Capacity

In recent years, secondary/ tertiary industries in the project areas have developed rapidly and counted for more percentage in GNP, especially in some place near township, some small fabrication firms, mining, transportation and restaurant with local characters have developed to some level. The percentage of the secondary/tertiary industry will increase with the process of speeding up the agriculture structure adjustment and township population expansion.

Estimations of increased capacity are as follows:

- a) 1,000 to 1,500 by developing small fabrication firms, water transportation, restaurants and stores in project areas of Hunan Province.
- b) 400 to 650 persons by developing mining, cotton processing and urban and rural transportation in project areas of Jiangxi Province.
- c) 2453 persons by developing animal breeding, village-run firms and tertiary industry etc. in project areas of Hubei Province.

4.4.4.3 Production Capacity Conclusions

From the analyses of the land capacity and the secondary/tertiary industry we can conclude that with the application of adequate land enhancement measures, the capacities of the chosen new settlement areas can satisfy the requirements of resettlement and the choice is appropriate.

4.4.5 Proposed Income Restoration Programs

There are sufficient resources in most effected villages. It is planned that the rearrangement shall be mainly concentrated on agriculture, with the readjustment of village lands and improvement of agricultural production, and the development of new skills and income generation modes combining agriculture with industry, commerce and trade, in which the improvement of agriculture working condition shall be emphasized.

In case the population involved in gardening can not reach their original standard of living because of the limitation of the land resources, they can develop secondary/tertiary industry such as timber/orchard cultivation, intensive animal breeding, fabrication, restaurants, commerce and trade, according to their available funds and actual conditions.

Production plans for each province are outlined below:

- (a) **Hunan Province** - Improve 52,762 mu of land to support 5,077 resettlers and transfer 1,277 mu of foreign village tilled land to support 893 resettlers, among whom 623 mu is irrigated tilled land and 604 mu is non-irrigated tilled land.
- (b) **Jiangxi Province** - Adjust and transfer 4,987 mu of foreign village tilled land. The rearrangement is mainly concentrated in market gardening, with the development of timber/orchard farm, animal breeding, and village-run firms as supplement. The measures taken in market gardening include soil improvement of 125,000 mu land, turn 193 mu barren field into land, build 17 irrigation stations with unit capacity 80 kW, 39 irrigation stations with unit capacity 40 kW, 51 irrigation stations with unit capacity 17 kW, as well as 1,708 km channel. The measures taken for timber/ fruit farm include turning barren hills and fields into hills and land suitable for fruit and tea, improve 420 mu fruit and tea field. The measures taken for animal breeding include develop 1,776 mu intensive fish breeding. They also developed 35 village-run firms.
- (c) **Hubei Province** – support 5,968 rural resettlers, among which 3,516 persons will involved in improving low-output land, 264 persons in animal breeding, 2,189 persons in village-run firms and tertiary industry.

In the whole project area, 49 percent of income restoration is planned through land

improvement for 8,593 people, 34 percent (5,865 people) through land reallocation and in only eleven instances transfer from other villages, another 434 resettlers will be provided with animal husbandry opportunities (2 percent), and 2,589 persons in village-run firms and the tertiary industry, a counting for 15 percent.

The production restoration program for the project areas is provided in **Table 4-10**.

4.4.6 Forecasting of the Resettlers' Standard of Living

After the rearrangement, agricultural land per capita will decrease. With the decreased flood losses calculated from dike strengthening, by the end of the planned year, the resettlers' net income shall be rising steadily as a result of the completed land improvements, irrigation developments and improvements, the optimized market garden structure, improved plantations and orchards, animal breeding, village-run firms, restaurants and other commerce and trade.

Forecasts of the resettlers' standard of living in each of the provinces are presented in **Table 4-11**, showing that by the end of the planned year, the net income per capita shall exceed the target.

4.4.7 Investment Estimation of Production Rearrangement

In order to restore or exceed the original standard of living, investment of 153,784,100 yuan is needed, among which 54,623,700 yuan for Hunan Province 53,916,400 yuan for Hubei Province and 45,254,000 yuan for Jiangxi Province.

The investment per capita for rearrangement is 9,000 yuan.

Estimated investment requirements for production rearrangement are included in **Table 4.12**.

4.4.8 Adequacy of Land Compensation Funds for Production and Income Restoration Programs

It is stipulated in the 9th clause of "Purchased Land Compensation and Resettlement Regulation for Large and Medium-Sized Water Conservancy & Hydropower"[Ref. 13] that the land compensation and resettlement funds shall be used by the unit, whose land has been taken over, to restore and develop production, to rearrange the extra working force and to compensate the personnel who can not work. It is also stipulated that these compensation and funds shall be planned and arranged by the concerned city (county) government to develop land and rearrange the production and living. These funds shall be specially used and not be taken for other purpose or private purpose. In cases where the land compensation and rearrangement funds can not cover the requirements of production rearrangement, it is necessary to raise the rearrangement funds, hence, the land compensation and the rearrangement funds are the only fund resources for resettlers' production, which must be equal to, or marginally in excess of the total investment for production rearrangement.

In the YBFCP area, the land compensation and rearrangement funds is 223,820,100 yuan, taking 69,598,400 yuan out of for land compensation without rearrangement of the unit, the total funds of 154,221,700 yuan can be used for production rearrangement investment, which exceeds by 427,600 yuan the funds required for production

rearrangement. Thus the land compensation standard is appropriate and can satisfy the resettlers funds requirements for production rearrangement and guarantee the resettlers standard of living keep the original level after the rearrangement.

The balance between the land compensation and the rearrangement Investment see **Table 4-13**.

4.4.9 Temporarily Occupied Lands

4.4.9.1 Affected Areas

The survey shows that the amount of leased land for this Project is 11,220 mu in Hubei Province, 2,100 mu in Jiangxi Province and 8,788 mu (this figure is collected by construction teams; it includes 4,150 mu hilly areas and 4,638 mu floodland on riverbanks) in Hunan Province.

Lands will be leased for one year periods, with the amount of compensation based on the annual output of the leased land plus the costs associated with land leveling off and re-cultivation. Total compensation for temporarily occupied lands are: 3,500 yuan/mu in Jiangxi totaling is 7.35 million yuan, at a rate of 1,800 yuan/mu totaling 20.196 million yuan in Hubei (see **Table 3-2**).

4.4.9.2 Funding Temporary Land Costs

The above expenses are calculated as land acquisition resettlement compensations for the respective provinces. The land leasing compensation is calculated into project construction cost by the construction teams.

4.4.9.3 Conditions of Transfer

During the project construction process, when soil is taken from the leased land, soil-taking procedures should be strictly followed to protect the soil layer of land. At the end of the leasing period, the construction teams are responsible for the re-cultivation of leased land. Resettlement supervision organizations will supervise the re-cultivation process, and county land management authorities and resettlement offices undertake inspection and acceptance.

4.5 Restoration of Infrastructure and Enterprises

4.5.1 Principle and Standard

- a) Based on the analysis of the functions of resettlement village installations of water supply, power supply, telecommunication, broadcasting, etc. installations which need to be reconstructed will be replaced according to their original scale, standard and function. Where no losses will be caused, or the existing function and need of facilities has expired, no reconstruction will be planned.
- b) Planning for water supply, power supply, telecommunication, broadcasting, etc. for new residential area, are planned so that the operation of existing systems in the host area will not be affected, mainly by connecting with the nearby facilities. However, capacity increase for power supply and telecommunication installations shall be considered during planning if necessary.
- c) For water conservancy facilities such as hydropower station, electrical irrigation and

drainage pumping stations, reconstruction scheme shall be prepared according to the specific condition of benefited area and the degree of impact. Reasonable compensation will be made for those no need to be recovered.

- d) Special installations, with certain scale and class, such as county level highway, township road, 35 kV transformer substation and 35 kV power transmission lines will be designed and planned by professional departments.
- e) Relocating enterprises will be compensated according to their original standard and scale. Existing equipment and technology shall be fully considered to limit losses during relocation and reconstruction.
- f) Relevant departments will finance any additional investment for expanding operation scale, improving standard, regulating industry structure and conducting technical transformation of the enterprises to be relocated.

4.5.2 Reconstruction of Infrastructure

4.5.2.1 Reconstruction Planning for Piped Water Supply

The relevant water department will finance the increased investment for expanding operation scale, improving standard, regulating industry structure and conducting technical transformation of the enterprises to be relocated.

The project will involve relocation of 9.5 km primary water supply pipes, including 3.9 km in Hunan and 5.63 km in Hubei. Recovery will be undertaken by local professional construction team by local tap water Company and be financially compensated. During replacement, the water supply Company will investigate the quality of water at distribution points, and guide the Village Environment Officer as to methods for improving and ensuring quality.

4.5.2.2 Communication Recovery Planning

Relocation and land acquisition of the project will involve graded highways of 12.67 km, simple road of 80.39 km, tractor's road of 43.62 km. After discussion with the relevant departments of the affected counties (including city, district and farm), it is planned to compensate and recover these facilities by professional construction team organized by the local government.

4.5.2.3 Electrical Power Planning

The project will involve removal and relocation of 340.21 km of power transmission lines, including 10 kV high-voltage lines of 85.88 km long (Jiangxi: 6.18 km, Hunan: 49.6 km and Hubei: 30.09 km), 380v low-voltage lines of 250.73 km (Jiangxi: 1.99 km, Hunan: 124.72 and Hubei: 118.03 km), 97 sets of power transformation installations.

According to the characteristics of the distribution of above power transmission lines and in consideration that most resettlers will be resettled by moving in close proximity to their existing residence, only re-routing of lines to these locations is required.

4.5.2.4 Telecommunication Facilities

The project land acquisition will involve relocating mainly the aerial telecom lines and a few telephone line with total length of 517.87 km, including 28.78 km in Jiangxi, 109.59 km in Hunan and 379.5 km in Hubei. According to the characteristics of these lines, it

only need to move these lines backward.

4.5.2.5 Broadcasting Installations

The project will involve relocation of 122.68 km broadcasting lines, including 23.68 km in Hunan and 99 km in Hubei. Recovery will be undertaken by local professional construction team by relevant local department and be financially compensated.

For details of planned investment estimate of the special installations see **Table 4-6**.

4.5.2.6 Investment in Infrastructure Restoration

Compensation investment for relocation and reconstruction of the above-mentioned special installations will be calculated according to their original scale and standard (see **Table 3-1**). Relevant departments will finance the increased investment for expanding operation scale, upgrading standard. It is calculated that total investment for compensation of special installations will need 33.3444 million yuan, including 16.5907 million yuan for Hunan, 13.6777 million yuan for Hubei and 3.076 million for Jiangxi.

Proportions of investment for special installations for specific items and provinces see are: Jiangxi: 9 percent; Hubei: 41 percent; Hunan: 50 percent.

4.5.3 Relocation and Reconstruction Planning for Enterprises

4.5.3.1 Land Acquisition Relocation and Briefing of the Enterprises

The project will involve acquisition of a total 884,501 m² of enterprise buildings (490 enterprises), including 400,331 m² in Hubei (321 enterprises), 235,015 m² in Jiangxi (102 enterprises), and 249,215 m² in Hunan (67 enterprises). Of this, 64,156 m² are framework buildings, brick-concrete of 501,244 m², brick-wood of 301,612 m², 530 m² of wood, miscellaneous of 17,005 m².

4.5.3.2 Relocation and Reconstruction

Many enterprise buildings will be only partially relocated, and these buildings may be extended, or rebuilt in nearby areas. In both cases, relocation sites will be determined by the affected organizations in consultation with local authorities. Compensation will be provided for lost production as a result of relocation, which will incorporated compensation for lost of wages for employees.

Proposals will be made for the small-scale enterprises that need to be entirely relocated according to the local resources; marketing, productivity level, and local government, in accordance with the “Capital Construction Management Regulations”[Ref. 23], will carry out relocation and reconstruction.

4.5.3.3 Compensation Investment for Relocated Enterprises

Compensation investment estimate will be calculated according to the original scale and original standard of the relocated enterprises. Main works involving land acquisition compensation, cost of water and electrical power supply, access road building and land leveling, cost of compensation for buildings and auxiliary buildings, cost of compensation for infrastructures, production facilities and equipment, loss due to ceased production and relocation transportation.

The total compensation cost for the enterprises is 364.9 million yuan, including 134.011 million yuan for Jiangxi (36 percent), 73.37 million yuan for Hunan (21 percent) and

157.52 million yuan for Hubei (43 percent).

Details of these compensation cost are provided in **Table 4-15**.

4.6 Summary and Conclusions

Chapter 4 presents the Resettlement Program for the Yangtze Basin Flood Control Project. The chapter outlines the various housing and economic restoration measures which have been developed in order to; (i) minimize disturbance to resettlers by providing local resettlement options, familiar production/income restoration alternatives, necessary support in the period of transition, (ii) be acceptable to both resettlers and host populations, (iii) maintain or improve income levels and standards of living of people in the affected areas. Chapter 4 also describes the mechanisms for restoration of enterprises and infrastructure and utilities affected by the project.

(a) Household Restoration

Some 12,599 families with 52,859 people in the project area will have to be resettled, of which 4,464 families with 19,213 people come from Hunan, 5,400 families with 22,100 people from Hubei and 2,715 families with 11,546 people from Jiangxi.

In accordance with the guidelines for minimizing distance to alternative resettlement sites, and with resettler preferences, the following resettlement alternatives were developed, based on available land area and its capacity for increased production, and the viability of industry expansion.

Resettlement Type	Number of HH	Number of People
Internal Resettlement (resettlement of rural households within the existing village area)	5,670	25,499
Collective Resettlement (relocation to new residential areas in rural and urban sites (as appropriate), urban resettlement to apartment blocks and rural safety platform sites)	5,712	22,760
Cash Compensation (when urban resettlers opt to relocate to another area or for alternative accommodation)	1,217	4,600

(ai) Internal Resettlement

Almost 45 percent of resettlers will be relocated within their existing village administrative areas, minimizing disturbance to existing social and economic systems. This type of rural resettlement will be require land improvement and the redistribution of village productive lands, and in eleven instances, the transfer of lands from adjacent villages to supplement lands currently available within the village. Environmental and economic capacity investigations identified the 136 villages as feasible for this means of resettlement, in light of the production restoration measures proposed.

In most cases of internal resettlement, infrastructure and service displacement will be minor, and the restoration of all impacted services is included in the resettlement program and budget. House reconstruction will be undertaken by the villagers themselves, in accordance with relevant standards.

(a) Collective Resettlement

Collective resettlement shall involve 5,712 families with 22,760 people to 35 sites. These sites are of three types for collective resettlement. These sites will be of three types:

1. Towns or Communities – where new housing areas can be constructed in existing communities
2. Township Blocks – where new residential blocks will be developed for resettlers
3. Safety Platforms – elevated platforms will be built nearby to villages, on top of dykes where residential housing will be constructed.

In Hunan and Hubei seven residential sites will be developed for rural resettlers in towns or communities, providing for a total of 637 households with 2,625 people. Through land re-allocation and land development, the RAP provides for the largely rural resettlers to maintain agricultural livelihoods.

In project affected townships of Hubei, 12,021 urban residents from 389 households will be relocated into purpose built residential apartment blocks.

In Hunan, 11 residential safety platforms are proposed for the resettlement of 1,715 rural households totaling 7,331 people.

In each instance, minimum housing and living space standards will be met, and where adequate infrastructure and facilities including water supply and sanitation, drainage, power will be provided.

(a) Purchase of Replacement Housing

Purchase of commercial housing in four apartment blocks, will be undertaken to replace the housing of 752 people in 171 households. The people involved are urban residents whose original houses are concentrated in the bank section in Jiujiang City where no opportunity exists for them to move back. Each of the replacement housing blocks are located within a radius of 5 km of the original sites, and thus current employment will be able to be maintained despite relocation.

(a) Direct Cash Compensation

In Jiangxi, 1,217 urban residents from 4,600 households have selected direct cash compensation for their lost residence. Compensation rates budgeted are adequate for the purchase of comparable housing at commercial prices, and provides resettlers with the choice to relocate to housing and locations according to their requirements.

(b) Production Resettlement

The income and production restoration program described in Chapter 4 was developed according to guidelines of: (i) providing a variety of restoration alternatives, with land as the primary means of support, (ii) utilizing local resources and development activities without adverse impact to the environment, and (iii) development of secondary and tertiary village run industries.

Target net income per capita rates have been set by the program as a target and measure for successful implementation of the program. An analysis of the land capacity in the affected villages, examined land availability and level of development of existing lands in the identification of the selected sites where reduced land holdings, with appropriate

investment and development would not compromise carrying capacity.

Production plans for each province are outlined below:

- (a) **Hunan Province** - Improve 52,762 mu of land to support 5,077 resettlers and transfer 1,277 mu of foreign village tilled land to support 893 resettlers, among which 623 mu is irrigated tilled land and 604 mu is non-irrigated tilled land.
- (b) **Jiangxi Province** - Adjust and transfer 4,987 mu village arable land. The rearrangement will mainly be concentrated on market gardening, with the development of timber/orchards, animal husbandry activities and village-run industries to supplement the primary agricultural pursuits. Improved productivity of lands will be facilitated by; soil improvement for 125,000 mu of land, 193 mu of barren field brought under cultivation, construction of 107 irrigation stations, improvement of 420 mu of fruit and tea fields, and development of 1,776 mu for intensive fish breeding. Some 35 village-run enterprises are also proposed.
- (c) **Hubei Province** – support 5,968 rural resettlers, among which 3,516 persons will be involved in improving low-output land, 264 persons in animal husbandry, and 2,189 persons in village-run enterprises and tertiary industry.

Implementation of these programs will require an estimated investment of 153,784,100 yuan, distributed as 54,623,700 yuan for Hunan Province 53,916,400 yuan for Hubei Province and 45,254,000 yuan for Jiangxi Province, which will be met by use of the land compensation and resettlement funds.

The average investment per capita for rearrangement is 9,000 yuan.

(d) Occupation of Temporary Lands

Total affected lands have been identified as 23,108 mu. Compensation will be provided based on annual output (for lost production), and to meet restoration costs. These costs are not included in the RAP as they are met by the project construction costs.

(d) Infrastructure and Enterprise Recovery

Chapter 4 identifies affected infrastructure which will be relocated or reconstructed as a result of the project, at a cost of approximately 33.34 million yuan.

Affected enterprises total 490, with a land area of 884,501m². In many instances land acquisition will result in only partial relocation or loss of land with minimal impact to production. Investment for their relocation and lost production is estimated at 401.8962 million yuan.

Table 4-1 Resettlement Planning by Counties

Province	County (City, District, Farm)	Internal Resettlement			Collective Resettlement			Cash Compensation		Total		
		Resettlement Sites	Household	Population (person)	Residential Area (sites)	Household	Population person	Household	Population (person)	Resettlement Sites	Household	Population (person)
Hunan	7	50	2,136	9,741	17	2,328	9,472			67	4,464	19,213
	Linxiang City	8	368	1,321	8	1,370	6,126			16	1,738	7,447
	Yunxi Township	8	541	2,363						8	541	2,363
	Junshan Farm	11	284	1,351	2	445	1,205			13	729	2,556
	Huanggaihu Farm	4	265	1,241	2	49	298			6	314	1,539
	Junshan District	9	234	1,408						9	234	1,408
	Hurong County	9	435	2,028	5	464	1,843			14	899	3,871
	Jianxin Farm	1	9	29						1	9	29
Jiangxi	6	28	1,347	6,194	4	171	752	1,217	4,600	32	2,735	11,546
	Ruichang City	3	9	52						3	9	52
	Jiujiang County	11	414	2,134						11	414	2,134
	Lushan District	2	49	222				214	963	2	263	1,185
	Hukou County	2	90	448						2	90	448
	Pengze County	10	785	3,338						10	785	3,338
	Xunyang District				4	171	752	1,003	3,637	4	1,174	4,389
Hunbei	15	58	2,187	9,564	14	3,213	12,536			72	5,400	22,100
	Zhijiang City	15	484	1,728						15	484	1,728
	Jingzhou District	3	178	753						3	178	753
	Songci County	1	8	33						1	8	33
	Gongan County	4	25	98						4	25	98
	Shishou County	9	263	1,190	1	23	86			10	286	1,276
	Jianli County	1	3	18	1	36	366			2	39	384
	Honghu City				3	2,168	8,671			3	2,168	8,671
	Xinzhou County	3	31	128						3	31	128
	Huangpo County	5	80	400						5	80	400
	Hannan District	2	162	689						2	162	689
	Jiangxia District	1	6	42	1	220	766			2	226	808
	Ezhou City	7	659	3,430						7	659	3,430
	Huangzhou District	4	176	545	2	619	2,036			6	795	2,581
	Tuanfeng County	3	112	510	4	106	402			7	218	912
	Yangxin County				2	41	209			2	41	209
Total in Project Areas		136	5,670	25,499	35	5,712	22,760	1,217	4,600	171	12,599	52,859

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CHAPTER 4: RESETTLEMENT PROGRAM

Table 4-2 List of Safety Platform Infrastructure & Main Work Quantities

Description		Yalan	Guhuazhou	Changwangzhou	Caijiazhuan1 ^a	Caijiazhuan2 ^a	Xiweigou	Yanpowei	Yejiadun	Daqingjiang	Total
Main Stem km		0.19	0.17	0.8	1.05	1.1	0.66	0.55	0.62	0.17	5.31
Alley way km		0.8	1.1	0.3	0.48	0.25	0.14	0.07	0.21	1.38	4.73
Tractor Bridge set				2	3	3	2				10
Mian Drain Ditch km		0.4	0.34	0.36	2.1	2.2	1.32	1.1	0.42	0.34	8.58
Branch Ditch km		0.75	1	1.6	0.96	0.25	0.14	0.21	1.22	0.92	7.05
Transformer kVA		70	90	110	160	170	90	90	90	100	970
M a i n w o r k Q u a n t i t i e s	Cofferdam m ³	96300	6650	29436	29030	3487	2900	2471	15570	7560	193404
	Filling Earthwork m ³	298800	217000	14990	266100	2879	441300	279200	136000	354800	2011069
	Masonry Ditchm ³	520	897	2430	1710	1840	1170	1050	2016	845	12478
	Land Levelling m ³	8153	8890	8200	10800	11600	6880	5810	6300	6220	72853
	Earth Excavation m ³	1250	1520	3650	3775	4010	2386	2160	2810	1625	23186
	Earth Backfilling m ³	580	7850	612	1360	1390	867	720	5208	680	19267
	Road cushion m ²	7890	4960	8600	14300	15000	8600	7540	7383	10260	84533
	Road Surface m ²	7890	4960	9600	14300	15000	8600	7540	7380	10260	85530
	Masonry Retaining Wall m ³	1245	3807						765		3916

Table 4-3 List of Resettlement Planning for Hunan Province

County (City, District, Farm)	Township	Village Name	Resettlement Method	Resettlement Area	Household Resettled	People Resettled
Linxiang City	Yuxi Townshi				1,738	7,447
					193	756
		Shiziling Village	Centralized Platform	Yalan Safety Platform	77	338
			Move to nearby higher place & decentralized	Same village	37	116
		Yuxi Village	Move to nearby higher place & decentralized	Same village	79	302
		Jiangnan Town			1,545	6,691
		Yalan Village	Centralized Platform	Yalan Safety Platform	23	84
			Move to nearby higher place & decentralized	Same village	39	154
		Sihe Village	Move to nearby higher place & decentralized	Same village	66	250
		Xiaozhou Village	Move to nearby higher place & decentralized	Same village	39	169
	Guhua Village	Centralized Platform	Changwan Safety Platform	167	730	
		Centralized Platform	Yejiadun Safety Platform	126	600	
		Centralized Platform	Caijiazhuan 1# Platform	128	609	
		Centralized Platform	Guhuazhou Platform	48	327	
		Move to nearby higher place & decentralized	Same village	47	125	
	Changjiang Village	Move to nearby higher place & decentralized	Caijiazhuan No.1 Platform	98	402	
		Centralized Platform	Caijiazhuan No.2 Platform	253	1,107	
		Centralized Platform	Xiweigou Platform	144	543	
		Move to nearby higher place & decentralized	Same village	31	124	
	Dengta Village	Move to nearby higher place & decentralized	Yanpowei Platform	114	555	
		Centralized Platform	Beitiguani Platform	139	608	
	Resident's Committee	Centralized Platform	Guhuazhou Platform	53	223	
	Xinzhou Village	Move to nearby higher place & decentralized	Same village	30	81	
Yunxi District					541	2,363
	Songyanghu Farm				75	315
		Yangshugang Branch Farm	Move to nearby higher place & decentralized	Same village	31	133
		Leigutai Branch Farm	Move to nearby higher place & decentralized	Same village	44	182
		Daorenji Town			165	673
		Dingshan Village	Move to nearby higher place & decentralized	Same village	70	274
		Binjiang Village	Move to nearby higher place & decentralized	Same village	56	175
		Silong Village	Move to nearby higher place & decentralized	Same village	39	224
		Lucheng Town			301	1,375
	Xingang Village	Move to nearby higher place & decentralized	Same village	187	887	

Table 4-3 List of Resettlement Planning for Hunan Province

County (City, District, Farm)	Township	Village Name	Resettlement Method	Resettlement Area	Household Resettled	People Resettled
		Lucheng Village	Move to nearby higher place & decentralized	Same village	7	35
		Xinshe Village	Move to nearby higher place & decentralized	Same village	107	453
Junshan Farm					729	2,556
	Xinhe Farm		Centralized Platform	No.1 & No.2 brigades	106	381
	Wuxin Farm		Move to nearby higher place & decentralized	Same village	18	68
	Wangcheng Farm		Move to nearby higher place & decentralized	Same village	69	249
	Water Committee		Move to nearby higher place & decentralized	Same village	46	153
	Linjiao Farm		Move to nearby higher place & decentralized	Same village	7	25
	Dawan Reed Farm		Move to nearby higher place & decentralized	Same village	113	397
	Power Cor.		Move to nearby higher place & decentralized	Same village	32	113
	Cotton, Hemp & Grease Plant		Move to nearby higher place & decentralized	Same village	10	26
	Productive Materials Cor.		Move to nearby higher place & decentralized	Same village	18	56
	Water Way Transportation Cor.		Move to nearby higher place & decentralized	Same village	33	118
	Reed Farm		Centralized Platform	Same village	239	824
	Brickyard		Move to nearby higher place & decentralized	Same village	24	90
	Dreadging Team		Move to nearby higher place & decentralized	Same village	14	56
Huanggaihu Farm					314	1,539
	No. 1 Branch Farm				265	1,241
		Shuangzhou Village	Move to nearby higher place & decentralized	Same village	111	521
		Xinzhou Village	Move to nearby higher place & decentralized	Same village	78	364
		Guangping Village	Move to nearby higher place & decentralized	Same village	34	165
		Baisha Village	Move to nearby higher place & decentralized	Same village	42	191
	Perper Mill		Resettlement by building centralized town	Tuanzhou Town	24	219
	Tieshanzhu Electric Pumping Station		Resettlement by building centralized town	Tishanzui Town	11	19
	Grain Supply Center		Resettlement by building centralized town	Tishanzui Town	6	19
	Jiangti Station		Resettlement by building centralized town	Tishanzui Town	8	41
Junshan Farm					234	1,408
	Guangxinzhou Town				124	742
		Jiangling Village	Move to nearby higher place & decentralized	Same village	68	403
		Jiangnan Village	Move to nearby higher place & decentralized	Same village	29	177
		Changfu Village	Move to nearby higher place & decentralized	Same village	27	162

Table 4-3 List of Resettlement Planning for Hunan Province

County (City, District, Farm)	Township	Village Name	Resettlement Method	Resettlement Area	Household Resettled	People Resettled
	Xushi Town				110	666
		Huangan Village	Move to nearby higher place & decentralized	Same village	51	301
		Nongke Village	Move to nearby higher place & decentralized	Same village	20	122
		Bao'an Village	Move to nearby higher place & decentralized	Same village	5	33
		Hongshi Village	Move to nearby higher place & decentralized	Same village	22	132
		Baihe Village	Move to nearby higher place & decentralized	Same village	9	57
		Fenghuang Village	Move to nearby higher place & decentralized	Same village	3	21
Iuarong Township					899	3,871
	Tashi Township				449	1,178
		Tashi Town	Resettlement by building centralized town	Tashi-Xinjie	100	280
		Resident's Committee	Resettlement by building centralized town	Tashi-Xinjie	70	187
		Wanjia Village	Resettlement by building centralized town	Same village	6	23
		Changjiang Village	Move to nearby higher place & decentralized	Same village	4	16
		Yuchang Village	Move to nearby higher place & decentralized	Same village	21	69
		Shunxin Village	Move to nearby higher place & decentralized	Same village	44	115
		Baishuihu Village	Move to nearby higher place & decentralized	Same village	89	201
		Xiaodukou Village	Move to nearby higher place & decentralized	Same village	110	266
		Baiyang Village	Move to nearby higher place & decentralized	Same village	5	21
Hongshantou Town					450	2,693
		Minsheng Village	Move to nearby higher place & decentralized	Same village	110	928
		Changling Village	Move to nearby higher place & decentralized	Same village	46	389
		Yuchang Village	Resettlement by building centralized town	Zhuanqiao-Xinjie	34	313
		Xinjiang Village	Resettlement by building centralized town	Zhuanqiao-Xinjie	182	735
		Hongshan village	Resettlement by building centralized town	Zhuanqiao-Xinjie	78	328
Jianxin Farm			Move to nearby higher place & decentralized	same village	9	29
Sub-total of internal resettlement					2,236	9,741
Sub-total of resettlement by building centralized platform					1,715	7,331
Sub-total of resettlement by building centralized Town					513	2,141
Total					4,464	19,213

Table 4-4 List of Resettlement Planning in Hubei Province

No.	Name of Dyke	City, County	Township	Village & Resident Committee	Population Resettlement						Resettlement Method	Resettlement Place	
					No. of Household			Enterprise pce	Population person				
					Total	Village	Town		Total	Country side			Non-agriculture
1	Xia Bailizhou	Zhijiang	Majiajian Town	Yijie Resident Committee	29		29	23	108		108	Move to nearby higher place & decentralized	Same Resident Committee
2				Tenjiahe Village	2	2		3	7	7		Move to nearby higher place & decentralized	Same Village
3				Zhaojiahe Village	15	15			61	61		Move to nearby higher place & decentralized	Same Village
4				Baohuachi Village	18	18			80	80		Move to nearby higher place & decentralized	Same Village
5			Jiangkou Town	Yijie Resident Committee	39	39		9	119	119		Move to nearby higher place & decentralized	Each Resident Committee
6				Ejie Resident Committee									
7				Sanjiejie Resident Committee									
8				Yongshouyuan Village	1	1			3	3		Move to nearby higher place & decentralized	Same Village
9			Qixingtai Town	Qixintao Resident Committee	39	15	24	14	141	78	63	Move to nearby higher place & decentralized	Same Resident Committee
10				Yazikou Village	42	42		1	160	160		Move to nearby higher place & decentralized	Same Village
11				Shitaozi Village	56	56			224	224		Move to nearby higher place & decentralized	Same Village
12				Sanwanmiao Village	92	92		1	389	389		Move to nearby higher place & decentralized	Same Village
13				Chenjiagang Village	25	25			59	59		Move to nearby higher place & decentralized	Same Village
14				Dabujie Village	79	79		7	221	221		Move to nearby higher place & decentralized	Same Village
15				Dngwan Village	47	38	9		156	135	21	Move to nearby higher place & decentralized	Same Village
Sub-total					484	422	62	58	1,728	1,536	192		
16	Jingnan Dyke	Jingzhou District	Mishi	Laoyang Village	73	73		1	298	298		Move to nearby higher place & decentralized	Same Township
17				Jisheng Village	74	74		1	332	332			
18				Dakou Village	31	31			123	123			
Sub-total					178	178		2	753	753			
19		Songci	Wanshi	Yueti Village	8	8			33	33		Move to nearby higher place & decentralized	Same Village

Table 4-4 List of Resettlement Planning in Hubei Province

No	Name of Dyke	City, County	Township	Village & Resident Committee	Population Resettlement						Resettlement Method	Resettlement Place		
					No. of Household			Enterprise pce	Population person					
					Total	Village	Town		Total	Country side			Non-agriculture	
				Sub-total	8	8				33	33			
20		Gongan	Mahaokou	Zhuhu Village	5	5				20	19	1	Move to nearby higher place & decentralized	Same Village
21				Pingnan Village	3	3				10	10		Move to nearby higher place & decentralized	Same Village
22				Bailong Village	3	3		2		26	11	15	Move to nearby higher place & decentralized	Same Village
23			Doutihu	Gaojian Village	14	14				42	41	1	Move to nearby higher place & decentralized	Same Village
				Sub-total	25	25		2		98	81	17		
24		Shishou	Taohuashan Town	Wumatou Village	17	17				103	103		Move to nearby higher place & decentralized	Same Village
25				Changjiang Village	2	2				8	8		Move to nearby higher place & decentralized	Same Village
26			Tiaoguang Town	No.2 Resident Committee	23		23	24		86		86	Centralized resettlement in Township	Relocatee's zone in Tiaoguang Town
27				Zhanghuagang Village	31	31				136	136		Move to nearby higher place & decentralized	Same Village
28				Beihu Village	6	6				29	29		Move to nearby higher place & decentralized	Same Village
29				Chagang Village	55	55				234	234		Move to nearby higher place & decentralized	Same Village
30				Nanhu Village	44	44				195	195		Move to nearby higher place & decentralized	Same Village
31				Xinhezhou	86	86				385	385		Move to nearby higher place & decentralized	Same Village
32				Shazui	16	16				73	73		Move to nearby higher place & decentralized	Same Village
33				Guanyin'an	6	6				27	27		Move to nearby higher place & decentralized	Same Village
				Sub-total	286	263	23	24		1,276	1,190	86		Same Village
				Sub-total	497	474	23	28		2,160	2,057	103		
34	Jianli Dyke	Jianli	Chiba Town	Hongmiao Village	3	3				18	18		Move to nearby higher place & decentralized	Same Village
35				Street Resident Committee	36		36	5		366		366	Centralized resettlement in Township	Same Resident' Committee
				Sub-total	39	3	36	5		384	18	366		
36	Honghu Dyke	Honghu	Shimatou Office		33		33	1		131		131	Centralized resettlement in Township	Relocatee' Zone

Table 4-4 List of Resettlement Planning in Hubei Province

No.	Name of Dyke	City, County	Township	Village & Resident Committee	Population Resettlement						Resettlement Method	Resettlement Place			
					No. of Household			Enterprise pce	Population person						
					Total	Village	Town		Total	Country side			Non-agriculture		
37			Maojiang Office			1,098		1,098	32	4,392		4,392			
38			Xinti Office			1,037		1,037	26	4,148		4,148			
Sub-total							2,168		2,168	59	8,671		8,671		
39	Wuhan Dyke	Xinzhou	Dabu	Mayi Village	1	1				3	3			Move to nearby higher place & decentralized	Same Village
40				Chenlu Village	2	2				7	7			Move to nearby higher place & decentralized	Same Village
41				Wagou Village	28	28				118	118			Move to nearby higher place & decentralized	Same Village
Sub-total					31	31				128	128				
42		Huangpo	Wuhu Farm	Dongsheng Village	9	9				42	42			Move to nearby higher place & decentralized	Same Village
43				Shahe Village	2	2			1	9	9			Move to nearby higher place & decentralized	Same Village
44				Shudi Village	25	25			2	153	153			Move to nearby higher place & decentralized	Same Village
45				Jiangzui Village	29	20	9		3	136	95	41		Move to nearby higher place & decentralized	Same Village
46				Xiaowang Village	15	15			2	60	60			Move to nearby higher place & decentralized	Same Village
Sub-total					80	71	9		8	400	359	41			
47		Hannan	Dazui	Dazui Village	57	56			1	224	224			Move to nearby higher place & decentralized	Same Village
48				Changjiang Village	105	105			1	465	465			Move to nearby higher place & decentralized	Same Village
Sub-total					162	161			2	689	689				
49		Tunkou	Tunkou	Tunkou Block					5					Move to nearby higher place & decentralized	Same Resident' Committee
Sub-total									5						
50		Jiangxia	Jinkou	Jinkou Block	220		220		28	766		766		Centralized resettlement in Township	Relocatee's new village
51			Jinshui	Hengti Village	6	6			6	42	42			Move to nearby higher place & decentralized	Same Village
Sub-total					226	6	220		34	808	42	766			

Table 4-4 List of Resettlement Planning in Hubei Province

No	Name of Dyke	City, County	Township	Village & Resident Committee	Population Resettlement							Resettlement Method	Resettlement Place
					No. of Household			Enterprise pce	Population person				
					Total	Village	Town		Total	Country side	Non-agriculture		
Sub-total					499	269	229	49	2,025	1,218	807		
52	Bapu Dyke	E'zhou	Fenghuang Office	Caiyuantou Village	121	106	15	12	659	364	295	Move to nearby higher place & decentralized	Same Village, City
53			Xinmiao Town	Maocao Village	5	5			67	66	1	Move to nearby higher place & decentralized	Same Village
54			Duandian Town	Sanjiang Village	74	74			393	392	1	Move to nearby higher place & decentralized	Same Township
55			Linjiang Town	Huangboshan Village	56	56		1	270	248	22	Move to nearby higher place & decentralized	Same Village
56			Niji Town	Luohu Village	157	157		1	825	813	12	Move to nearby higher place & decentralized	Same Village
57				Sifen Village	92	92		2	443	433	10	Move to nearby higher place & decentralized	Same Township
58				Zhangwan Village	154	154		2	773	723	50	Move to nearby higher place & decentralized	Same Village
Sub-total					659	644	15	18	3,430	3,039	391		
59	Changcheng Dyke	Huangzhou	Yuwang Office	Wanfu Village	75	75			200	200		Move to nearby higher place & decentralized	Same Village
60				Xinhe Village	36	36			159	159		Move to nearby higher place & decentralized	Same Village
61				Caiwuliao Village	7	7			28	28		Move to nearby higher place & decentralized	Same Village
62			Chibi Office	Chibi Village	39		39		218		218	Centralized resettlement in Township	Chibi New Village
63				Enterprise	580		580	35	1,818		1,818		
64			Donghu Office	Enterprise				12					
65	Changsun Dyke		Lukou Town	Lujiawang Village	58	58			158	158		Move to nearby higher place & decentralized	Same Village
Sub-total					795	176	619	47	2,581	545	2,036		
66	Dulong Dyke	Tuanfeng	Tuanfeng	Luojiagou Village	65	65			256	256		Move to nearby higher place & decentralized	Same Village
67				Linjiangpu Village	40	40			227	227		Move to nearby higher place & decentralized	Same Village
68				Mafangqia Resident Committee	9		9	45	26		26	Move to nearby higher place & decentralized	Same Resident Committee

Table 4-4 List of Resettlement Planning in Hubei Province

No.	Name of Dyke	City, County	Township	Village & Resident Committee	Population Resettlement						Resettlement Method	Resettlement Place	
					No. of Household			Enterprise pce	Population person				
					Total	Village	Town		Total	Country side			Non-agriculture
69				Zhongjie Resident Committee	8		8		40		40		
70				Hexian Resident Committee	6		6		30		30		
71				Desheng Village	83	83			306	306		Centralized resettlement in Township	Relocatee's Zone in Luohuozhou
72				Zhangwan Village	7	7			27	27		Move to nearby higher place & decentralized	
Sub-total					218	195	23	45	912	816	96		
73	Yangxin Dyke	Yangxin	Fuchi Town	Yanhejie Resident Committee	19		19	10	100		100	Centralized resettlement in Township	Dazaihu Development Zone
74			Banbishan Farm	Farm' Resident Committee	22		22	2	109		109	Centralized resettlement in Township	Haojixiaqu in Dukou Town
Sub-total					41		41	12	209		209		
Provincial Total					5,400	2,183	3,216	321	22,100	9,229	12,871		

Table 4-5 Resettlement Planning in Jiangxi Province

County City District	Township Town	Administrative Village	House-building for resettler		Internal Resettlement			Collective Resettlement			
			Household	Population	Household	Resettlers	Resettlement Area	Household	Resettlers	Resettlement Area	
Ruichang City	Matou Town	Jinsi Village	7	40	7	40	Same Village				
		Xiafan Village	1	6	1	6	Same Village				
		Matou Village	1	6	1	6	Same Village				
Total of Ruichang City			9	52	9	52	Same Village				
Jiujiang County	Chengzi Town	Pengwan Village	26	156	26	156	Same Village				
		Chihu Village	9	54	9	54	Same Village				
		Chihu Aquafarm	25	150	25	150	Same Village				
			Sub-total	60	360	60	360				
	Baihua Township	Yong'an Town	Wangjiabao Village	6	33	6	33	Same Village			
			Xinmin Village	18	92	18	92	Same Village			
			Dashu Village	44	224	44	224	Same Village			
			Binjiang Village	111	580	111	580	Same Village			
			Mingzha Village	6	33	6	33	Same Village			
			Aiguo Village	31	180	31	180	Same Village			
			Guanhu Village	41	240	41	240	Same Village			
			Sub-total	251	1,349	251	1,349				
		Saichenghu	Saichenghu Farm	97	392	97	392	Same Village			
Total of Jiujiang County			414	2,134	414	2,134					
Xunyang District	Binxingjie Office		735	2,743				735	2,743	Lijianghuayuan District	
		Baishuihujie Office	219	766				219	766	Shentai District	
		Gantangjie Office	220	880				220	880	Xiyuan District	
Total of Xunyang District			1,174	4,389				1,174	4,389		
Lushan District	Xingang Town	Xingang Village	22	110	22	110	Same Village				
		Yangjia Village	27	112	27	112	Same Village				
		Sub-total	49	222	49	222					
	Jinjipojie Office	Jinjipo Resident Committee	214	963				214	963	Binjiang District	
Total of Lushan District			263	1,185	49	222		214	963		

Table 4-5 Resettlement Planning in Jiangxi Province

County City District	Township Town	Administrative Village	House-building for resettler		Internal Resettlement			Collective Resettlement		
			Household	Population	Household	Resettlers	Resettlement Area	Household	Resettlers	Resettlement Area
Hukou County	Fenghuang Township	Huang Village	16	86	16	86	Same Village			
	Liusi Town	Yonghe Village	74	362	74	362	Same Village			
Total of Hukou County			90	448	90	448	Same Village			
Pengze County	Hongguan Xian	Hongguan Village	23	122	23	122	Same Village			
	Dinshan Town	Mianzhou Village	14	50	14	50	Same Village			
	Furongdun Town	Taizi Village	192	780	192	780	Same Village			
		Wulian Village	32	124	32	124	Same Village			
		Furong Village	25	86	25	86	Same Village			
		Jianghe Village	66	228	66	228	Same Village			
			315	1,218	315	1,218				
	Quanshan Township	Chenzi Village	305	1,373	305	1,373	Same Village			
Madang Town	Yuejing Village	27	107	27	107	Same Village				
	Madang Village	80	365	80	365	Same Village				
	Yangliu Village	21	104	21	104	Same Village				
	Sub-total	128	576	128	576					
Total of Pengze County			785	3,339	785	3,339				
Total			2,735	11,547	1,347	6,195		1,388	5,352	

Table 4-6 Production Resettlement Target for Rural Resettler

Province	County (City, District, Farm)	Population Resettled by Production (person)	
		Design Base Year	Planning Base Year
Hunan	Linxiang City	1,657	1,692
	Yunxi District	1,036	1,058
	Junshan Farm	229	234
	Huanggaihu Farm	163	166
	Junshan District	738	753
	Huarong County	2,258	2,305
	total	6,081	6,208
Jiangxi	Ruichang City	357	366
	Jiujiang County	1,316	1,352
	Lushan District	547	558
	Hukou County	1,540	1,582
	Pengze County	1,212	1,245
	total	4,972	5,103
Hubei	Zhijiang District	919	940
	Jingzhou District	915	936
	Songci County	44	45
	Gongan County	147	152
	Shishou City	549	562
	Jiangli County	362	374
	Xinzhou County	22	23
	Huangpo County	242	248
	Hannan District	90	93
	Jiangxia District	328	336
	E'zhou City	2,065	2,112
	Huangzhou District	127	131
	Yangxin County	15	16
	total	5,825	5,968
Provincial Total		16,878	17,279

Table 4-7 Cultivated Land Capacity of Affected Townships in Hunan

County (City, District, Farm)	Township	Name of Village	Planned Production Resettlement (person)	Developable & Utilizable Resources (Mu)		Increaseable Income of Planting Industry (Yuan)			Increaseable Environment Capacity (person)		
				Increase investment & low yield land transformation	Dryland transferred into paddy	Sub-total	Increase investment & low-yield land transformation	Dryland transferred into paddy	Sub-total	Increase investment & low-yield land transformation	Dryland transferred into paddy
Linxiang City			1,692	13,005	12,095	9,560,593	1,638,630	7,921,963	2,941	504	2,437
	Ruxi Town	2	238	956	272	298,354	120,456	177,898	91	37	54
		Shiziling Village	97	121	37	39,481	15,246	24,235	11	4	7
		Ruxi Village	141	835	235	258,873	105,210	153,663	79	32	47
	Jiangnan Town		1,454	12,049	11,823	9,262,239	1,518,174	7,744,065	2,849	467	2,382
		Yalan Village	115	1,617	1,697	1,315,277	203,742	1,111,535	403	62	341
		Sihe Village	48	2,105	2,111	1,647,935	265,230	1,382,705	506	81	425
		Xiaozhou Village	96	1,440	1,467	1,142,325	181,440	960,885	350	55	295
		Guhua Village	534	2,018	1,392	1,166,028	254,268	911,760	358	78	280
		Changjiang Village	280	1,382	1,572	1,203,792	174,132	1,029,660	369	53	316
		Dengta Village	249	1,580	1,575	1,230,705	199,080	1,031,625	378	61	317
		Xinzhou Village	132	1,907	2,009	1,556,177	240,282	1,315,895	477	73	404
Yunxi District			1,058	6,682	4,005	3,465,207	841,932	2,623,275	1,066	259	807
	Songyanghu Farm		243	1,945	856	805,750	245,070	560,680	247	75	172
		Yangshugang Branch Farm	106	1,001	555	489,651	126,126	363,525	149	38	111
		Leigutai Branch Farm	137	944	301	316,099	118,944	197,155	96	36	60
	Daorenji Town		422	2,830	2,062	1,707,190	356,580	1,350,610	524	109	415
		Dingshan Village	128	1,362	1,129	911,107	171,612	739,495	279	52	227
		Bingjiang Village	156	732	192	217,992	92,232	125,760	66	28	38
		Silong Village	138	736	741	578,091	92,736	485,355	177	28	149
	Lucheng Town		393	1,907	1,087	952,267	240,282	711,985	292	73	219
		Xingang Village	140	410	633	466,275	51,660	414,615	142	15	127
		Lucheng Village	197	847	73	154,537	106,722	47,815	46	32	14
		Xinshe Village	56	650	381	331,455	81,900	249,555	101	25	76
Junshan Farm			234	2,443	6,741	4,723,173	307,818	4,415,355	1,452	94	1,358

Table 4-7 Cultivated Land Capacity of Affected Townships in Hunan

County (City, District, Farm)	Township	Name of Village	Planned Production Resettlement (person)	Developable & Utilizable Resources (Mu)		Increasable Income of Planting Industry(Yuan)			Increasable Environment Capacity (person)		
				Increase investment & low yield land transformation	Dryland transferred into paddy	Sub-total	Increase investment & low-yield land transformation	Dryland transferred into paddy	Sub-total	Increase investment & low-yield land transformation	Dryland transferred into paddy
		Xinhe Branch Farm	192	1,749	4,774	3,347,344	220,374	3,126,970	1,028	67	961
		Brigade No.1	14	226	738	511,866	28,476	483,390	156	8	148
		Brigade No.2	30	205	733	505,945	25,830	480,115	154	7	147
		Brigade No.3	49	290	707	499,625	36,540	463,085	153	11	142
		Brigade No.4	39	335	866	609,440	42,210	567,230	186	12	174
		Brigade No. 6	11	120	389	269,915	15,120	254,795	82	4	78
		Brigade No.7	15	391	806	577,196	49,266	527,930	177	15	162
		Brigade No. 9	34	182	535	373,357	22,932	350,425	114	7	107
		Wuxing Branch Farm	42	694	1,967	1,375,829	87,444	1,288,385	422	26	396
		Brigade No.1	30	365	833	591,605	45,990	545,615	181	14	167
		Brigade No.2	12	329	1,134	784,224	41,454	742,770	240	12	228
Huanggaihu Farm			166	638	1,847	1,290,173	80,388	1,209,785	396	24	372
		No.1 Branch Faarm	166	638	1,847	1,290,173	80,388	1,209,785	396	24	372
		Shuangzhou	52	231	653	456,821	29,106	427,715	139	8	131
		Xinzhou Village	58	171	374	266,516	21,546	244,970	81	6	75
		Guangping	14	236	616	433,216	29,736	403,480	133	9	124
		Baishazhou	42		204	133,620		133,620	41		41
Junshan District			753	5,225	6,515	4,925,675	658,350	4,267,325	1,514	202	1,312
	Guangxinzhou Town		753	5,225	6,515	4,925,675	658,350	4,267,325	1,514	202	1,312
		Jianglin Village	113	1,002	1,226	929,282	126,252	803,030	285	38	247
		Jiangnan Village	131	735	672	532,770	92,610	440,160	163	28	135
		Changfu Village	5		485	317,675		317,675	97		97
		Huang'an Village	87	767	840	646,842	96,642	550,200	198	29	169
		Nongke Village	97	545	710	533,720	68,670	465,050	164	21	143
		Bao'an Village	113	853	1,181	881,033	107,478	773,555	270	33	237

Table 4-7 Cultivated Land Capacity of Affected Townships in Hunan

County (City, District, Farm)	Township	Name of Village	Planned Production Resettlement (person)	Developable & Utilizable Resources (Mu)		Increasable Income of Planting Industry (Yuan)			Increasable Environment Capacity (person)		
				Increase investment & low yield land transformation	Dryland transferred into paddy	Sub-total	Increase investment & low-yield land transformation	Dryland transferred into paddy	Sub-total	Increase investment & low-yield land transformation	Dryland transferred into paddy
		Hongshi Village	207	1,323	1,402	1,085,008	166,698	918,310	333	51	282
Huarong County			2,305	7,447	12,599	9,190,667	938,322	8,252,345	2,826	288	2,538
	Tashi Town		1,402	3,425	8,149	5,769,145	431,550	5,337,595	1,774	132	1,642
		Tashi Village	305	758	90	154,458	95,508	58,950	47	29	18
		Wanjia Village	251	270	393	291,435	34,020	257,415	89	10	79
		Changjiang Village	232	83	894	596,028	10,458	585,570	183	3	180
		Shunxin Village	223	11	1,718	1,126,676	1,386	1,125,290	346		346
		Baishuihu Village	103	96	1,219	810,541	12,096	798,445	248	3	245
		xiaodukou	122	221	1,481	997,901	27,846	970,055	306	8	298
		Qin ni Village	84	1,232	1,564	1,179,652	155,232	1,024,420	362	47	315
		Laodan Village	82	754	790	612,454	95,004	517,450	188	29	159
	Hongshantou Town		903	4,022	4,450	3,421,522	506,772	2,914,750	1,051	155	896
		Jiangshan Village	29	1,925	349	471,145	242,550	228,595	144	74	70
		Minsheng Village	207	305	1,283	878,795	38,430	840,365	269	11	258
		Changnin village	120	341	1,037	722,201	42,966	679,235	221	13	208
		Xinjiang Village	345	252	1,960	1,315,552	31,752	1,283,800	403	9	394
		Xuchang Village	35	316	68	84,356	39,816	44,540	25	12	13
		Hongshan Village	167	1,367	347	399,527	172,242	227,285	121	52	69
Total			6,208	35,440	43,802	33,155,488	4,465,440	28,690,048	10,195	1,371	8,824

Table 4-8 Cultivated land Capacity for Rural Resettlement in Jiangxi Province

County (District)	Township (Town)	Adm. Village	Current Status			Planning Base Year			Planning Base Year	Planning Base Year	Environment Capacity Satisfy Degree	
			Population (person)	Cultivated land (mu)	Per capita land (mu/person)	Population (person)	Cultivated land (mu)	Per capita land (mu/person)	Standard of Per Capita land (mu/person)	Environment Capacity (person)		
Ruichang City	Matou town	Sushan	2,310	2,246	0.97	2,366	2,152.0	0.91	0.75	2,869	Satisfied	
		Caigong	1,296	1,153	0.89	1,327	1,030.0	0.78	0.75	1,373	Satisfied	
		Zhuhu	2,649	2,258	0.85	2,713	2,154.0	0.79	0.75	2,872	Satisfied	
	Total	6,255	5,657	0.90	6,406	5,336.0	0.83		7,115			
Jiujiang County	Chengzi Town	Pengwan	3,048	2,466	0.81	3,131	2,273.2	0.73	0.73	3,114	Unsatisfied	
		Chihu	1,141	1,046	0.92	1,172	875.8	0.75	0.73	1,200	Unsatisfied	
		Sub-total	4,189	3,512	0.84	4,303	3,148.9	0.73		4,314		
	Baihua Township	Wanjiabao	2,455	3,058	1.25	2,522	2,958.0	1.17	1	2,958	Satisfied	
		Yong'an Town	Xinming	2,876	2,887	1.00	2,954	2,704.6	0.92	0.9	3,005	Satisfied
			Dashu	2,930	3,369	1.15	3,010	3,253.6	1.08	0.9	3,615	Satisfied
	Binjiang		2,843	3,066	1.08	2,920	2,857.3	0.98	0.9	3,175	Satisfied	
	Mingzha	805	1,011	1.26	827	975.8	1.18	0.9	1,084	Satisfied		
	Aiguo	2,976	3,501	1.18	3,057	3,364.3	1.10	0.9	3,738	Satisfied		
	Guanhu	2,737	3,184	1.16	2,812	3,018.0	1.07	0.9	3,353	Satisfied		
	Sub-total	15,167	17,018	1.12	15,580	16,173.4	1.04		17,970			
	Total	21,811	23,588	1.08	22,339	22,280.3	1.00		25,242			
	Lushan District	Xingang Town	Xingang	1,234	1,080	0.88	1,260	772.5	0.61	0.78	990	Unsatisfied
Yangjiachang			2,331	3,763	1.61	2,380	3,511.0	1.48	0.78	4,501	Satisfied	
Total		3,565	4,843	1.36	3,640	4,283.5	1.18		5,492			
Hukou County	Maying Town	Haishan	1,398	1,568	1.12	1,436	1,139.0	0.79	0.78	1,460	Satisfied	
	Fenghuang Township	Huangcun	2,859	3,015	1.05	2,937	2,528.8	0.86	0.78	3,242	Satisfied	
		Liusi Town	Yonghe	831	665	0.80	854	610.8	0.72	0.78	783	Unsatisfied
	Yangshan	1,754	2,234	1.27	1,802	2,124.0	1.18	0.78	2,723	Satisfied		

Table 4-8 Cultivated land Capacity for Rural Resettlement in Jiangxi Province

County (District)	Township (Town)	Adm. Village	Current Status			Planning Base Year			Planning Base Year	Planning Base Year	Environment Capacity Satisfy Degree
			Population (person)	Cultivated land (mu)	Per capita land (mu/person)	Population (person)	Cultivated land (mu)	Per capita land (mu/person)	Standard of Per Capita land (mu/person)	Environment Capacity (person)	
		Changjiang	469	560	1.19	482	474.8	0.99	0.78	609	Satisfied
		Jiangshan	2,218	2,677	1.21	2,278	2,419.0	1.06	0.78	3,101	Satisfied
		Shazhou	717	760	1.06	737	727.0	0.99	0.78	932	Satisfied
		Tangshan	2,283	2,331	1.02	2,345	2,190.0	0.93	0.78	2,808	Satisfied
		Sub-total	8,272	9,227	1.12	8,497	8,545.6	1.01		10,956	
	Total		12,529	13,810	1.10	12,870	12,213.4	0.95		15,658	
Pengze County	Hongguang Township	Hongguang	1,098	1,720	1.57	1,128	1,422.4	1.26	1	1,422	Satisfied
	Dingshan Town	Mianzhou	586	1,194	2.04	602	1,116.5	1.85	1	1,117	Satisfied
	Furongdun Town	Taizi	4,300	3,528	0.82	4,417	3,363.3	0.76	0.75	4,484	Satisfied
		Wulian	4,308	4,203	0.98	4,425	4,165.1	0.94	0.75	5,553	Satisfied
		Furong	2,592	2,686	1.04	2,663	2,620.5	0.98	0.75	3,494	Satisfied
		Jianghe	1,510	1,199	0.79	1,551	1,035.8	0.67	0.75	1,381	Unsatisfied
		Sub-total	12,710	11,616	0.91	13,056	11,184.7	0.86		14,913	
	Quanshan Township	Cenzi	1,800	1,800	1.00	1,849	1,696.7	0.92	0.9	1,885	Satisfied
	Matdang Town	Yuejin	1,548	2,303	1.49	1,590	2,185.0	1.37	1	2,185	Satisfied
		Madang	2,634	2,898	1.10	2,706	2,817.7	1.04	1	2,818	Satisfied
		Liudang	2,890	3,392	1.17	2,969	3,283.7	1.11	1	3,284	Satisfied
		Chuanxing	1,209	1,602	1.33	1,242	1,476.0	1.19	1	1,476	Satisfied
		Sub-total	8,281	10,195	1.23	8,481	9,762.3	1.15	1	9,762	
	Total		24,475	26,525	1.08	25,117	25,182.7	1.00		29,099	
Total			68,635	74,423	1.08	70,372	69,295.8	0.98		82,606	

Table 4-9 Cultivated Land Environment Capacity in Hubei Province

No	Name of Dyke	City, County (District)	Township	Name of Village	Cultivated Land Area after Resettlement (mu)			Population resettled by production (person)	Land developable and utilizable (mu)	Increaseable environment capacity (person)	Capacity Analysis
					Sub-total	Paddy	Dry land				
1	Xiabailizhou	Zhijiang	Majiadian	Tenjiahe	1,713	206	1,506	46	856	57	11
2				Zhaojiahe	2,378	287	2,092	44	1,189	79	35
3				Baohua	2,490	299	2,191	17	1,120	75	58
4			Jiangkou	Yongshouyuan	1,359	164	1,195	55	951	63	8
5			Qixingtai	Yazikou	2,986	362	2,624	138	2,090	139	1
6				Shitaozi	3,073	374	2,699	160	2,458	164	4
7				Sanwangmiao	3,493	428	3,066	219	2,795	186	(32)
8				Chenjiagang	4,419	532	3,888	33	1,768	118	85
9				Dabujie	4,927	596	4,331	115	1,971	131	17
10				Dengwang	1,751	213	1,537	113	1,400	93	(20)
			Sub-total		28,588	3,461	25,127	940	16,599	1,107	166
11	Jingnan dyke	Jingzhou City	Mishi City	Laoyang	3,130	295	2,835	223	2,504	167	(56)
12				Jisheng	463	27	436	660	370	25	(636)
13				Dakou	1,690	245	1,445	53	1,014	68	15
			Sub-total		5,283	567	4,716	936	3,888	259	(677)
14		Songci	Wanshi City	Yueti	4,101	2,519	1,582	45	1,640	109	64
			Sub-total		4,101	2,519	1,582	45	1,640	109	64
15		Gong'an	Mahaokou	Zhuhu	2,005	1,103	902	20	802	53	33
16				Pingnan	2,090	1,150	941	48	836	56	8
17				Bailong	1,625	893	732	61	975	65	4
18			Doutihu	Gaojian	2,762	1,519	1,243	23	1,105	74	51
			Sub-total		8,482	4,664	3,818	152	3,718	248	96
19		Shishou	Taohuashan	Wumakou	1,185	830	355	55	889	59	4
20				Changjiang	1,568	1,098	470	39	627	42	3
21			Tiaoguan	Zhanghua	2,236	1,565	671	38	894	60	22
22				Baihu	1,288	901	386	79	1,030	69	(10)
23				Caigang	2,291	1,604	687	63	1,146	76	14
24				Nanhu	2,009	1,406	603	115	1,607	107	(8)
25				Xinhezhou	3,283	2,298	985	93	1,641	109	16
26				Shazui	2,100	1,470	630	58	1,050	70	12
27				Guangyin'an	2,643	1,850	793	22	1,057	70	49
			Sub-total		18,602	13,022	5,580	562	9,942	663	101
			Sub-total		36,468	20,772	15,695	1,695	19,188	1,279	(415)
28	Jianli Dyke	Jianli	Chiba	Fulu	2,341	1,156	1,184	26	936	62	37
29				Hongmiao	1,495	739	757	46	748	50	4

Table 4-9 Cultivated Land Environment Capacity in Hubei Province

No	Name of Dyke	City, County (District)	Township	Name of Village	Cultivated Land Area after Resettlement (mu)			Population resettled by production (person)	Land developable and utilizable (mu)	Increasable environment capacity (person)	Capacity Analysis
					Sub-total	Paddy	Dry land				
30				Gaoma	2,027	1,001	1,026	28	811	54	26
31				Jidang	2,036	1,006	1,030	63	1,018	68	5
32				Jigou	758	375	384	25	379	25	0
33				Lintang	547	270	277	20	328	22	2
34				Hedang	609	301	308	14	244	16	3
35				Sanhong	2,912	1,438	1,473	24	1,165	78	53
36				Yonghong	1,854	916	938	18	741	49	31
37			Tuomu Town	Xuetan	2,228	1,101	1,127	47	891	59	13
38				Dawangmiao	1,993	984	1,008	30	797	53	23
39				Hebu	2,956	1,460	1,496	34	1,183	79	45
				Sub-total	21,756	10,748	11,009	374	9,241	616	242
40	Wuhan Dyke	Xinzhou	Dabu	Chenlu	3,545	2,067	1,477	23	1,418	95	72
				Sub-total	3,544	2,067	1,477	23	1,418	95	72
41		Huangpo	Wuhu Farm	Dongsheng	911	723	188	33	547	36	3
42				Shahe	1,456	1,155	301	2	582	39	36
43				Shudi	1,737	1,379	359	126	1,390	93	(34)
44				Jiangzui	988	784	204	21	395	26	6
45				Xiaowan	905	718	187	66	724	48	(17)
				Sub-total	5,997	4,759	1,238	248	3,638	243	(5)
46		Hannan	Dazui	Dazui	3,690	1,476	2,214	61	1,476	98	38
47				Changjiang	3,567	1,427	2,140	32	1,427	95	63
				Sub-total	7,257	2,903	4,354	93	2,903	194	101
48		Jiangxia	Jinshui	Hengti	869	542	327	336	695	46	(289)
				Sub-total	869	542	327	336	695	46	(289)
				Sub-total	17,667	10,270	7,397	699	8,654	577	(122)
49	Bapu Dyke	E'zhou	Fenghuang Office	Caiyantou	120	67	53	227	96	6	(221)
50			Xinmiao Town	Maicao	2,375	1,330	1,045	26	950	63	37
51			Duandian	Sanjiang	1,284	719	565	178	1,027	68	(110)
52			Linjiang Town	Huangbuoshan	1,732	970	762	136	1,386	92	(43)
53				Linjiang	2,038	911	1,127	161	1,630	109	(52)
54				Bapu	4,874	902	3,971	67	1,949	130	63
55				Wangbu	3,116	262	2,854	63	1,246	83	20
56				Luzhou	1,520	50	1,470	65	1,140	76	11
57				Desheng	1,355	42	1,313	67	1,084	72	5
58			Niji Township	Luohu	1,876	1,050	826	306	1,501	100	(206)

Table 4-9 Cultivated Land Environment Capacity in Hubei Province

No	Name of Dyke	City, County (District)	Township	Name of Village	Cultivated Land Area after Resettlement (mu)			Population resettled by production (person)	Land developable and utilizable (mu)	Increasable environment capacity (person)	Capacity Analysis
					Sub-total	Paddy	Dry land				
59				Sifen	1,233	690	543	486	986	66	(421)
60				Zhangwang	772	432	340	329	618	41	(288)
				Sub-total	22,295	7,425	14,870	2,112	13,614	908	(1,205)
61	Huanggang Dyke	Huangzhou	Yuwang Office	Wanhu	1,336	348	988	21	535	36	15
62				Xinhe	2,114	551	1,563	7	846	56	49
63				Caiwuliao	2,483	647	1,836	17	993	66	49
64			Lukou Town	Lujiaawang	1,952	509	1,443	86	1,425	95	9
				Sub-total	7,885	2,055	5,830	131	3,798	253	122
65	Yangxin Dyke	Yangxin	Banbishan	Banbishan Farm	3,393	1,633	1,760	16	1,357	90	74
				Sub-total	3,393	1,633	1,760	16	1,357	90	74
				Provincial Total	138,051	56,364	81,687	5,968	72,451	4,830	(1,138)

Table 4-10 Production Resettlement Planning

Province	County (city, district, farm)	Resettled by production (person)	Improvement of Village Lands		Improvement of Lands (including land transfer from other villages)		Resettlement into Animal Husbandry (person)	Resettled into Village Enterprise and Tertiary Industry(person)	Total
			Area (mu)	Population resettled (person)	Area (mu)	Population resettled (person)			
Hubei	13	5,968	52,871	3,516			264	2,188	5
	Zhijiang city	940	13,326	889			22	30	
	Jingzhou district	936	3,667	244			40	651	
	Songchi county	45	678	45					
	Gongan county	152	2,278	152					
	Shishou city	562	8,148	544			20		
	Jianli county	374	5,606	374					
	Xinzhou county	23	341	23					
	Huangpo county	248	2,953	197			22	29	
	Hannan distric	93	1,393	93					
	Jiangxia district	336	695	47			20	269	
	E'zhou city	2,112	11,577	762			140	1,209	2
	Huangzhou distric	131	1,968	131					
	Yangxin county	16	240	16					
Hunan	6	6,208	52,763	5,077	1,227	893		238	6
	linxiang city	1,692	16,636	1,368	378	286		38	1
	Yunxi district	1,058	9,291	776	284	280		2	1
	Junshan farm	234	3,161	234					2
	Huanggaihu farm	166	1,350	166					1
	Junshan district	753	7,975	753					7
	Huarong county	2,305	14,350	1,780	565	327		198	2
Jiangxi	5	4,972			4,987	4,972	170	163	5
	Ruichang city	357			299	357		3	3
	Jiujiang county	1,316			1,344	1,316	18	38	1
	Lushan district	547			658	547	13	42	6
	Hukou district	1,540			1,435	1,540	111	45	1
	Pengze county	1,212			1,251	1,212	28	35	1
Total of Project Area		17,148	105,633	8,593	6,214	5,865	434	2,589	17,4

Table 4-11 Family Income Level Comparison before & after Resettlement

Item	Unit	Hunan				Jiangxi		Hubei	
		Resettlement by land improvement		Resettlement by secondary & tertiary industry		Resettlement by land improvement		Resettlement by land improvement	
		Before	After	Before	After	Before	After	Before	After
1. Form of Family Populaton	Person	4.3	4.3	4.3	4.3	4.3	4.3		
1.1 Labour at age 17—60	Person	2.8	2.8	2.8	2.8	2.3	2.3		
1.2 Non-labour force	Person	1.5	1.5	1.5	1.5	2	2		
2. Land Contracted from Collectivity	mu	7.79	7.39	5.46	4.82	4.30	4.23		
2.1 Paddy	mu	3.32	4.47	3.14	4.39	1.59	1.55		
2.2 Dry land	mu	4.47	2.92	2.32	0.43	2.71	2.68		
3. Family income & expenditures									
3.1 Income	Yuan	14,713.49	22,208.66	14,109.46	23,906.11	13,353.48	19,465.17		
Income from planting	Yuan	8,512.25	13,761.31	5,966.22	8,975.58	6,772.26	10,022.94		
Income from forest	Yuan	151.34	151.34	151.34	151.34	48.50	55.78		
Income from stock raising	Yuan	1,862.95	2,351.93	1,862.95	1,862.95	1,693.06	2,539.59		
Industry & sideline income	Yuan	3,264.28	4,779.23	5,206.28	11,794.73	3,133.20	4,543.14		
Other income	Yuan	922.67	1,164.85	922.67	1,121.51	1,706.46	2,303.72		
3.2 Expenditures	Yuan	13,854.87	16,448.05	13,854.87	17,613.04	9,994.15	13,000.53		
Living expenditures	Yuan	6,659.58	7,495.42	6,659.58	7,495.42	5,732.85	7,911.33		
Production expenditure	Yuan	5,778.09	7,294.71	5,778.09	8,459.70	3,652.68	4,310.16		
Other expenditure	Yuan	1,417.20	1,657.92	1,417.20	1,657.92	608.62	779.03		
3.3 Total net incomes	Yuan	8,935.40	14,913.95	8,331.37	15,446.41	9,700.80	15,155.01		

Table 4-11 Family Income Level Comparison before & after Resettlement

Item	Unit	Hunan				Jiangxi		Hubei	
		Resettlement by land improvement		Resettlement by secondary & tertiary industry		Resettlement by land improvement		Resettlement by land improvement	
		Before	After	Before	After	Before	After	Before	After
3.4 Income & expenditure per capita									
Mean per capita income	Yuan	3,421.74	5,164.80	3,421.74	5,559.56	3,105.46	4,526.78		
Mean per capita expenditure	Y/P	3,222.06	3,825.13	3,222.06	4,096.06	2,324.22	3,023.38		
Mean per capita net income	Y/P	2,078.00	3,468.36	1,938.00	3,592.19	2,256.00	3,524.42		
4. Economic target value	Y/P		3,412.00		3,239.00		3,386.00		

Table 4-12 Budget Estimate for Production Resettlement

Province	Item	Unit	Unit Price	Quantity	Investment (10,000 Yuan)
Hunan					5,462.37
	Low yield land transformation	mu	240	33,927	814.25
	Dry land transferred into paddy	mu	2,070	18,554	3,840.68
	Paddy transferred from other village	mu	6,932	623	431.86
	Dry land transferred from other village	mu	3,854	604	232.78
	Dietetical industry	person	6,000	30	18.00
	Small shops	person	6,000	208	124.80
Jiangxi					4,525.40
	Land improvement	mu	500	12,500	625.00
	Land reclamation	mu	6,000	193	115.80
	80kW electrical pumping station	kW	320,000	17	544.00
	40kW electrical pumping station	kW	160,000	39	624.00
	17kW electrical pumping station	kW	70,000	51	357.00
	Canal	km	5,000	1,708	854.00
	Water slop	set	50,000	34	170.00
	Development of orchard and tea garden	mu	4,500	236	106.20
	Transformation of orchard and tea garden	mu	2,000	420	84.00
	Development of fish pond	mu	4,000	1,776	710.40
	Township's enterprises	pce		35	335.00
Hubei					5,391.64
	Land improvement	mu	52,870.62	700	3,700.94
	Breed aquatics	person	264	6,000	158.40
	Village's enterprises and the third industry	person	2,189	7,000	1,532.30
Total of three provinces					15,379.41

Table 4-13 Calculation of Investment Balance for Land Compensation Cost & Production Resettlement

Unit(10,000 Yuan)

Items	Hunan	Hubei	Jiangxi	Total
1. Production Development Investment	5,462.37	5,391.64	4,525.40	15,379.41
1.1 Agricultural resettlement	5,319.57	3,859.34	4,190.40	13,369.31
Low yield land transformation	814.25	3,700.94		4,515.19
Dry land transferred into paddy	3,840.68			3,840.68
Cultivated land transferred from other village	664.64			664.64
Soil improvement			625.00	625.00
Land reclamation			115.80	115.80
80kW electrical pumping station			544.00	544.00
40kW electrical pumping station			624.00	624.00
17kW electrical pumping station			357.00	357.00
Canal			854.00	854.00
Water slop			170.00	170.00
Development of orchard and tea garden			106.20	106.20
Transformation of orchard and tea garden			84.00	84.00
Aquaculture		158.40	710.40	868.80
1.2 Non-agricultural resettlement	142.80	1532.30	335.00	2010.10
Dietetical industry	18.00			18.00
Small shops	124.80			124.80
Township's enterprises			335.00	335.00
2. Land compensation and resettlement compensation	9,486.93	8,089.08	4,806.00	22,382.01
Fund for production	5,521.78	5,354.39	4,546.00	15,422.17
3. Difference of compensation fund and planned investment	59.41	-37.25	20.60	42.76

Table 4-14 Planned Investment Estimate for Community/Infrastructure

Description		Total Investment (10,000 Yuan)	Hunan Province			Jiangxi Province			Hubei Province		
			Reconstruction scale		Investment (10,000 Yuan)	Reconstruction scale		Investment (10,000 Yuan)	Reconstruction Scale		Investment (10,000 Yuan)
			Unit	Quantity		Unit	Quantity		Unit	Quantity	
Total		3,334.44			1,659.07			307.6			1,367.77
Highway	Total	1,731.33			1,225.03						506.30
	Concrete road surface	316.75	km						km	12.67	316.75
	Simple road	1,359.92	km	69.24	1,170.37				km	11.15	189.55
	Tractor's road	54.66	km	43.62	54.66				km		
Power Supply Planning	Total	652.08			254.66			163.7			233.72
	Low-voltage lines	275.64	km	124.72	113.83	pce	399	39.9	km	118.03	121.91
	10kV high-voltage lines	304.74	km	49.6	111.73	pce	619	123.8	km	30.09	69.21
	Transformation facilities	59.10	set	97	29.10				□	2	30.00
	35kV high-voltage lines	12.60								3.6	12.60
Telecom facilities	Total	778.19			140.94			143.9			493.35
	Telecommunication lines	778.19	km	109.59	140.94	pce	1439	143.9	km	379.5	493.35
		-									
	Tap Water Trunk	58.91	km	3.9	19.50				km	5.63	39.41
Cable TV facilities	Cable TV lines	113.93	km	23.68	18.94				km	99.00	94.99

Table 4-15 Summary of Compensation Cost for Enterprises

Province	County, City, District	House Compensation (10000 Yuan)	Auxiliary Building Compensation (10000 Yuan)	Compensation Subsidy for Enterprises					Total of Compensation for Enterprises (10,000 yuan)
				Facility Compensation (10,000 yuan)	Loss of stop production (10,000 yuan)	Transfer Transportation (10,000 yuan)	Land levelling (10,000 yuan)	Total (10,000 yuan)	
Jiangxi	Ruichang City	381.25	12.56	47.10	132.80	12.70	26.80	219.40	613.21
	Jiujiang County	324.40	23.65	125.80	134.70	5.90	23.00	289.40	637.45
	Xunyang District	9421.00	97.00	880.00	554.00	440.00	66.00	1940.00	11458.00
	Lushan District	164.08	11.56	23.00	20.40	1.90	10.70	56.00	231.64
	Hukou County	77.23	5.77	10.00	25.00	1.70	3.60	40.30	123.30
	Pengze County	177.89	18.25	37.80	92.90	2.40	8.30	141.40	337.54
	Total	10545.85	168.78	1123.70	959.80	464.60	138.40	2686.50	13401.13
Hunan	Huarong County	2851.06						20.00	2871.06
	Junshan District	281.78							281.78
	Junshan Farm	584.52							584.52
	Jianxin Farm	166.59							166.59
	Yunxi District	2167.64							2167.64
	Linxiang City	864.03							864.03
	Huanggaihu Farm	401.42							401.42
Total	7317.04						20.00	7337.04	
Hubei	Zhijiang City	903.26		15.00	142.18	6.60	8.80	172.58	1075.84
	Shishou City	874.25		62.20	31.45	8.50	8.40	110.55	984.80

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CHAPTER 4: RESETTLEMENT PROGRAM

Table 4-15 Summary of Compensation Cost for Enterprises

Province	County, City, District	House Compensation (10000 Yuan)	Auxiliary Building Compensation (10000 Yuan)	Compensation Subsidy for Enterprises					Total of Compensation for Enterprises (10,000 yuan)
				Facility Compensation (10,000 yuan)	Loss of stop production (10,000 yuan)	Transfer Transportation (10,000 yuan)	Land levelling (10,000 yuan)	Total (10,000 yuan)	
	Mishi City	171.88		5.00	2.00	0.40	0.30	7.70	179.58
	Jiangli County	228.17		2.00	2.00	1.30	2.00	7.30	235.47
	Honghu	7613.04		40.30	1.60	2.20	9.00	53.10	7666.14
	Xinzhou County	491.85		20.00	14.10	5.30	6.60	46.00	537.85
	Huangpo County	337.61		5.00	1.80	0.70	0.70	8.20	345.81
	Hannan County	221.40		2.60	3.50	1.80	2.30	10.20	231.60
	Jiangxia District	1429.55		26.40	24.90	7.90	12.70	71.90	1501.45
	E'zhou City	3015.63		80.00	123.00	15.00	21.60	239.60	3255.23
	Huangzhou County	2067.71		1.20	1.00	0.30	0.20	2.70	2070.41
	Yangxin County	523.20		10.00	3.00	3.00	5.00	21.00	544.20
	Tuanfeng County	819.16		1.40	1.00	0.50	1.00	3.90	823.06
	Total	18696.72		271.10	351.53	53.50	78.60	754.73	19451.45
Total of three provinces		36559.61	168.78	1394.80	1311.33	518.10	217.00	3461.23	40189.62

TABLE OF CONTENTS

5. RESETTLEMENT BUDGET	5-2
5.1 INTRODUCTION.....	5-2
5.2 RESETTLEMENT PROGRAM COSTS.....	5-2
5.2.1 <i>Compensation Costs</i>	5-2
5.2.2 <i>Contingency Costs</i>	5-2
5.2.3 <i>Subsidies for Vulnerable Groups</i>	5-2
5.2.4 <i>Total Estimated Costs</i>	5-3
5.3 BUDGET PROGRAM	5-3
5.3.1 <i>Fund Disbursement</i>	5-3
5.3.2 <i>Fund Sources</i>	5-3
5.3.3 <i>Annual Investment Plan</i>	5-4
5.4 SUMMARY AND CONCLUSION.....	5-4

TABLES

<i>Table 5-1 Summary Resettlement Costs</i>	5-4
<i>Table 5-2 Resettlement Program Investment Estimates</i>	5-5
<i>Table 5-3 Invest Fund Sources</i>	5-7
<i>Table 5-4 Program for Annual Resettlement Investment</i>	5-8

5. Resettlement Budget

5.1 Introduction

Chapter 5 presents the essential basic cost estimates of the proposed resettlement budget for the Yangtze Basin Flood Control Project. The total estimated resettlement budget is 1.3211292 billion yuan, including 501.6646 million yuan in Hunan Province, 488.691 million yuan in Hubei Province and 331.1196 million yuan in Jiangxi Province. The base un-escalated investment is estimates at 1.2301811 million yuan, including 444.3287 million yuan in Hunan Province, 466.082 million yuan in Hubei Province and 319.7704 million yuan in Jiangxi Province.

5.2 Resettlement Program Costs

5.2.1 Compensation Costs

These costs incorporate compensation for relocation (including houses and assets), land compensation and compensation for public utilities, etc. Based on inventories undertaken and compensation standards, total compensation costs are estimated to be 1.0244412 billion yuan (almost 78 percent of the total resettlement budget), including 725.3142 million yuan (56 percent) relocation compensation for resettlers, 231.1723 million yuan (16 percent) land acquisition compensation, and 67.9546 million yuan (5 percent) compensation for public utilities, as summarized in **Table 5-1**.

5.2.1.1 Planning and Management Costs

Planning and management costs represent five percent of the overall resettlement budget, totaling 84.0877 million yuan. This budget is composed of 24.8514 million yuan for survey and planning, 30.6491 million for implementation administration, 1.8537 million for special research (including studies such as land capacity assessment), 6.4843 million for technical training (for both resettlement staff and resettlers), 10.2161 million for supervising, 7.1512 million yuan for monitoring and evaluation, and 2.8819 million yuan for the functioning of the Panel of Experts.

5.2.2 Contingency Costs

5.2.2.1 Basic Contingency

Contingencies for compensation, planning and management costs are 39.8175 million yuan in Hunan, 42.371 million yuan in Hubei, and 41.3633 million yuan for Jiangxi.

5.2.2.2 Contingency Cost for Price Difference

Based on the annual investment plan and the price indexes, the contingency cost for price difference is estimated to be 91.2945 million yuan.

5.2.3 Subsidies for Vulnerable Groups

Approximately 5 percent of the affected population are considered vulnerable groups (low income families, female headed families, handicapped and elderly). Allocation of a single 600 yuan payment to assist relocation and transition represents 2.002 million yuan (Hunan 0.669 million yuan, Hubei 1.191 million yuan, and Jiangxi 0.142 million yuan).

In addition, a contingency of 5 percent of the housing compensation value has been

included in overall project contingency to provide a safety net fund for vulnerable groups (Hunan 0.576 million yuan, Hubei 0.663 million yuan, and Jiangxi 0.3464 million yuan).

5.2.4 Total Estimated Costs

Total estimated costs are presented in **Table 5-2** which provides a breakdown by cost item for each province and the overall project.

5.3 Budget Program

5.3.1 Fund Disbursement

After approval, PMOs disburse the resettlement compensation funds to CiROs, which consequently disburse to the relevant CoROs (except where resettlement will occur within the city, and hence CoROs are not involved). Funds are then disbursed according to the following classifications:

- a) Land acquisition compensation and resettlement subsidy is disbursed to township level governments who are held responsible for the implementation of production resettlement of the villages (see Chapter 8, Section 8.2). CiROs and CoROs make periodic surveys in regard to fund utilization.
- b) Compensation for houses, relocation subsidy and house-building subsidy for poor households are disbursed to township level resettler coordination groups, and then paid to the resettlers via village committees and household committees, sufficiently in advance of relocation for arrangement for replacement housing and relocation.
- c) Compensation for public utilities and infrastructure is disbursed, in installment, to the contractor through CiROs and CoROs according to the contract.
- d) Compensation for public utilities and enterprises is paid directly to the affected organizations affected by the CiROs and CoROs.
- e) For resettlement sites where houses are built collectively, to ensure funds for the successful construction of the resettlement sites, CiROs and CoROs, following approval from resettlers, collectively manage compensation funds for houses and attachments. After completion of housing construction, it is paid in installments according to the type of houses selected by the resettler.

5.3.2 Fund Sources

The total cost of resettlement is 1.3214752 billion yuan, partially funded by a \$33.556 million (278.515 million yuan) World Bank loan, and 1.0439602 billion yuan from domestic funds.

Domestic funds will be furnished from the following sources:

- (a) Hydrological Construction Fund: 456.773 million yuan;
- (b) Provincial Governments Agricultural Development Fund : 68.85 million yuan;
- (c) Provincial, city and county finance: 269.233 million yuan;
- (d) National fund for construction on large rivers/lakes: 199.14 million yuan;
- (e) Other sources: 48.9642 million yuan.

The detailed sources of fund are listed in **Table 5-3**.

5.3.3 Annual Investment Plan

Land acquisition and relocation must be finished before dyke project construction can proceed on the planned schedule. Resettlement implementation plan for this Project is thus formulated (see Chapter 10 for details), and on this basis, the annual investment plan for the following is made: compensation for rural resettlers, compensation for urban resettlers, compensation for public utilities and infrastructure, compensation for enterprises, compensation for major items, miscellaneous expenditure, and contingency costs.

The annual investment plan for various charges is shown in **Table 5-4**.

5.4 Summary and Conclusion

Chapter 5 presents detailed estimates of costs for implementing the resettlement program in the project regions which comprise the costs for the three participating provinces. The text discussion covers the following items, (i) compensation costs, (ii) planning and management costs, (iii) costs for contingencies, including basic contingency and contingency for price difference, (iv) budget program, including fund disbursement and fund sources, and annual investment plan.

Overall project cost is approximately 1.3211292 billion yuan, with 0.501665 billion yuan for Hunan province, 0.48869 billion yuan for Hubei province, and 0.331196 billion yuan for Jiangxi province (as summarised in **Table 5-1**).

These costs incorporate compensation for relocation (including houses and assets), land compensation and compensation for public utilities, etc. Based on inventories undertaken and compensation standards, total compensation costs are estimated to be 1.0807848 billion yuan (almost 78 percent of the total resettlement budget), including 781.6578 million yuan (56 percent) relocation compensation for resettlers, 231.1723 million yuan (16 percent) land acquisition compensation, and 67.9546 million yuan (5 percent) compensation for public utilities.

Contingencies for compensation, planning and management costs are 40.3935 million yuan in Hunan, 47.633 million yuan in Hubei, and 41.7097 million yuan for Jiangxi. Based on the annual investment plan and the price indexes, the contingency cost for price difference is estimated to be 94.4561 million yuan.

In addition, a contingency of 5 percent of the housing compensation value has been included in overall project contingency to provide a safety net fund for vulnerable groups (Hunan 0.576 million yuan, Hubei 0.663 million yuan, and Jiangxi 0.3464 million yuan).

World Bank loan will furnish 278.5 million, with the remainder coming from domestic funds, including:

- (a) Hydrological Construction Fund: 456.773 million yuan;
- (b) Provincial Governments Agricultural Development Fund : 68.85 million yuan;
- (c) Provincial, city and county finance: 342.106 million yuan;
- (d) National fund for construction on large rivers/lakes: 199.14 million yuan;
- (e) Other sources: 48.9642 million yuan.

Table 5-1 Summary Resettlement Costs

(1, 000 yuan)

	Hunan		Hubei		Jiangxi		Total	
	Cost	%	Cost	%	Cost	%	Cost	%
1. Relocation Costs	259,076.70	52	299,751.20	61	171,211.30	52	730,039.20	55
1.1 Houses	143,131.60		97,144.10		52,402.20		292,677.90	
1.2 Enterprises	73,170.40		138,647.40		105,458.20		317,276.00	
1.3 Attachments	4,482.20		20,523.40		3,330.80		28,336.40	
1.4 Subsidy for the Poor	669.00		1,191.00		142.00		2,002.00	
1.5 Infrastructure			31,239.60		3,515.00		34,754.60	
1.6 Other	37,623.50		11,005.70		6,363.10		54,992.30	
2. Land Compension	94,869.30	19	80,890.80	17	55,412.20	17	231,172.30	17
3. Public Utilities	16,790.70	3	13,678.00	3	29,939.00	9	60,407.70	5
4. Planning+ Management	33,198.50	7	29,391.00	6	21,498.20	6	84,087.70	6
4.1 Survey +Planning	9,268.40		7,886.00		7,697.00		24,851.40	
4.2 Implementation Management	11,122.10		11,830.00		7,697.00		30,649.10	
4.3 Technical Training	3,539.50		1,972.00		972.80		6,484.30	
4.4 Supervision	3,707.40		3,943.00		2,565.70		10,216.10	
4.5 Monitoring + Evaluation	2,595.20		2,760.00		1,796.00		7,151.20	
4.6 Resettlement Panel	1,112.20		1,000.00		769.70		2,881.90	
4.7 Other	1,853.70						1,853.70	
5. Contingency Costs	97,729.40	19	64,980.40	13	53,058.90	16	215,768.70	16
5.1 Basic	39,817.50		41,708.00		41,363.30		122,888.80	
5.2 Weak Group Subsidy	576.00		663.00		346.40		1,585.40	
5.3 Price Difference	57,335.90		22,609.40		11,349.20		91,294.50	
TOTAL	501,664.60		488,691.40		331,119.60		1,321,475.60	

Table 5-2 Investment Summary for YBFCP Resettlement

Item	Unit	Compensation (10,000 yuan)			
		Hunan	Hubei	Jiangxi	Total
I. Resettler Relocation		25,907.67	29,975.12	17,121.13	73,003.92
1. Houses	m ²	21,630.20	23,579.15	15,786.04	60,995.39
(1) Houses of Enterprises	m ²	7,317.04	13,864.74	10,545.82	31,727.60
Frame House	m ²		2,431.90	301.80	2,733.70
Brick Mix	m ²	4,337.49	7,271.60	515.21	12,124.30
Brick & Wood	m ²	2,900.86	4,127.84	299.94	7,328.64
Wood & Soil	m ²	10.34			10.34
Misc.	m ²	68.35	33.40	7.90	109.65
(2) Private Owned	m ²	14,313.16	9,714.41	5,240.22	29,267.79
Brick Mix	m ²	5,653.24	4,567.62	2,724.37	12,945.23
Brick & Wood	m ²	7,581.71	4,903.23	1,343.88	13,828.82
Wood & Soil	m ²	145.12			145.12
Misc.	m ²	933.09	243.56	79.81	1,256.46
2. Attachments		448.22	2,052.34	333.08	2,833.64
Walls	m ²	174.77		73.66	248.43
Sunny Yard	m ²	192.04		86.12	278.16
Water Pond	m ³	30.77			30.77
Well		6.66		1.76	8.42
Water Tower				7.83	
Manual Pump Well				11.11	11.11
Tomb		43.98		25.55	69.53
Temp. Building				5.75	5.75
3. Trees		231.67	167.24	26.44	425.35
4. Relocation Compensation	Person	382.51	933.33	467.14	1,782.98
Transportation Charge	Person	95.64		71.57	167.21
Material Loss	Person	95.64		42.94	138.58
Subsidy for Lost Work	Person	191.23		143.14	334.37
Rent Subsidy (Transition Period)	Person			42.94	
5. House Subsidy for the Poor	Household	66.90	119.10	14.20	200.20
6. Safety Platform		3,148.17			3,148.17
7. Infrastructure Investment			3,123.96	350.50	3,474.46
8. Other				143.73	
II. Land Compensation		9,486.93	8,089.08	5,541.22	23,117.23
1. Average below 1 mu		508.66			508.66
(1) Irrigation Land	mu	142.96			142.96
(2) Dry Land	mu	77.60			77.60
(3) Vegetable Land	mu	177.26			177.26
(4) Water Pond	mu	52.14			52.14
(5) Woods	mu	14.00			14.00
(6) Orchard	mu	23.96			23.96
(7) Land for Housing	mu	20.74			20.74

Item	Unit	Compensation (10,000 yuan)			
		Hunan	Hubei	Jiangxi	Total
2. Average above 1 mu		8,978.27		5,541.22	14,519.49
(1) Irrigation Land (farmland)	mu	1,999.30		4,586.60	6,585.90
(2) Dry Land	mu	2,671.04			2,671.04
(3) Vegetable Land	mu	1,752.19			1,752.19
(4) Water Pond	mu	798.17		162.99	961.16
(5) Woods	mu	922.76		102.55	1,025.31
(6) Orchard	mu	163.46			163.46
(7) Land for Housing	mu	671.35			671.35
(8) Other	mu			689.08	689.08
III. Major Items		1,679.07	1,367.80	2,993.90	6,040.77
1. Transportation		1,225.03	506.30		
a. Blacktop	km		316.75		
b. Simple Road	km	1,170.37	189.55		
c. Farming Lane	km	54.66			
2. Power Transmission line	km	254.66	233.72	163.70	652.08
a. Low voltage line	km	113.83	121.91	39.90	275.64
b. 35kv line	km		12.60		12.60
c. 10kv line	km	111.73	69.21	123.80	304.74
d. Power Converters	site	29.10	30.00		59.10
4. Telecommunication Lines	km	140.94	493.35	143.90	778.19
5. Radio & TV Broadcasting line	km	18.94	94.99		113.93
6. Tap Water Major Pipe	km	19.50	39.41		58.91
7. Enterprise Facilities		20.00		2,686.30	2,706.30
IV. Other Expenditure		3,319.85	2,939.10	2,149.82	8,408.77
1. Survey and Planning		926.84	788.60	769.70	2,485.14
2. Scientific Research		185.37			185.37
3. Implementation Management		1,112.21	1,183.00	769.70	3,064.91
4. Technical Training		353.95	197.20	97.28	648.43
5. Supervision		370.74	394.30	256.57	1,021.61
6. Monitoring and Evaluation		259.52	276.00	179.60	715.12
7. International Panel		111.22	100.00	76.97	288.19
V. Contingency Costs		9,772.94	6,498.04	5,305.89	21,576.87
1. Basic Contingency		3,981.75	4,170.80	4,136.33	12,288.88
2. Living Subsidy for Weak Group		57.60	66.30	34.64	158.54
3. Contingency for Price Difference		5,733.59	2,260.94	1,134.92	9,129.45
VI. Total Investment		50,166.46	48,869.14	33,077.32	132,112.92
Static Investment		44,432.87	46,608.20	31,942.40	122,983.47

Table 5-3 Investment Fund Sources (by Province)

Province	Land & Relocation Compensation (10,000 yuan)	Sources of Fund					
		Fund Hydro Construction	Agriculture Develop. Fund	Local Finance	Hydro. Construction Subsidy	Other	World Bank Loan
Hunan	50,166.46	20,654.00	6,885.00	6,885.00	13,769.00	1,973.46	
Hubei	48,869.10	14,379.30		6,638.30			27,851.50
Jiangxi	33,111.96	10,644.00		13,400.00	6,145.00	2,922.96	
Total	132,147.52	45,677.30	6,885.00	26,923.30	19,914.00	4,896.42	27,851.50

Table 5-4 Program for Annual Resettlement Investment

Province	Item	Invest. (10,000)	Annual Investment (10,000 yuan)			
			1998	1999	2000	2001
Hunan	1. Relocation	25,907.67	10,363.07	10,363.07	2,590.77	2,590.77
	2. Land Compensation	9,554.08	1,910.82	2,866.22	2,866.22	1,910.82
	3. Major Items	1,679.07	671.63	520.01	335.81	151.62
	4. Other Expenditure	3,252.71	1,301.08	975.81	650.54	325.28
	5. Contingency Costs	9,772.93	2,364.94	3,474.54	1,998.19	1,935.26
	a. Basic Contingency	4,039.35	1,424.66	1,472.51	644.33	497.85
	b. For Price Difference	5,733.58	940.28	2,002.03	1,353.86	1,437.41
	6. Total Investment	50,166.46	16,611.54	18,199.65	8,441.53	6,913.75
Hubei	1. Comp. For Rural Resettler	16,149.60		7,267.30	5,652.30	3,229.90
	2. Comp. For Urban Resettler	3,038.70		1,367.40	1,063.50	607.70
	3. Public Utility and Infrastructure	3,124.00		1,405.80	1,093.40	624.80
	4. For Enterprises	15,752.00		7,088.40	5,513.20	3,150.40
	5. Major Item Recovery	1,367.80		615.50	478.70	273.60
	6. Other	2,939.10		1,322.60	1,028.70	589.50
	7. Contingency Costs	6,498.00		2,478.70	2,386.10	1,633.20
	a. Basic Contingency	4,237.10		1,906.70	1,483.00	847.40
b. For Price Difference	2,260.94		572.00	903.10	785.80	
8. Total Investment	48,869.10		21,545.70	17,216.00	10,107.40	
Jiangxi	1. Comp. For Rural Resettler	9,728.00		6,323.00	3,405.00	
	2. Comp. For Urban Resettler	2,220.00		1,443.00	777.00	
	3. For Enterprises	13,401.00		8,711.00	4,690.00	
	4. Major Item Recovery	308.00		200.00	108.00	
	5. Other	2,150.00		1,397.00	752.00	
	6. Contingency Costs	5,306.00		3,449.00	1,857.00	
	7. Total Investment	33,111.96		21,657.00	11,662.00	
Total		132,147.52	16,611.54	61,402.35	37,319.53	17,021.15

TABLE OF CONTENTS

6. ORGANIZATION STRUCTURE AND ADMINISTRATION	6-1
6.1 INTRODUCTION.....	6-1
6.2 RESETTLEMENT PLANNING ORGANIZATIONS	6-1
6.3 RESETTLEMENT IMPLEMENTATION ORGANIZATIONS	6-2
6.3.1 <i>Resettlement Offices (ROs)</i>	6-2
6.3.2 <i>Township and Village Level Administration</i>	6-3
6.4 SUPERVISION AND MONITORING	6-3
6.4.1 <i>Supervisor of Resettlement (SR)</i>	6-3
6.4.2 <i>Independent Monitoring and Evaluation Organization (IMEO)</i>	6-4
6.4.3 <i>Environmental Management Organization</i>	6-4
6.5 OVERALL YBFCP RESETTLEMENT COORDINATION.....	6-4
6.6 RESETTLEMENT MANAGEMENT SYSTEM.....	6-5
6.7 STAFFING AT THE RESETTLEMENT ORGANIZATIONS	6-5
6.8 TRAINING	6-5
6.8.1 <i>Training Plan for Resettlement Officials</i>	6-5
6.8.2 <i>Production Skills Training for Resettlers</i>	6-7
6.9 IMPROVEMENT METHODS FOR RESETTLEMENT ORGANIZATIONS.....	6-8
6.10 SUMMARY AND CONCLUSIONS.....	6-8

TABLES

<i>Table 6-1 Resettlement Office Staffing</i>	6-11
<i>Table 6-2 Resettlement Staff Training Program</i>	6-12
<i>Table 6-3 Resettler Training Program</i>	6-14
<i>Table 6-4 Equipment to be Provided for Resettlement Offices</i>	6-15

FIGURES

<i>Figure 6-1 Provincial Resettlement Management Structure</i>	6-10
<i>Figure 6-2 Coordination and External Monitoring</i>	6-10

6. Organization Structure and Administration

6.1 Introduction

Each Provincial Project Management Office (PMO), as the owner of the project in their respective provinces have overall responsibility for planning and implementation of the Yangtze Basin Flood Control Project within their provincial jurisdiction. To administer the project, the PMO is organized into sections responsible for various aspects of the project: Financial, Consultation, Engineering, Administration, and Resettlement Sections. This structure is replicated at the more localized level of city and county, and to a less formal degree at the township and village level.

The Resettlement Offices (ROs) of the respective administrative levels (Provincial, City and County) effect implementation of resettlement, while investigations and planning is undertaken by provincial design institutes as delegated by the PMO.

The PMO is also responsible for the assignment of numerous contractors for provision of various construction activities and services, of which the Supervisor of Resettlement (SR) and Independent Monitoring and Evaluation Organization (IMEO) are most relevant to resettlement. Parallel environmental management for the project is described in the YBFCP EIA, and a summary of its organization relevant to resettlement is provided in this chapter.

To coordinate the overall resettlement activities between each of the provinces, and to facilitate coordination and communication between the provincial owners, the Ministry of Water Resources (MWR) and the Bank, appointment of an overall resettlement coordinator for the three provinces is recommended.

Details of the key resettlement organizations and the division of responsibilities for each is described below, and illustrated in Figure 6-1.

6.2 Resettlement Planning Organizations

As mentioned above, the PMO entrusts resettlement investigation and planning to the appropriate provincial planning and design institute (PPI) within each province, as shown below.

Province	Designated Resettlement Planning Institute
Jiangxi	Jiangxi Water Resource Planning and Design Institute, Nanchang
Hubei	Hubei Water Conservancy and Hydropower Survey and Design Institute, Wuhan
Hunan	Hunan Water Conservancy and Hydropower Survey and Design Institute, Changsha

While these agencies lead planning activities, other significant inputs are furnished by the Water Resources Bureaus at all levels. The active consultation and participation

of local officials, villager representatives from affected townships, villages and production teams has have also been integral in supporting the PPI in developing the resettlement plans (See Chapter 7, Section 7.4 for more details of consultations undertaken, ongoing and scheduled).

The main planning tasks undertaken by the PPIs are:

- (a) Site inventories of affected lands and assets, and where possible modification to construction plans to minimize resettlement requirements
- (b) Land and environmental capability studies of potential resettlement areas.

In addition, in cooperation with local governments, the PPI are responsible for:

- (c) RAP preparation
- (d) Budget determination for compensation
- (e) Relocation planning
- (f) Preparation of required maps and drawing related to resettlement activities.

During implementation, the PPI provides necessary support to implementing organizations as follows:

- (g) Support the Supervisor of Resettlement by providing necessary documentation (plans, maps, figures, notifications, specifications)
- (h) Assist the PROs and CoROs with implementation of resettlement and production
- (i) As necessary, amend the RAP in response to actual conditions.

6.3 Resettlement Implementation Organizations

The PMO takes ultimate responsibility for resettlement implementation work. The ROs of various levels (including provincial, city, county,) set up resettlement offices to carry out the implementation of the resettlement plan. The number of staff at these resettlement offices varies from 1 to 8 (Table 6-1). Since the resettlement work is a government activity with strong social characteristics, these offices should include personnel from Governments, Land Management Authorities, Water Resource and Agriculture departments. The leaders of the resettlement offices are usually officials with extensive management experience.

6.3.1 Resettlement Offices (ROs)

ROs at the provincial (PRO), and county (CoRO) levels are responsible for the following tasks for resettlement implementation:

- (a) *Participate or coordinate with local governments* in the following areas: formulation of physical index investigation (inventories), resettlement compensation and relocation plans, and resettlement implementation.
- (b) *Organize and manage* the implementation plan and compensation utilization at both the county and township levels

- (c) *Coordinates with the SR and IMEO*, and other monitoring parties involved in resettlement implementation so as to carry out the resettlement work satisfactorily on behalf of the PMO.
- (d) *Cooperate with the PPI* by arranging personnel to facilitate resettlement planning.
- (e) *Supervise and evaluate* the performance of the townships and villages, and monitor and assess resettlement implementation within their administrative zone, and report resettlement progress to the parties concerned.

These roles will be undertaken by the City RO (CiRO) or County RO (CoRO) as relevant for resettlement under their jurisdiction. For convenience in reference, in this report, the roles these roles are referred to only as CoRO. The CiRO in the initial channel for funds disbursement from the PMO, designated responsibility via a contract with the PMO. For resettlement under CoROs, the CiRO will then undertake similar agreement with CoROs, assigning responsibility and disbursing funds.

6.3.2 Township and Village Level Administration

At the affected townships and villages, there are normally one to two officials in charge of the resettlement work within their area (one official from township government and one from the Land Management Dept. at the township level; at the village level, the Village Leader takes up this responsibility). Township governments are involved in agreements on compensation and confirmation of resettlement sites, and other formal activities, however the Village is the primary implementing organization.

Duties of leaders at the township and village levels involve assisting the local resettlement office with:

- (a) land readjustment
- (b) development of secondary and tertiary industries
- (c) organizing the relocation of resettlers
- (d) assisting the resettlers to build houses
- (e) informing the resettlers (and host populations) of relevant policies and regulations, options for implementation and procedures for implementation
- (f) solving problems encountered by the resettlers during the implementation process
- (g) providing assistance as required in restoring and improving the livelihood of resettlers.

6.4 Supervision and Monitoring

6.4.1 Supervisor of Resettlement (SR)

The PMO will hire an organization with State level certification to control the investment, progress and quality of the project, and in cooperation with local authorities, to coordinate, supervise and monitor the work of both local authorities and

the planning organization and the acceptance of completed projects. In Hunan, the Hunan Hydropower Supervision Corp. has been contracted to undertake this role.

6.4.2 Independent Monitoring and Evaluation Organization (IMEO)

The PMO will hire an independent monitoring and evaluating organization to monitor and assess the resettler relocation process, achievements and impacts, and the social integration of the resettlers. Responsibilities and relationships of the IMEO to the ROs, the RS and the Panel of Experts (POE) are described in Chapter 7.

6.4.3 Environmental Management Organization

As discussed in the YBFCP EIA [Ref. 24], an Environmental Management Office (EMO) will also be established at the provincial level, with responsibility for coordinating implementation of the environmental protection measures (EPMs) outlined in the EIA. Environmental Construction Inspectors (ECIs) will also be retained to inspect the implementation and performance of the EPMs. At the village level is the delegation of a Village Environmental Officer (VEO) who reports monthly on the progress and adequacy of construction and resettlement activities.

Of primary relevance to the resettlement is the monitoring of public infrastructure and services for health protection and improvement in the resettlement areas, including provision of safe water supply to drinking water taps, provision for adequate toilet /excreta management in houses and other buildings, provision of adequate solid waste management, and provision of adequate surface drainage.

6.5 Overall YBFCP Resettlement Coordination

As noted above, the project is actually composed of three sub-projects that are located in different provinces, and thus separate administrative jurisdictions, and the ROs are set up under the PMOs of Hunan, Hubei and Jiangxi respectively. However, it is recommended that an Overall Resettlement Coordinator (ORC) position be established to work with the three ROs to ensure coordination of the resettlement operations of all three provinces.

The ORC would function at the central level (either in Beijing or Wuhan) coordinating the resettlement operations in all the three provinces. ORC will be a part of the Central Project Coordination Office (CPCO) to be setup for overall project coordination of YBFCP, and will report to Ministry of Water Resources (MWR), Yangtze Water Resource Commission (CWRC), and the World Bank through the CPCO organizational setup, on matters relating to implementation of the resettlement program. In addition the ORC will also be responsible for coordination with and reporting to the Resettlement Panel of Experts (POE).

The ORC will form part of an overall resettlement coordination committee that will have one representative from each PRO in addition to the ORC (see Figure 6-2). The ORC will work with the Committee to reach agreement on the work to be done by the ORC in cooperation and assistance of the PROs. The primary task of the ORC will be to work with the PROs to prepare reports on overall resettlement program performance, to facilitate the operations and visits of MWR, CWRC officials, the POE, and World Bank missions.

Responsibility of the ORC together with the RO leaders would be as follows:

- (a) Review and coordination of operation of provincial Resettlement Supervisors (SRs) and Environmental Management Offices (EMOs) with comments as needed to obtain effective continuing improvement and achievement of resettlement targets in the overall Project region.
- (b) Recommending, gaining approval for and carrying out any special studies or central government funding required to meet which are shown by the environmental performance.
- (c) Arrange and coordinate the visits of the MWR, CWRC officials, the POE, and World Bank mission resettlement members.
- (d) Periodic reports (twice a year) on project resettlement performance, including environmental performance to the MWR, CWRC, POE and to the World Bank.

6.6 Resettlement Management System

Various measures have been taken in the project management process, including employer accountability, monitoring and assessment, public bidding, and contract management systems. The PMO will be in charge of resettlement implementation and the public bidding of major component projects and infrastructure construction. In addition, project construction will be supervised by an organization with appropriate State level certification, and all contracts of project construction should be managed by the SR. Meanwhile, each PMO will retain the Yellow River Resettlement Monitoring and Evaluation Co. Ltd. to monitor and assess the resettlement process.

In addition, the resettlement offices will use information management systems to store the files of the resettlers and other relevant information during the implementation process.

6.7 Staffing at the Resettlement Organizations

Staffing of the provincial, city and county ROs is illustrated in **Table 6-1**. In both Hunan and Hubei province, the majority of these staff is from management and engineering fields, and in most counties have extensive experience with past resettlement projects. highlighting the significance of the training program

6.8 Training

In order to ensure the smooth progress of resettlement implementation, training plans must be formulated to train both the resettlers and the resettlement workers.

6.8.1 Training Plan for Resettlement Officials

Staff training and human resource development system will be set up for the resettlement organizations of various levels, in order to improve resettlement management capabilities of planning and implementing staff. Budget allocation has been made, and a training program developed to take the form of: lectures by officials/experts, technical courses, visits to other resettlement projects, and on site training for technical and managerial personnel etc. Content of the training will

include the following:

- Principle and Policies for Resettlement
- Resettlement Planning Management
- Resettlement Implementation Planning
- Implementation Progress Management
- Resettlement Financial Management
- Quality Control
- Management Information System
- Project Supervision
- Resettlement Monitoring and Evaluation
- Project Management

Since the village and township leaders will be instrumental in implementing the day to day activities of the resettlement program it is important for them to be trained and proficient in various aspects of resettlement program implementation.. Key areas of training at the village level will include:

- (i) enhancing awareness amongst the village leadership about national and provincial laws and regulations on resettlement (land acquisition, compensation fund etc.) so as to make them aware of their entitlements and privileges in this regard;
- (ii) training in day to day resettlement planning and implementation at the very grassroots level including the organization of the transfer process, reconstruction of housing and facilities, information dissemination to resettlers on the compensation standards and identifying problems and developing simple and quick solutions at the village level itself;
- (iii) procedures for coordination with township, county and city resettlement officials for implementation of the resettlement program including sanction and disbursal of funds, accounting, management and cost control and other issues related to all aspects of resettlement;
- (iv) training in public consultation and grievance redressal procedures;
- (v) training in the understanding of contracts and agreements with Resettlement Offices on housing, land and livelihood compensation and others;
- (vi) training in use of more efficient cropping and land preparation and adjustment techniques in those rural areas where land development is needed due to loss of arable land;
- (vii) vocational training and skills for development and engagement of rural people in secondary and tertiary industries; and basic reporting techniques and procedures for coordinating with the City, County and Township resettlement officials.

The proposed training program, listed in Table 6-2, involves training periods of between one and five weeks, beginning with an introduction to the policies and regulations relating to resettlement, and with particular emphasis on the requirements proposed in this YBFCP RAP. The program is due to commence in November 1999 and continue through until July 2000.

6.8.2 Production Skills Training for Resettlers

Production skills and agricultural technology training will be conducted for the resettlers before they move to new living and production environments. Some farmers may find the agricultural production methods unfamiliar at their resettlement destination, and some of them may need guidance in the growing of new types of crops, such as vegetables, cotton, tobacco, and fruit. As a result, training and agricultural development assistance should be provided. Some resettlers may be employed to work in secondary and tertiary industries, so they need specialized training. Some of the young resettlers with good educational background could be sent to technical schools/colleges to receive one to two years high level training, so they could help the training of local villagers after graduation.

In response to the preferred income generating activities selected by resettlers, budget allocations and practical arrangements have been considered for the provision of required training to assist resettlers in making the transition to intensified farming production, animal husbandry activities, small enterprise development, or for participation in the secondary and tertiary industry sectors. A preliminary program is illustrated in Table 6-3.

- **Secondary and Tertiary Skills:** The proposed training provides for initial training of two to three weeks for all 2,426 resettlers who plan to seek post-resettlement income in these sectors
- **Production Development:** Training is programmed for various aspects of agricultural production improvement including rice cultivation management, aquaculture and cash crop planting. The training program has been estimated based on provision to all working age members of resettled families who will pursue their livelihood in agricultural production.
- **Family Business:** Necessary preparation for families planning to establish or family enterprises, will include fundamentals required for planning and operation of such enterprises.

The proposed training programs will provide an important first step in helping resettlers prepare for and initiate the use of new skills. Of instrumental importance will be the provision of practical manuals for each of the training programs to which resettlers can seek reference as needed in order to cement the concepts introduced during the training courses. The training courses, and manuals should also highlight avenues for resettler access to further information and advice (e.g. through township and county agricultural extension and technology officers), and encourage mutual cooperation between resettlers, possibly through the formation of formal or informal action groups related to development of new skills, enabling the benefit of shared experience and enhancing community cohesion.

6.9 Improvement Methods for Resettlement Organizations

To improve performance of resettlement management and implementation, the following key limitations have been identified:

- (a) Responsibility and scope of duties of resettlement organizations of various levels should be clarified, and monitoring and management should be strengthened

Appointment of the ORC, together with the recommendations of the IMEO and RS will assist in continuous review of the functioning of resettlement organizations and provide assistance in the refinement and clarification of the scope of work required and mechanisms and organizations to best address them. It is also recognized that the POE and IMEO will play a key role in development of monitoring practice ;

- (b) Improve the capability of resettlement organizations of various levels, especially the professional/technical capability; Provide technical equipment, such as computers, testing apparatus, and transportation vehicles, etc.

Equipment to be purchased in support of the resettlement organizations is listed in **Table 6-4**.

- (c) Recruitment of resettlement personnel according to a strict standard, and provision of necessary training. Managerial personnel and technical staff at the resettlement organizations should be trained to improve their managerial capability and technical competence -

Recruitment of additional personnel with relevant experience will be sought as required in each organization, while the objective of the training program described in Section 6.8.1 above aims to upgrade the managerial skills required for improved resettlement performance.

6.10 Summary and Conclusions

- (a) The institutional structure for resettlement aspects of the YBFCP is described in Chapter 6. The discussion identifies the agencies and organizations responsible for management, planning, implementation, supervision and monitoring of all aspects of resettlement at the provincial level, independent external inputs, and recommendation for appointment of a Overall Resettlement Coordinator to operate as a linkage between the three provinces, the Ministry of Water Resources, and the World Bank.
- (b) **Figures 6-1 and 6-2** illustrate the proposed institutional structure.
- (c) In each province the PMO, as project owner, has contracted the relevant provincial Hydropower Planning and Design Institute to develop the RAP, including undertaking inventory, modifying design for resettlement minimization, identification and evaluation of alternative resettlement and production sites and income generation activities in consultation with relevant agencies and affected populations.
- (d) The PROs, through counterpart offices at the County level and through representatives in each of the affected townships and villages, are responsible for

the implementation of the plan. Supervision of implementation will be provided through furnishing an SR in each province to ensure quality and timely progress on resettlement works.

- (e) In addition, as noted in the YBFCP EIA, each province will establish an EMO to have primary responsibility for ensuring that the resettlement program design and implementation will comply with the EPMs specified in the YBFCP EIA. The PMO will arrange for appointment in each village of a VEO to be responsible for environmental management and reporting on resettlement progress, while the provincial EMO and ECIs will supervise planning and development public health infrastructure and waste management practices in the resettled villages.
- (f) Monitoring will be provided by an IMEO to regularly evaluate the progress of resettlement, including the social and economic rehabilitation of affected populations, and to provide direction and advice to the SR and PMO for adequate performance and in the resolution of outstanding problems. IMEO reports will be furnished to both the PMO and the World Bank.
- (g) Successful implementation of the resettlement program will require sizeable investment in training of resettlement staff in resettlement technology, and of resettlers in undertaking new production techniques and industry skills. The budgets for these training programs total approximately 7.0268 million yuan (3.9008 for resettlers and 3.126 for resettlement staff).

Figure 6-1: Provincial Resettlement Management Structure

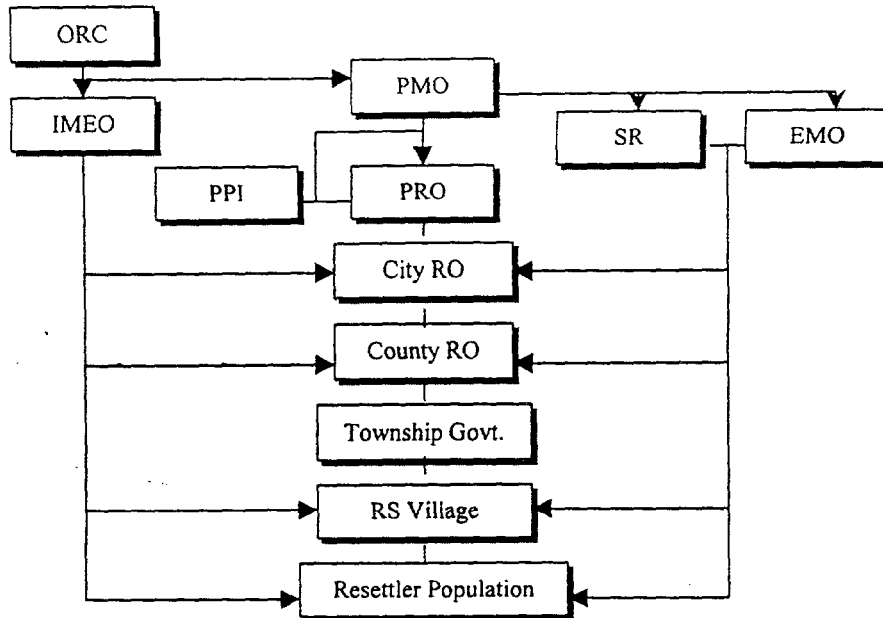
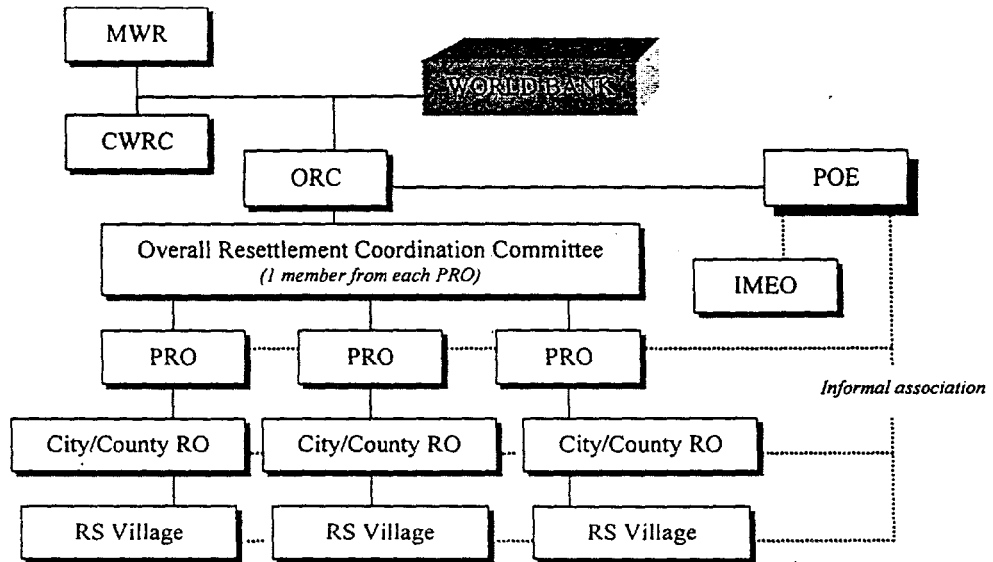


Figure 6-2: Coordination and External Monitoring (ORC and POE)



Note: ORC: Overall Resettlement Coordinator; RO: Resettlement Office; MWR: Ministry of Water Resources; PRO: Provincial Resettlement Office; CWRC: Yangtze Water Resource Commission; IMEO: Independent Monitoring and Evaluation Organization; RS: Resettlement; SR: Resettlement Supervisor; EMO: Environmental Management Office; PMO: Project Management Office; PPI: Project Planning Institute; POE: Panel of Experts

Table 6-1 Resettlement Office Staffing

Description	Jiangxi			Hunan			Hubei		
	Provincial RO	City RO	County RO	Provincial RO	City RO	County RO	Provincial RO	City RO	County RO
Management staff	2	2	8	2	2	11	8	14	20
Financial staff	2	2	8					7	
Engineering staff	1	1	4	2	2	17		17	20
Social worker	1	1	4						
Material supply & logistics	2	2					2		
Supporting personnel	2	2							
Total	10	10	24	4	4	28	10	38	40

Note: RO = Resettlement Office.

Table 6-2 Resettlement Staff Training Program

<i>Description</i>	<i>Province</i>	<i>Person</i>	<i>Place</i>	<i>Start Time</i>	<i>Duration (d)</i>	<i>Cost Estimate (10⁴ yuan)</i>
Lecture on RS policy & law/regulation	Hunan	36	Yueyang	99.1	10	5.76
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.2	5	1.6
RS project planning management	Hunan	36	Yueyang	99.1	15	8.64
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.3	10	3.2
RS implementation planning	Hunan	36	Yueyang	99.2	15	8.64
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.4	10	3.2
RS schedule control	Hunan	36	Yueyang	99.2	15	8.64
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.4	10	3.2
RS cost control	Hunan	36	Yueyang	99.3	15	8.64
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.5	10	3.2
RS project quality control	Hunan	36	Yueyang	99.3	15	8.64
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.5	5	1.6
Management information system	Hunan	36	Yueyang	99.4	20	11.52
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.6	20	6.4
Project supervision	Hunan	36	Yueyang	99.5	20	11.52
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.6	10	3.2
RS monitoring & evaluation	Hunan	36	Yueyang	99.6	15	8.64
	Hubei	40			15	9.6
	Jiangxi	20	Jiujiang	99.6	10	3.2
RS project management	Hunan	36	Yueyang	99.6	25	14.4
	Hubei	40			15	9.6
	Jiangxi	22	Jiujiang	99.7	25	8.8
Bank policies on RS	Hunan	10	USA		10	40
	Hubei	10	USA		10	40
	Jiangxi	5	USA		10	20
Oversea practices on RS	Hunan	8	Brazil		10	32
	Hubei	10	Brazil		10	40
	Jiangxi	5	Brazil		10	20

Table 6-2 (Cont.)

Total	Hunan	378			185	167.04
	Hubei	420			170	176
	Jiangxi	212			135	77.6

Note: Training cost is considered to be 160 yuan per person per day.

Table 6-3 Resettler Training Program

Description	Province	Person	Duration (d)	Cost Estimate (10 ⁴ yuan)
Rice Planting Management	Hunan	1200	5	12
	Hubei	1100	5	11
	Jiangxi	1000	4	9.6
Aquaculture Management	Hunan			
	Hubei	300	6	5
	Jiangxi	300	6	4.32
Family Sideline	Hunan	300	8	11
	Hubei	300	8	11
	Jiangxi	200	6	7.2
Cash Crop Planting Management	Hunan	1290	10	7
	Hubei	500	6	6
	Jiangxi	500	6	2.88
Secondary and Tertiary Industrial Skills	Hunan	238	15	25
	Hubei	2000	20	50
	Jiangxi	1500	10	36
Total	Hunan	3028	38	55
	Hubei	4200	45	83
	Jiangxi	3500	32	60

Table 6-4 Equipment to be Provided for Resettlement Offices

Description	Unit	Jiangxi				Hunan				Hubei				Total	
		Qty			Cost (10 ⁴ yuan)	Qty			Cost (10 ⁴ yuan)	Qty			Cost (10 ⁴ yuan)	Qty	Cost (10 ⁴ yuan)
		Provincial RO	City RO	County RO		Provincial RO	City RO	County RO		Provincial RO	City RO	County RO			
1. Office building	m ²	240	220	720	82.6	240	220	1260	120.4	240	1320	1800	235.2	6260	438.2
2. Office equipment	m ²				37.4				40.92				120.46	0	198.78
2.1 Desk & chair	set	16	14	36	1.3	4	4	28	0.72	10	38	40	1.76	190	3.78
2.2 Xerox	set	2	1	4	10.5	1	1	7	13.5	2	7	12	31.5	37	55.5
2.3. Computer	set	5	4	4	18.2	4	2	7	18.2	10	21	12	60.2	69	96.6
2.4. Fax machine	set	1	1	4	3	1	1	7	4.5	1	7	12	15	35	22.5
2.5. Air conditioner	set	4	3	4	4.4	2	1	7	4	4	14	12	12	51	20.4
3. Communications					63				86				475	0	624
3.1 Cherokee	set	2	1	4	63			7	36					14	99
3.2 Mitsubishi jeep	set					1	1		50	2	7	12	475	23	525
4. Telecommunications					6				6.8				19.6	0	32.4
4.1 Telephone set	set	5	3	4	2.4	3	2	7	2.4	5	21	12	7.6	62	12.4
4.2 Portable phone	set	3	2	4	3.6	2	2	7	4.4	4	14	12	12	50	20
Total (10 ⁴ yuan)					189				254.12				850.26	0	1293.38

TABLE OF CONTENTS

7. PUBLIC CONSULTATION AND SOCIAL ADJUSTMENTS 7-1

7.1 INTRODUCTION..... 7-1

7.2 PREFERENTIAL POLICIES FOR PROJECT AFFECTED PEOPLE 7-1

7.3 SPECIAL MEASURES TO ASSIST AFFECTED PARTIES..... 7-2

7.4 ADJUSTMENTS FOR THE TRANSITION PERIOD..... 7-2

7.5 PUBLIC CONSULTATION 7-3

 7.5.1 *Participation of Affected People and Representatives*..... 7-3

 7.5.2 *Survey of Resettler Preferences*..... 7-5

 7.5.3 *General Project Stakeholders* 7-5

7.6 PUBLICIZING RESETTLEMENT INFORMATION..... 7-5

 7.6.1 *Information Dissemination during Planning*..... 7-5

7.7 GRIEVANCES AND COMPLAINTS 7-6

 7.7.1 *Possible Causes and Solutions*..... 7-6

 7.7.2 *Complaint Channels and Procedure* 7-6

7.8 RELATIONSHIP BETWEEN RESETTLERS AND HOST POPULATIONS 7-8

7.9 SUMMARY AND CONCLUSIONS..... 7-8

FIGURES

Figure 7-1 Public Participation in Resettlement Planning..... 7-10

TABLES

Table 7-1 Public Consultation and Negotiation in the Planning Phase 7-11

Table 7-2- Grievance Recording Proforma..... 7-14

7. Public Consultation and Social Adjustments

7.1 Introduction

Chapter 7 describes the specific measures planned to ensure the successful adjustment of affected population following resettlement, including; preferential policies and other assistance available to resettlers, mechanisms for participation of affected populations in the development of the resettlement program, description of the grievance system through which resettlers may seek redress if required, and the establishment of “safety net” plans to account for rectification of unforeseen circumstances where resettlers are unable to restore livelihoods following resettlement

7.2 Preferential Policies for Project Affected People

Provincial Governments will abide by the National Policy to encourage and support development resettlement through compensation and production support. To assist resettlers in re-establishing their housing and livelihood after resettlement, resettlers will be eligible for the following preferential policies:

- (a) In each of the project provinces, the relevant Land Management Implementation Method Ordinances [Refs. 11-13] allows for tax and levy deduction for acquired lands, and for exemptions or reductions in the associated grain quotas, thereby supporting both the resettlers and host communities. All resettlers will be entitled to such reductions in land taxes and levies, and grain quotas for rural resettlers will also be reduced accordingly.
- (b) In addition, industrial, agricultural and animal husbandry taxes and levies at the county and township levels will be adjusted in accordance with the magnitude of impact in each administrative area.
- (c) The resettlement budget included a contingency for the support of vulnerable groups if they are disadvantaged by the project and due to unforeseen circumstances, unable to restore their livelihood under the proposed RAP.
- (d) In the year of resettlement, resettlers will be exempted from the requirement for contribution of annual labor to dike maintenance.
- (e) In accordance with the provincial Ten Year Plans, industrial projects concerning the industrial and agricultural development in the affected areas will be given priority, especially those projects relying on resources from the affected areas. The resettlers should be given preferential treatment in employment.
- (f) The resettlers have the right to enjoy the benefits of the applicable national poverty support policies, and the affected counties will be given priority when granting social development fund monies for selected aspects, such as irrigation, transportation, telecommunication, poverty support, forestry, loans, education and health service etc.

Compensation paid for lost or impeded modes of production are to be utilized for recovery and development of production such that employment of the affected people can be maintained or improved. To ensure the effective and assigned use of such compensation, it is to be paid to, and managed by CoROs. In this way, the multidisciplinary expertise of local governments can be utilized in planning and establishing viable and equitable production systems and enterprises in a timely manner, avoiding the risk or individual mis-management or poor investment decisions if

compensation were paid directly to resettlers. One task of the IMEO will be review of the proposed usage of these funds by the CoROs, ensuring the proposed development plans effectively target the needs of the resettlers.

7.3 Special Measures to Assist Affected Parties

- (a) In each village, special assistance from village administration will be extended to vulnerable groups within the community (such as economically disadvantaged groups, widows, and the elderly living alone), particularly in regard to purchase and construction of replacement housing. As mentioned above, contingency funding for the support of vulnerable groups will be available, in addition to the special compensation allowance included in the project budget for vulnerable groups.
- (b) During the relocation process, local governments will formulate comprehensive safety measures, provide necessary vehicles, helpers and temporary lodgings, designate safety inspection workers, maintain orderly transportation conditions, protect the safety of the resettlers' lives and properties, and make sure resettlement progress smoothly.

When resettlers or residents within the relocation area encounters unforeseeable difficulties, assistance could be sought through the following means:

- (a) Local and provincial agencies may enact additional policies to support resettlers in re-establishment of housing and income generation. Such policies may involve supplementary tax reductions, production quota waivers or priority employment or training for improved production or alternative income generation activities.
- (b) Local government loans and subsidies

The key to effective benefit from such policies comes in the early identification of non-recovering affected people, which is the responsibility of the Supervisor of Resettlement and the Independent Monitoring and Evaluating Organization.

7.4 Adjustments for the Transition Period

Resettlement is a complex task with widespread involvement and long implementation times, and effective management of the transitional period is of vital importance to the whole resettlement process. To support the successful realization of this period, consultations with affected people have and will continue to be undertaken in order to ascertain their preferences (as discussed in Section 7.5.2 for Hunan Province) for resettlement sites and future activities. Particular efforts are made to relocate resettlers of similar background (relatives, neighbors, communities) to the same place in order to minimize their psychological pressure and anxiety during the transition period.

The resettlement plan includes compensation allowance for temporary accommodation, and losses of employment suffered during the transition period. Compensation disbursements for affected structures and allocation of replacement houseplots/sites will be undertaken a minimum of three months in advance of housing demolition to provide adequate time for resettlers to replace housing, and thus minimize any temporary accommodation requirements.

In addition, in the transition period, many resettlers are unwilling to take risks. They keep a conservative attitude and pay special notice to safeguarding their basic livelihood needs. Hence, during the initial period when the resettlers have just settled down, special attention is, and will continue to be paid by Resettlement Offices and Village Leaders to

make them feel secure about their new livelihood and production. Ensuring the successful transition of the affected people will be achieved by various means including: providing key infrastructures such as water supply, electricity, roads and waste management as a component of the resettlement scheme; loans; technical and training services about agriculture, secondary and tertiary industries to facilitate their transition into new or altered livelihood systems; health services; assistance in marketing of new services and products generated;; establishment of resettler oriented action groups; organization of activities to promote resettler activity and independence and minimize the difficulties encountered. Together, these initiatives will provide a solid base restoration of resettler livelihoods and community.

It is important to mention that even when compensation disbursements for housing reconstruction and assets area made, experience suggests that many resettlers will await a reduction in demand for construction materials, or slowly building their own replacement housing, staying with relatives in their village. This may be the case in the internal resettlement villages where usually only a small percentage of the village must relocate and thus relatives are able to furnish accommodation.

During the transition period, resettlers will be able to rely on the compensation paid for the crops on their acquired lands. As land acquisition has been scheduled to allow for harvest of the seasons yield, farmers will effectively gain a double income for the crop in the year of acquisition, providing a significant individual transitional support fund.

7.5 Public Consultation

To date, all three provinces have incorporated public awareness and participation in resettlement planning. Villagers and Government Officials have been consulted in regard to selection of relocation sites, and development of alternative production resettlement schemes.

As illustrated in **Figure 7-1**, and described below, the resettlement planning cycle explicitly involves information dissemination to and collection from resettlers and relevant officials, and also their consultation and participation, by means of meetings and discussions with resettler representatives, negotiation and entering of agreements with affected parties, involvement in asset inventories, and sampling of resettlers' intentions. The process of resettler involvement in the planning and implementation process is described below, and **Table 7-1** lists the activities undertaken to date in the three provinces.

7.5.1 Participation of Affected People and Representatives

Step 1 - A draft plan is formulated before the site investigation is carried out, into which the advice and suggestions of local governments regarding the scope, methods, and requirements of investigation is incorporated.

Step 2 - When the inventory is being carried out, the Township, village and production team leaders and resettlers take part in the investigation, at which time they are informed of the necessity of project construction, benefits and impact of the project, compensation criteria and resettlement progress etc., and potential relocation destinations for resettlers are discussed. As the inventory team progresses through the affected villages, village meetings are held where all villagers are invited, including women. Although not all members may participate, information is effectively dispersed to the community through “word-of-mouth” following such large gatherings.

Step 3 - During the resettlement planning stage, PPIs hold further discussions with city,

county and township officials to listen to their advice, requirements and existing problems, and decide on the relocation destinations. In addition, further sample surveys are undertaken to establish more detailed resettler preferences and attitudes. An essential component of the planning process is the development of entitlement booklets to be disseminated to every affected household. These booklets (as utilized on the Xiaolangdi Reservoir resettlement project [Ref. 25] will outline resettler entitlements (including compensation rates, basis for calculation, schedule for disbursement, entitlement to tax and quota reductions and operation of the grievance mechanism) and responsibilities of both the resettlers and resettlement implementing organizations (including requirements for relocation, designated responsibilities for infrastructure replacement, land allocation and development proposals and entitlements including training).

Step 4 – Agreements are made with the affected resettlement and host villages in regard to the loss of village assets and land, compensation rates, relocation sites and methods, timing for implementation and the responsibilities of each party. If the proposed resettlement plans are not acceptable to the affected villages, further planning must be undertaken in consideration of the village requirements.

Step 5 - On agreement with the villages, individual households must also be in agreement with the proposed conditions. Where resettlers can not accept the proposed plan, again, further modifications must be made in planning to resolve outstanding issues. On final agreement, the modified entitlement booklets are distributed to every affected household.

As outlined in the agreed resettlement program, active participation in all aspects of the consequent resettlement implementation is paramount to its successful conclusion. During resettlement implementation, participation of affected populations will be essential in:

- House Construction – in rural resettlement situations, resettlers will be responsible for construction of their replacement housing, undertaking it themselves, or hiring contractors for the task. Resettlers will be able to salvage materials from their acquired residence for use in the new sites, or other purposes, and will be bound to demolish their original housing by the agreed date. Issuance of documents formalizing the transfer of land and housing registration will complete the
- Training – based on the conditions in the resettlement area, and the expressed preferences of the resettlers, training resettlers are to be provided, as necessary, to support the restoration and facilitate the betterment of pre-relocation incomes.
- Grievances and Complaints – resettlers and host populations will be encouraged to utilize the grievance procedures (discussed below in Chapter 7.7), which provides the mechanism for resolution of problems and overall identification of any shortfallings in resettlement implementation at the village level (as discussed in Section 7.7) Familiarity with the existence and operation of the process will be ensured through the issuance of the entitlement booklets distributed to every household.

During both training courses, and through Village Leaders, resettlers and hosts should be encouraged to form or utilize new mutual interest and mutual benefit groups within the village, and perhaps between villages. These groups could be both social and production related. Such groups could enhance the restoration of livelihoods through the benefit of learning from shared experience, and generate cohesion in the altered social environment. In addition, such organizations would more effectively be able to identify problems and convey these to the Village Leader and ROs, and represent the community in village meetings and visits undertaken by the IMEO.

The IMEO and will continue to collect data from affected communities relating to income and lifestyle changes post-resettlement through data collection in sample populations.

7.5.2 Survey of Resettler Preferences

The HnPPI conducted a sampling survey of resettlers' intentions. The study sampled 281 households, accounting for 6.3 percent of the total resettling households in Hunan. This Study found that: all of the resettlers have a supportive attitude toward this project, with 75.4 percent believing the project will have a major impact on them, 18.1 percent believing the impact to be small, and 6.5 percent believing the impact to be very small. Most resettlers indicated a preference for relocation a short distance set-back from their current site (44.5 percent), or relocation with other members of the community to alternative sites (33.8 percent), with 21.7 percent selecting alternative means. Surveys in regard to re-establishment of production showed that 31 percent prefer to shift land within the village, 37 percent prefer to change to work in secondary and tertiary industries, while 32 percent indicated preference for alternative means, such as land transformation.

7.5.3 General Project Stakeholders

Opinions of various project stakeholders, including, but not limited to resettlers and host communities have been undertaken as part of the EIA studies including contact with the general public on their attitudes and opinions. Interviews have been held, and questionnaires sent out relating to the various aspects of the YBFCP to gauge public opinion, and identify major issues in the public mind.

It is significant to note that many of the people interviewed raised issues relating to resettlement as of primary concern to them. In particular, most expressed hope that resettlement planning and compensation would be adequate.

These views were also reflected in further surveys and interviews held primarily with representatives from government, as well as non-governmental and business organizations. Those interviewed were generally of a high education level, working for agencies of education, health care, water resources, environmental protection, commerce, forestry and so on. Their specialties covered industry and commerce, medical science, forestry, water resources, law, literature, economics, news, civil engineering and environment science etc. Some were members of parties of China Peasants and Workers Democratic Party, China Democratic League, China Association for Promoting Democracy, Chiu San Society, Revolutionary Committee of the Kuomintang, Workers' Union etc. Of these responses, sixteen of the thirty eight respondents made special comment in regard to resettlement planning and compensation adequacy and the disclose and publicity of the proposed plan.

These surveys highlight the prominence of resettlement management issues in the minds of the public in the project area, and the necessity for continued awareness and participation of project affected people and the public throughout implementation and reestablishment of affected communities.

7.6 Publicizing Resettlement Information

7.6.1 Information Dissemination during Planning

From project inception up to the end of resettlement implementation, information on the

project and the resettlement related national laws and regulations have and continue to be publicized through public participation activities (such as interviews and discussions as illustrated in Table 7-1). Resettlement workers and local governments are responsible for informing project affected people of the following: affected assets, the calculation process for compensation standards, means of compensation, relocation methods, the disbursement and utilization of resettlement compensation, their rights and preferential policies etc. Concurrently, the host communities must be kept informed of relevant resettlement information, such as land acquisition, land compensation criteria, utilization of compensation and information of local resettlers. The issuance of the entitlement booklets will be of paramount importance in ensuring awareness of all project affected people, enhancing transparency, and increasing the efficiency of resettlement operations.

7.7 Grievances and Complaints

7.7.1 Possible Causes and Solutions

During the implementation process, grievances may be caused due to unforeseen circumstances or operational errors. Experiences with similar projects, show that resettler grievances are mainly of the following types:

(a) Issues in Regard to Recorded Assets (Inventory)

Errors during the inventory and calculation process, may include omission and erroneous recording of assets affecting the resettlers' rights. When this problem happens, either the victim or the village committee report, orally or in written form, to the county resettlement office, and the resettlement office then processes this report and sends it to the Employer and the Supervising Party. The Employer organizes planning personnel and supervising professionals to conduct a field investigation to verify the problem, and if it is found to be a mistake, the relevant asset is recorded and compensation made according to determined standards.

(a) Compensation Criteria

Lack of resettler understanding of the national resettlement policies and regulations leads to doubt as to the sufficiency of compensation criteria. Improved consultation and information dissemination procedures as described in Section 7.3.2 above have ensures that planning organizations, in cooperation with local governments and resettlement offices, make on site plan presentation, explains national resettlement policies and regulations and the calculation process of compensation criteria. This approach ensures improved understanding of the project and resettlement standards and procedures, instilling trust and confidence in the ability of required compensatory mechanism to support their re-establishment of residential and production lifestyles in the new locations.

(b) Fund Disbursement

Failure of compensation monies to be disbursed in a timely manner is a serious threat to efficient livelihood and production resettlement and reestablishment. The inclusion of supervising and monitoring personnel with effective control over funding, and ensuring the progress and quality of all project components, will ensure compensation is used for its designated purpose. In particular, the supervising and monitoring parties will with the finance departments to ensure disbursement of funds according to monthly progress monthly, so as to ensure resettlement progress on schedule.

7.7.2 Complaint Channels and Procedure

The Chinese Government has established a complete assurance system to protect the

people's legal rights, which is specified in the Constitution of PRC and the Civil Law of PRC. With regard to appeal arrangement, offices for letters from and calls by the people as well as prosecution offices and courts have been established; and committees and groups for mediation in civil litigation are available. In case that affected people are dissatisfied with the compensation arrangements, certain procedures are available for seeking solutions.

(a) Complaint Channels

- PROs have the responsibility to monitor their subsidiary offices in the implementation of resettlement, and can address resettlers grievances.
- Citizen Appeal Offices - In all the counties, cities and provinces, where affected people can lodge complaints;
- Supervisor of Resettlement (SR) for the project has the responsibility to supervise local authorities to carry out resettlement implementation lawfully, and may solve project affected people's grievances through the means of auditing, investigation and coordination etc.
- Independent Monitoring and Evaluation Organization monitors resettlement implementation as required by relevant national regulations. It has the responsibility to protect resettlers' legal rights and could accept complaints and report the problems to the parties concerned.
- Government agencies, such as administration supervision, auditing, discipline investigation, law enforcement departments, deal with illegal or regulation-violation cases.

(b) Complaint Procedure

When project affected people are unsatisfied with the resettlement arrangement, they can report their grievance to the village committee. The village committee may directly resolve the grievance, (as is this usual case). Where the grievance remains unresolved after three days, the complaint is filed (either orally or in written form) to the County Resettlement Office. This Resettlement Office makes a record of this complaint, and negotiates it with the village committee and local resettlement office to work out a solution within 10 days. If resolution is not achieved, in accordance with the Administration Litigation Law of China [Ref 26], the village committee could follow the complaint channel (such as the PRO, Citizen Appeal Office, Administration Supervision Dept., Discipline Investigation and censoring departments) to file complaints. If the result is not satisfactory, the village committee or the resettler could go to court. All affected villages will be made aware of their entitlements and responsibilities, and use of the grievance procedure in resolving any of their complaints or clarifying concerns through the issuance of the resettlement entitlement booklet issued to each household.

While this system requires the recording of all grievances, this aspect is often overlooked. This is particularly true at the village level, where grievances are primarily conveyed verbally and informally. However, the recording of all grievances, irrespective of their form and nature need to be recorded to assist in the identification of larger trends and to instill the aggrieved parties confidence in the significance and treatment of their concern. Table 7-2 includes a proforma to be utilized in every village. These records will be regularly submitted to the CoRO, who themselves must ensure adequate recording of grievances. Monitoring by the IMEO will include an evaluation and review of the filed grievances, and ensure adequate and timely responses to grievances, and utilization of the grievance procedure.

7.8 Relationship between Resettlers and Host Populations

For those resettlers who will re-build their houses only slightly set-back from their original locations, or at identifies resettlement sites nearby, resettlement will not represent a major changes in their living environments. Similarly, urban resettlers will be relocated in similar environments. Due to the proximity of relocation sites and the homogenous culture between resettlers and host populations, for both groups, adapting to the new communities created is not expected to create unnecessary friction.. Certainly, this does not mean there will be no conflicts between the two groups, and so the following activities have, and will continue to be pursued to assist the integration of the two groups:

- (a) Involvement in Planning -Consultation between both groups will ensure familiarity with their rights, and facilitate their input into the identification and selection of various alternatives in development of the resettlement plan. This transparency and participation in planning, in general, will solicit their cooperation, and encourage continued participation and feedback. Consultation with affected people may be undertaken directly with them or facilitated through formal and informal contacts with officials and representatives. Systematic arrangements will be made in most cases, such as routine meetings between project officials and local groups, which enables the resettlers and the affected residents to report their opinion on the resettlement work during the planning and implementation phase.
- (b) Provision of Adequate Resources - When the resettlers move into the host community, the demand for land, water resources, wood, and social services will increase, creating a potential for conflict due to competition for resources. Planning for resettlement into host communities has included evaluation of the capacity of existing services and resources to support the heightened demand. Where services are determined inadequate, upgrading and expansion has been planned and budgeted for , such as water supply, electricity and improved road access. In addition, all resettlement sites will be introduced to improved waste management practices and new standards for sanitation, which will significantly improve existing public health conditions.

7.9 Summary and Conclusions

Chapter 7 reviews the activities included in the Resettlement Program relating to provisions for public consultation and social adjustments to ensure achievement of the goal that the affected parties (resettler families and the host communities) involved in the Resettlement Operation are not disadvantaged by the project and to the extent feasible will share with the project benefits.

Preferential policies specified by the Government and additional policies included in the YBFCP RAP will be available to resettlers. Policies of primary importance to YBFCP resettlers will be:

- (a) tax and levy deduction for acquired lands, and for exemptions or reductions in the associated grain quotas, thereby supporting both the resettlers and host communities.
- (b) industrial, agricultural and animal husbandry taxes and levies at the county and township levels will be adjusted in accordance with the magnitude of impact in each administrative area.
- (c) The resettlement budget includes a contingency for the support of vulnerable groups if they are disadvantaged by the project, and due to unforeseen circumstances, unable to restore their livelihood under the proposed RAP.

(g) In the year of resettlement, resettlers will be exempted from the requirement for contribution of annual labor to dike maintenance.

Consultation and participation of affected people and their representatives has been an integral component of the development of the RAP. The process of consultation is illustrated in **Figure 7-1**. Essential to the success of the planning and assurance of resettler acceptance and understanding of the resettlement program is the issuance of resettlement entitlement booklets (as utilized in the Xiaolangdi Resettlement Project), and the undertaking of agreements with all affected parties.

Grievance redress mechanisms in China are clear (**Figure 7-2**) and comprehensive, yet the publication of the existence and use of this mechanism to affected people through incorporation in the resettlement entitlement booklets will be essential to its effective use, and thus management of resettlement implementation. Comprehensive recording of grievance and responses and actions at all levels will also be undertaken.

Figure 7-1 Public Participation in Resettlement Planning

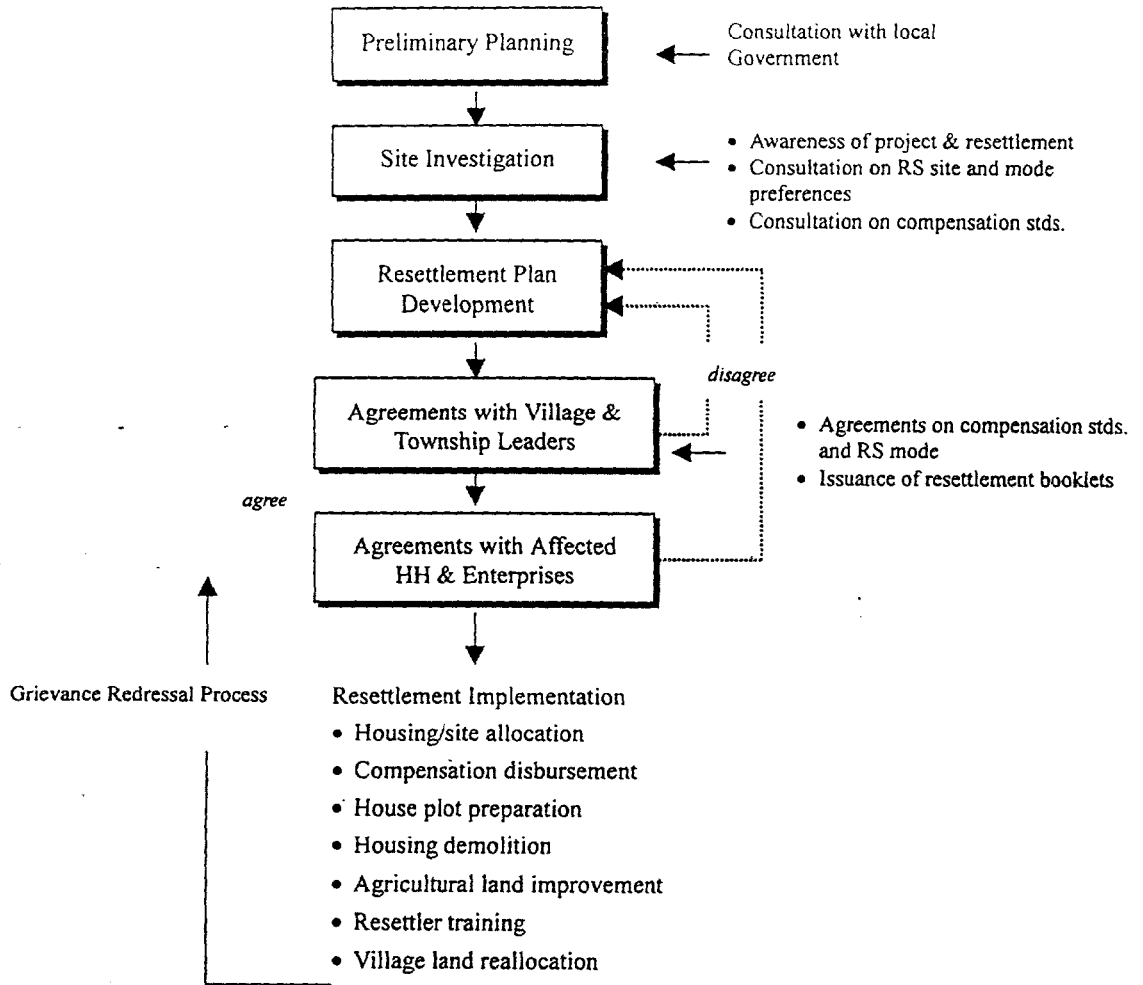


Table 7-1 Public Participation and Negotiation during the Planning Phase

Province	Stage	Date	Location	Participants	Contents	Method	Results
Hunan	Preparation	98.7.10	Yueyang Hydropower Bureau	Officials from Project Offices of Huanggiahu Farm, Linxiang City, Yunxi and Junshan Districts, Jianxin and Jushan Farms and Huarong County	Discuss methods and personnel required to assist physical index investigation	Discussions	Determined the investigation schedules of the counties; designated official from local Project Offices in charge of cooperation for the investigation
		98.7.15	Huangaihuh Farm	Chief officials of #1 Farm and Director of Tieshan Station	Assign publicizing task; make plan to collaborate with investigation	Discussions	Action plan
		98.7.15	Linxiang Hydropower Bureau	Chief officials from Jiangnan, Ruixi Township and the Water Committee	Assign publicizing task; make plan to collaborate with investigation	Discussions	Determined the local official in charge of cooperation; investigation routes & schedule; required to publicize importance of the Project
		98.7	Yunxi District Water Resource Bureau	Chief officials from the affected Townships and the Water Committee	Assign publicizing task; make plan to collaborate with investigation	Discussions	Determined the local official in charge of cooperation; investigation routes & schedule; required to publicize importance of the Project
		98.7	Jushan District Hydropower Bureau	Chief officials from the affected Townships and the Water Committee	Assign publicizing task; make plan to collaborate with investigation	Discussions	Determined the local official in charge of cooperation; investigation routes & schedule; required to publicize importance of the Project
		98.7	Huarong County Hydropower Bureau	Chief officials from the affected Townships and the Water Committee	Assign publicizing task; make plan to collaborate with investigation	Discussions	Determined the local official in charge of cooperation; investigation routes & schedule; required to publicize importance of the Project
		98.7	Junshan Farm	Chief officials from the affected Townships and the Water Committee	Assign publicizing task; make plan to collaborate with investigation	Discussions	Determined the local official in charge of cooperation; investigation routes & schedule; required to publicize importance of the Project
		98.7	Jianxin Farm	Chief officials from the affected Townships and the Water Committee	Assign publicizing task; make plan to collaborate with investigation	Discussions	Determined the local official in charge of cooperation; investigation routes & schedule; required to publicize importance of the Project

Table 7-1 Public Participation and Negotiation during the Planning Phase

Province	Stage	Date	Location	Participants	Contents	Method	Results
		98.8	Branch Farms of Huanggaihu	Local officials	Information Dissemination	Discussions	Done
		98.8	Ruxi Township, Jiangnan of Linxiang	Local officials	Information Dissemination	Discussions	Done
		98.8	Affected Townships of Yunxi District	Local officials	Information Dissemination	Discussions	Done
		98.8	Affected Townships of Junshan District	Local officials	Information Dissemination	Discussions	Done
		98.8	Townships of Huarong County	Local officials	Information Dissemination	Discussions	Done
		98.8	Branch Farms of Junshan Farm	Local officials	Information Dissemination	Discussions	Done
		98.8	Jianxin Farm	Local officials	Information Dissemination	Discussions	Done
	Investigation	98.9	Huangaihu Farm	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
		98.9	Linxiang City	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
		98.9	Yunxi District	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
		98.9	Junshan District	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
		98.9	Huarong County	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
		98.9	Junshan Farm	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
		98.9	Jianxin Farm	Officials and villagers	Cooperation with Investigation	Participation	Implement on schedule
	Resettlement Planning	98.12	Yueyang City	Chief officials from local Project Offices	Resettlement Plan, etc.	Discussions	
		98.12					
		98.12	counties, townships, villages and teams	Officials and villagers	Selection of Relocation Destination	Participation and Opinion Poll	

Table 7-1 Public Participation and Negotiation during the Planning Phase

Province	Stage	Date	Location	Participants	Contents	Method	Results
		99.3	counties, townships, villages and teams	Resettlers	Attitude toward Project	Sampling Investigation	
	Implementation				Pland Improvement	Sampling Investigation and Discussions	
Hubei	Preparation	99.3	City/County Governments	Government Officials	Discuss investigation methods	Discussions	
	Investigation	99.6	counties, townships, villages and teams	Resettlers and Residents of the Relocation Destinations	Physical index investigation	Participation	
	Resettlement Planning	99.6	counties, townships, villages and teams	Officials and villagers	Resettlement Planning	Discussions; Consultation; Interview	
		99.7	counties, townships, villages and teams	Resettlers	Selection of Relocation Plan and Destination	Discussion and Visits	
		99.4~7	counties, townships, villages and teams	Resettlers	Household investigation	Sampling Investigation	
	Implementation		counties, townships, villages and teams	Resettlers	Production development	Participation	
Jiangxi	Preparation	99.1~5	counties, townships, villages and teams	Resettlers	Index Investigation	Participation	
		99.2	counties, townships, villages and teams	Resettlers and Residents of the Relocation Destinations	Relocation preferences	Negotiations	
	Resettlement Planning	99.6	counties, townships, villages and teams	Government and Resettler Representatives	Resettlement Planning	Discussions; Consultation; Interview	
	Implementation			Resettlers	Problems encountered	Visits	

Table 7-2- Grievance Recording Proforma

Issue		Grievance			Response Action	
Date	Name	Nature of Grievance	Nature of Resp/Action	Response Party	Date of Response Action	Outcome

TABLE OF CONTENTS

8. RESETTLEMENT CONTRACTS AND AGREEMENTS	8-2
8.1 INTRODUCTION.....	8-2
8.2 RESETTLEMENT AGREEMENTS	8-2
8.3 CONTRACTS FOR RESETTLEMENT CONSTRUCTION.....	8-3
8.3.1 <i>General Requirement</i>	8-3
8.3.2 <i>Environmental Constraints on Construction Contractor (CC)</i>	8-3
8.4 SUMMARY AND CONCLUSIONS	8-4

ATTACHMENTS

<i>Attachment 8-1 Agreement Between PRO and CiRO.....</i>	<i>8-5</i>
<i>Attachment 8-2 Land Sharing Agreement between Host and Resettlement Villages</i>	<i>8-7</i>
<i>Attachment 8-3 Household Compensation Agreement with Township Government.....</i>	<i>8-9</i>
<i>Attachment 8-4 Contract for Construction of Resettlement Project</i>	<i>8-11</i>
<i>Attachment 8-5 Environmental Construction Constraints.....</i>	<i>8-13</i>

8. Resettlement Contracts and Agreements

8.1 Introduction

The project area covers 26 counties in 3 provinces. To strengthen project management, it is essential for the PMOs to retain Supervisors of Resettlement (SRs) to work under PMO supervision for overall quality control, and cost and schedule control during the project implementation. The PMOs themselves can then focus their efforts on management of components involving large cost estimates or representing major impacts, and for the conclusion of important contacts and agreements. Agreements will necessarily be made between resettled and host parties and relevant local authorities, and contracts between construction contractors and the PMO for major works and CoROs and villages for smaller works, will be required. The scope of these contracts and agreements is outlined in this chapter.

8.2 Resettlement Agreements

- a) Agreement on total resettlement cost estimates and financial sources: Agreements on resettlement cost are concluded, on a lump-sum basis, between the PMO and City ROs (see **Attachment 8-1**). Similar agreements are then made between CiROs and CoROs, taking responsibility for completion of required resettlement tasks within the financial requirements as stated in the agreements.
- b) Agreement on resettlement scheme/host site section: Following consensus on resettlement schemes proposed by the provincial planning institutes together with counties, agreements will be reached between CoROs and resettlers, with assistance from township governments, regarding the place and mode of resettlement, the time of relocation, and the amount of compensation cost among other things.
- c) Agreement on assets to be relocated: Field survey and verification of physical assets have been completed by the provincial institutes, and formalized with the signing of family compensation contracts (see **Attachment 8-3**). Agreement has also been reached with counties, townships and villages on this basis, and all materials have been signed and accepted.
- d) Agreement on compensation: Agreements on compensation cost will be signed with local governments prior to the start of relocation, to identify the amount of compensation cost, the destination of people, mode of resettlement, and specific responsibilities and obligations of the parties to the agreements.
- e) Land share agreement: To keep host communities well aware of resettlement planning, agreements on the share of land and other resources will be signed between resettlers and host communities, with host communities compensated for their share of land with resettlers, and financial support provided to enhance productivity and yields (see **Attachment 8-2**). Specifically, this support may include: provision of new irrigation facilities, terracing slopeland, improvement of soil, and cropping of improved varieties in extensive areas. Land compensation costs for host communities can also be used in this manner to increase agricultural productivity and/or to fund training in, or establishment of new income sources other than farming activities.

8.3 Contracts for Resettlement Construction

8.3.1 General Requirement

To improve construction management, standardize bidding process and contract administration, earnestly guarantee the legal interests of contract parties, and ensure the proper progress of project construction management and bidding on a fair and equal basis, it is required to sign agreements on the construction of various special projects by applying the “Conditions of Contract, Civil Works, Water and Hydropower Project” [Ref 27] (including general conditions and special conditions).

These conditions will be applied to all construction contracts, and require inclusion of the following:

- (a) Definitions
- (b) General responsibilities and obligations of the parties
- (c) Performance guarantee
- (d) Supervision organization and personnel
- (e) Correspondences
- (f) Drawings
- (g) Assignment and subcontract
- (h) Contractor’s personnel and supervision
- (i) Materials and equipment
- (j) Transportation
- (k) Schedule
- (l) Quality control
- (m) Measurement and payment
- (n) Price adjustment
- (o) Variation
- (p) Breach of contract and liquidated damages
- (q) Settlement of dispute
- (r) Risks and assurance
- (s) Completion and defaults liability
- (t) Environmental protection measures
- (u) Others

The format for such contracts is presented in Annex 8-4.

8.3.2 Environmental Constraints on Construction Contractor (CC)

As noted in Section 4.2.12 of the YBFCP/EIA [Ref. 24], it is important that the construction contract documents include specific provisions on the EPMs to be carried

out by the construction contractor (CC), so the CC will be fully aware of these (and of their costs) in preparing the CC's bid. A summary of these EPMs is given in **Attachment 8-5**. Details are given in the EIA report, Section 4.2.12.

8.4 Summary and Conclusions

As noted in Chapter 6 on Project Institutions, the PMO in each of the three provinces has lead responsibility for implementing the provincial resettlement program component of YBFCP. This work involves participation and cooperation between numerous agencies including the PMO Chief, PRO, SR engaged by the PRO, EMO, CiROs and CoROs, township governments, the resettlement Villages including their.

In order for these various agencies/officials to work together efficiently, a number of contracts/agreements are needed which spell out clearly the roles of the participating parties. Four of these contracts/agreements are especially important and formats for these are included as attachments to Chapter 8, on (i) letter of Agreement between PRO and City RO, (ii) Agreement on Land Sharing between Host Community and Resettlement Village, (iii) Agreement on Resettler Family Compensation between Resettling Family and Township Government, (iv) Agreements on Land and Asset Acquisition with Counties, Townships and Villages, and (v) Contract for Construction of Resettlement Project, including specific constraints relating to environmental protection.

Attachment 8-1 Agreement Between PRO and CiRO

YANGTZE BASIN FLOOD CONTROL PROJECT**LETTER OF AGGREEMENT BETWEEN PROJECT
MANAGEMENT OFFICE AND CITY RESETTLEMENT OFFICE**

The Yangtze Basin Flood Control Project, a major national project with sub-projects in Hunan, Hubei and Jiangxi Provinces, will produce huge flood control benefits when completed. The success of resettlement is directly related to the success of the whole project. To meet the flood control target as early as possible, this Letter of Assignment is herein concluded to identify the responsibilities and obligations of the parties concerned.

1. Time Requirement

_____ City Government shall complete the transfer of _____ people _____ families and also production reestablishment and corresponding infrastructures by _____ month _____ year. At the same time, production development and special facility construction shall be also undertaken and completed, in stages and batches, according to resettlement requirements.

2. Compensation Cost

According to the project review of responsible departments, the total compensation cost due to _____ City inclusive county, city and farm is fixed at _____ yuan as detailed in the table attached hereto. This amount shall be applied by _____ City Government on a lump-sum basis.

3. Responsibilities

- a. _____ City Government shall complete the resettlement task under Yueyang component of the Yangtze Basin Flood Control Project according to quality requirements and on schedule as specified in Clause 1 above. People transfer and resettlement shall be implemented according to “Land Acquisition and Resettlement Implementation Planning, Yangtze Basin Flood Control Project”, in principle, for the avoidance of secondary resettlement. Any adjustment or change to the resettlement scheme shall not be initiated unless approved by the Provincial Project Office (PPO). The consequence of any failure to complete the above stated task on schedule shall be totally the responsibility of _____ City Government.
- b. Resettlement costs shall be disbursed to _____ City Government, in a timely manner, by the PPO according to the financial arrangements. In the event that resettlement is affected by any delay of cost disbursement, the PPO shall be held responsible.
- c. The PPO shall examine, witness and coordinate resettlement work; exercise resettlement cost control as per the Detailed Rules for Implementing Special Fund

Control Procedures of Large Water and Hydropower Project” and other resettlement regulations; review and approve resettlement implementation programs; identify annual plans; and review and approve special facilities.

- d. This Letter of Assignment is signed by and between the PPO and _____ City Government. It is made in duplicate, each of which shall be of equal validity.

_____Project Management Office (PM)) _____City Government: (common seal)
Management Office: (common seal)
Legal Person: (signature) Legal Person: (signature)

Attachment 8-2 Land Sharing Agreement between Host and Resettlement Villages

YANGTZE BASIN FLOOD CONTROL PROJECT**LAND SHARING AGREEMENT BETWEEN HOST AND RESETTLEMENT VILLAGES**

The Yangtze Basin Flood Control Project is an important flood control project in Hunan Province. Construction of the project involves the resettlement of ____ village (s) in ____ Township, ____ County. As indicated by statistical data, ____ Village in ____ Township is able to receive a certain amount of resettlement people. To enable smooth progress of resettlement work, this Agreement is signed as agreed by the Parties on the date of _____.

1. ____ mu land shall be allocated from ____ Village of ____ Township for the resettlement of ____ persons from ____ Village of Township, including ____ mu farmland (____ mu irrigated land, ____ mu dryland, ____ vegetable plot and ____ floodland) and m ____ mu reclaimable wasteland, with ____ mu to be used for production purposes and ____ mu for residential purposes.
2. Both resettlement and host people shall be adequately compensated according to the resettlement compensation cost estimate as approved by the State. Such compensation cost shall be applied toward the improvement of farming conditions, implementation of advanced production measures and construction of infrastructures.
3. The host village shall warrant both resettlement and host communities that the planned various measures will be implemented in the village, to reach and maintain the target living quality of both resettlement and host communities.
4. Resettlement compensation costs (e.g. such for temporary income, house and auxiliary structure) shall not be mobilized by a individual and entity.
5. The host township is obliged to ensure that resettlement people will not be discriminated in any way, and will equally treated as host people in such aspects as education and employment.
6. The host village and township are entitled of some resettlement preferential policies granted by the State, such as tax and public grain exemption/reduction, more employment opportunities.
7. Any dispute between the resettlement and host communities during the performance of this Agreement shall be referred to the township resettlement agency, and reported to the city/county resettlement agency, with a solution sought from the resettlement

complaint management channel.

8. All and any of the above clauses are accepted by both resettlement and host villages and townships.

Resettlement Village and Township:

Host Village and Township:

Witness: _____ City Resettlement Agency

Date:

Attachment 8-3 Household Compensation Agreement with Township Government

YANGTZE BASIN FLOOD CONTROL PROJECT**AGREEMENT ON FAMILY COMPENSATION BETWEEN
RESETTLING FAMILY AND TOWNSHIP GOVERNMENT**

No.:

Party A: _____ Township Government, _____ County

Party B: _____ family head, _____ Family Size, _____ Group,
_____ Village

_____ Township

To ensure smooth progress of and provide support for the Yangtze Basin Flood Control Project, a national major project, _____ resettlement family opts for _____ resettlement mode. According to Regulations for Land Compensation and Resettlement under Large and Medium Water and Hydropower Project" of the State Council, the Land Law, PRC" and the land Acquisition and Resettlement Implementation Planning, Yangtze Basin Flood Control Project" as approved by the State, this Agreement is made by and between the Parties as follows:

1. Item, Quantity, Rate and Amount of Compensation/Subsidy

- 1.1 The item and quantity of compensation shall be based on the family survey records kept by the provincial institute in October 1999.
- 1.2 Compensation shall be certified and paid according to the compensation rates approved by the provincial government
- 1.3 The total amount of land acquisition and relocation compensation cost is _____yuan (a schedule of breakdown calculations is attached hereto).

2. Terms of Payment

- 2.1 Party A shall place the said total amount due to Party B in the "Resettlement" Special Account at a credit cooperative at a single time, and then disburse such in the form of current passbook.
- 2.2 Party B shall obtain a reception certificate (signed by more than 70% host families) from the receiving group and village and a residence transference permit from the township government, to obtain a residence transference certificate from the original

household registration authority.

2.3 Party A shall review and approve the lump-sum amount of compensation and subsidy due to Party B (with 10% compensation cost for sparse trees retained toward the cutting of trees, and paid upon completion of cutting) against the reception certificate, residence transference permit and residence transference certificate (in copy) presented by Party B.

3. Part B shall ensure to complete house relocation on the date of _____ as required by the governments at all levels, and move to his new house at ___Group___ Village___ Township___ County___ Province, without changing the resettlement scheme in an arbitrarily and returning to his original place.

4. Any loss arising out of Party A failure to complete relocation by the date of _____ shall be incurred by himself.

5. Production reestablishment of Part B shall be properly handled by the receiving township government as agreed between Party A and such receiving township government.

6. The number of people entitled of production reestablishment shall that as of the date of resettlement cost certification, without any consideration given to natural population growth.

7. Party B, when moved to the host site, shall observe the State laws, regulations and policies, and respect the local social customs and habits, and will be entitled of the applicable resettlement preferential policies granted by the State.

9. In the event that the host village and township fail to perform any of the obligations as stipulated herein, either of them may refer to the county RO via the resettlement complaints channel, with a solution proposed by the county RO after investigation.

10. This Agreement is made in triplicate, with one copy held by each Party, and another kept by the county RO for reference. It will be effected when signed by both Parties.

Party A: (common seal)

Party B: (signature) County

RO: (common seal)

Legal Person: (signature)
(signature)

Legal Person

Attachment 8-4 Contract for Construction of Resettlement Project**CONTRACT FOR CONSTRUCTION OF RESETTLEMENT PROJECT**

Name of Contract: _____

Contract No.: _____

In witness that:

_____ (referred to as “Owner” hereinafter) intends to construct the project and has accepted the bid provided by _____ (referred to as “Contractor” hereinafter);

This Contract, with a total contract price of _____ yuan, is signed by and between the Parties on the date of _____ as follows:

1. The words and expressions included herein shall have the same meaning as defined in the General Conditions of Contract and Special Conditions of Contract as listed in Clause 2 below.
2. This Contract is composed of the following documents:
 - (1) Agreement (including Agreement Memorandum)
 - (2) Letter of Acceptance
 - (3) Tender
 - (4) Special Conditions of Contract
 - (5) General Conditions of Contract
 - (6) Specifications
 - (7) Drawings
 - (8) Priced Bill of Quantities
 - (9) Conditions as Relating to Environmental Protection (see Attachment 8-5)
 - (10) Any other documents as a part of the Contract

The above listed documents includes and supersede all agreements, minutes and any other documents agreed and signed by the Parties prior to the conclusion of this Contract.

3. The Contractor undertakes to complete all of the Works under the Contract, and

perform all and any responsibilities as stipulated in the Contract.

- 4. The Owner undertakes to make payment as stipulated in the Contract and perform all of his due responsibilities.
- 5. This Contract shall be put into effect as separately signed by the legal person of each Party or his authorized representative, with the seal common of each Party applied (subject to notary or witness, if applicable).
- 6. This Contract is made in _____, including 2 originals, with one copy held by each Party, and _____duplicates, with _____copies held by Party A and _____copies by Party B, and the rest sent to relevant organizations.

Owner: (common seal)

Legal Person: (signature

Person to contacted:

Add.:

Post Code:

Tel. .:

Fax:

Open Bank:

Account No.:

Contractor: (common seal)

Legal Person: (signature)

Person to contact:

Add.:

Post Code:

Tel.:

Fax:

Open Bank:

Account No.:

Attachment 8-5 Environmental Construction Constraints

NO.	ITEM	CONSTRAINTS
1	Wastewater	all discharged wastewater meet national standards
2	Air Pollution Control	a. all oil burning machines meet national waste gas discharge standards; b. measures to control blasting and quarrying dust; c. road dust control (wetting, paving); d. Avoid production of obnoxious and toxic fumes.
3	Water Use	use water as planned
4	Workers Health	a. worker medical examination to screen out infectious virus carriers; b. safe drinking water supply; c. wastewater treatment and management; d. schistosomiasis prevention as described in Section 4.2.4 e. food sanitation; f. mosquito and rat killing; g. medical care capabilities and facilities including first aid facilities; h. adequate excreta management; I. occupational health and safety; j. adequate housing with sanitary facilities;
5	Noise Control	a. all machines meet national standards; b. no construction activities in night in residential area if feasible; c. protection facilities provided to workers operating high noise machines;
6	Spoil Disposal	Dispose construction spoils in specified places and specified manners including protection dikes and resurfacing.
7	Solid Waste Management	Collect solid wastes regularly and dumps in safe places and in safe way; dispose solid wastes in specified place in safe way.
8	Soil Erosion	resurfacing all borrow areas and filling areas
9	Cultural Relics	No damaging activities to cultural relics, stop construction whenever cultural relics is discovered.
10	Aquatic Ecology	Specially assign person/person to watch appearance of the Yangtze rare species when “blow filling” operation is carried out in river sections sensitive of the species.
11	Saicheng Lake Migratory Birds	Make sure no worker will enter the bird migratory area.
12	Land Use	Occupy land as specified, no damage to farm land and crops; resurfacing land after use.
13	Monthly Environmental Report	CC is fully responsible for environmental protection in his construction area and camping area. CC is to make monthly environmental report to ECI/EMO on its performance in implementing the EPMS/constraints.

Notes : (a) All of the constraints noted above are to comply with National and provincial laws and regulations applicable to construction.

(b) Detailed constraints will be prepared according to above items by the P/EMO and will be included in project construction contracts.

TABLE OF CONTENTS

9. MONITORING AND SUPERVISION	9-1
9.1 INTRODUCTION.....	9-1
9.2 MONITORING INDICATORS.....	9-1
9.2.1 <i>Livelihood Reestablishment</i>	9-1
9.2.2 <i>Production Reestablishment</i>	9-1
9.2.3 <i>Other Aspects</i>	9-1
9.2.4 <i>Public Participation and Consultation</i>	9-1
9.2.5 <i>Complaints/Grievance Management</i>	9-2
9.3 INTERNAL MONITORING AND CONTROL.....	9-2
9.3.1 <i>Organization</i>	9-2
9.3.2 <i>Purpose</i>	9-2
9.3.3 <i>Work Process</i>	9-2
9.3.4 <i>Scope of Work</i>	9-2
9.3.5 <i>Responsibilities</i>	9-3
9.4 INDEPENDENT MONITORING AND EVALUATION.....	9-3
9.4.1 <i>Organization</i>	9-3
9.4.2 <i>Purpose</i>	9-3
9.4.3 <i>Scope of Work</i>	9-3
9.4.4 <i>Responsibilities</i>	9-4
9.4.5 <i>Monitoring and Evaluation Measures</i>	9-5
9.4.6 <i>Process and Cost Estimate</i>	9-6
9.5 SUPERVISOR OF RESETTLEMENT.....	9-6
9.5.1 <i>Purpose</i>	9-6
9.5.2 <i>Scope of Work and Methodology</i>	9-7
9.5.3 <i>Responsibilities</i>	9-9
9.5.4 <i>Organization</i>	9-9
9.5.5 <i>Work Process and Cost</i>	9-9
9.6 OVERALL RESETTLEMENT COORDINATOR.....	9-10
9.7 INTERNATIONAL PANEL OF EXPERTS ON RESETTLEMENT.....	9-10
9.7.1 <i>Need for Panel</i>	9-10
9.7.2 <i>Establishment of Panel</i>	9-10
9.7.3 <i>Responsibilities of Panel</i>	9-10
9.7.4 <i>Schedule</i>	9-10
9.7.5 <i>Reporting System</i>	9-11
9.7.6 <i>Cost Estimate</i>	9-11
9.8 SUMMARY AND CONCLUSIONS.....	9-11
FIGURES	
<i>Figure 9-1 Internal Monitoring Process</i>	9-14
<i>Figure 9-2 Project Supervision Organization Chart of Hunan Province</i>	9-15
<i>Figure 9-3 Project Supervision Organization Chart of Hubei Province</i>	9-16
<i>Figure 9-4 Project Supervision Organization Chart of Jiangxi Province</i>	9-17
TABLES	
<i>Table 9-1 Internal and Independent Monitoring Programs</i>	9-18
ATTACHMENTS	
<i>Attachment 9-A Forms for Independent Monitoring and Evaluation</i>	9-20
<i>Attachment 9-B Supervisor for Resettlement – Review Forms</i>	9-31

9. MONITORING AND SUPERVISION

9.1 Introduction

Implementation of the procedures and activities described in Chapter 4 for the resettlement of affected populations can only be attained through efficient supervision and monitoring. This chapter describes the proposed methodology and procedures for implementing such programs, identifying the salient indicators which will be the focus of this monitoring, and outlining each of the organizations (both internal and independent), including their responsibilities, scope of work, coordination with other parties, and reporting requirements.

9.2 Monitoring Indicators

Resettlement monitoring requires the integration of various parameters reflecting both the timely and satisfactory progress of physical works and programmed activities, as well as the performance of resettled communities and implementing organizations in achieving production reestablishment goals and social integration. Indicators which will be utilized in the monitoring of these issues are discussed below.

9.2.1 Livelihood Reestablishment

Livelihood reestablishment monitoring indicators mainly include: schedule and progress of relocation; disbursement and use of house compensation cost; housing area, place, progress and quality; family income level, income source, property and quality of life before versus after resettlement; progress and quality of water/power supply, road, post and telecommunications, public address and other infrastructure established or reestablished after resettlement; type, place, land area, land leveling progress of resettlement townships; employment and education of resettlement people.

9.2.2 Production Reestablishment

Production reestablishment monitoring indicators are mainly: quantity, time and progress of land acquisition; disbursement and application of land compensation cost; changed mode of production; number, progress and quality of production developments (land redistribution, courtyard economic development, secondary and tertiary industrial resettlement); progress and quality of production supporting infrastructures and special facilities; progress and result of resettlement training in production skills.

9.2.3 Other Aspects

Monitoring indicators in other aspects include: resettlement implementation progress, timely and correct disbursement of resettlement funds, performance of contracts, and financial status; conclusion of agreements on people transfer; reestablishment of vulnerable groups; preparation work at host sites; arrangements for transition period; safety network regarding health, medical care and other aspects of resettlement communities; and organization, training, work time and efficiency of resettlement agencies.

9.2.4 Public Participation and Consultation

Public participation and consultation indicators include: time, way, frequency, scope, degree and effect of resettlement and host communities' participation and consultation; percentage and role of women and vulnerable groups involved in public participation and consultation.

9.2.5 Complaints/Grievance Management

Monitoring indicators in this respect mainly include the following: channel and process of complaints; various problems and disputes encountered during resettlement implementation, and resolution of such problems and disputes.

9.3 Internal Monitoring and Control

9.3.1 Organization

PMOs will provide an internal monitoring role for land acquisition and resettlement work under the YBFCP. These organizations will be provided with full-time officials to be responsible for resettlement-related problems under the project. Staff will have resettlement work experience and be of adequate seniority/authority to facilitate coordination between different departments involved in resettlement. To support staff in undertaking these duties, a detailed training program to enhance capabilities in management, planning, supervision, monitoring and evaluation has been developed and is included in the YBFCP resettlement budget (see Chapter 6, Section 6.8.1).

9.3.2 Purpose

Ultimate responsibility for internal monitoring will lie with PMOs, with the primary objectives of maintaining performance of ROs during project implementation, coordinating resettlement work by all parties, and keeping abreast of resettlement implementation status.

9.3.3 Work Process

PROs and CiROs coordinate and monitor resettlement implementation of resettlement by the CoROs, and themselves report to the PMO, as illustrated in **Figure 9-1**.

9.3.4 Scope of Work

Internal monitoring efforts will be targeted on the following issues:

- a) Resettler relocation, distribution of residential sites and housing progress;
- b) Progress and quality of production reestablishment projects (including land leveling, courtyard economic development, and resettlement in secondary and tertiary industries);
- c) Survey, coordination and recommendation regarding major problems encountered by resettlers and implementation organizations during implementation;
- d) Recovery of family income levels after resettlement;
- e) Progress and quality of infrastructure and community facility construction;
- f) Reestablishment of vulnerable groups;
- g) Disbursement, availability and use of resettlement compensation costs;

- h) Level of public participation and consultation during implementation;
- i) Resettlement training services and achievements; and
- j) Organization, training, working program and efficiency of local ROs.

9.3.5 Responsibilities

- a) Cooperation with resettlement implementation organizations, responsible departments, IMEO and SR;
- b) Preparation of forms against monitoring activities, to be completed and submitted by implementation organizations, responsible departments and owners on a given date each month;
- c) Field inspection and examination on a monthly basis, and participation in the inspection and acceptance of completed resettlement projects;
- d) Monitoring of the implementation of annual work plans and use of funds, and organization of annual financial auditing together with provincial ROs;
- e) Submission of monitoring summary reports to the ORC and World Bank on a regular basis (twice a year); and
- f) Periodic presentation to provincial governments, consultation with executive authorities, whenever necessary.

9.4 Independent Monitoring and Evaluation

9.4.1 Organization

The Yellow River Resettlement Monitoring and Evaluation Co. Ltd. will be retained, as an independent monitoring and evaluation organization (IMEO), by the PMOs to be responsible for monitoring and evaluation of land acquisition and resettlement work under the YBFCP. Responsibilities of the IMEO are to; carry out internal control and provide technical consultation services for the owners, provide all-round resettlement implementation information for the project owners, direct and evaluate the work completed by resettlement supervision organizations, report resettlement implementation progress to the PMOs/PROs and the ORC, and identify and advise on resolution of outstanding problems.

9.4.2 Purpose

Independent monitoring is intended to evaluate resettlement work and review resettlement implementation activities from a comprehensive and long-term perspective. The IMEO is to trace resettlement activities sufficiently to evaluate the achievement of resettlement objectives.

9.4.3 Scope of Work

The IMEO will monitor and evaluate the achievement of rural resettlement implementation, reestablishment of village facilities and infrastructure, and the disbursement and use of resettlement funds.

- a) *Monitoring and evaluation of rural resettlement implementation planning:* The

scope of work includes evaluation of the progress and sufficiency of preparatory work prior to the start of resettlement, including; project engineering and design, financial preparation, action plan development, and production and livelihood goods preparation. During implementation, the scope of work will be focused on land development and redistribution; provision and quality of housing; water/power supply, road and supporting infrastructure construction; public service reestablishment; production and livelihood change in both level and quality before versus after resettlement; arrangements for those to go in for second and third industries, including their income level and livelihood after employment; and training services aimed at improving rural resettlers' production skills and overall cultural levels.

- b) ***Monitoring and evaluation of community infrastructure reestablishment:*** The scope of work in this aspect covers special facilities involving water/power supply, telecommunications, roads and transport, and communications. Monitoring and evaluation of project quality, progress, investment and effect will be evaluated against approved engineering and design documents.
- c) ***Income restoration post-relocation*** will be monitored by evaluating; changes in quality and quantity of production, realization and success of transfer into secondary and tertiary industries by evaluating pre- and post resettlement incomes, and availability and utilization of training programs targeted at upgrading rural resettlers production skills.

Formats of monitoring and evaluation reports addressing these issues are attached as **Attachment 9-A**.

9.4.4 Responsibilities

The IMEO will act as advisor to the PMOs and PROs, providing recommendations for alternative courses of action aimed at avoiding any existing or potential problems identified during evaluation and monitoring, which may otherwise create obstacles to the realization of resettler objectives. In carrying this work, the IMEO will be responsible for evaluating; results from the Supervisor of Resettlement (as discussed in Section 9.5.3) and the quality of their supervision; planning and implementation at the county and village level through regular site visits and evaluation of RO records. These responsibilities will require undertaking the following activities.

9.4.4.1 Evaluation of Living Standard Restoration

Prior to the start of resettlement, the IMEO will plan and undertake a socio-economic survey in both a random sample and a control group of affected people. Such survey will be repeated annually as one of the ways to measure any change to the living standard of affected people. Where resettlement has already commenced, this evaluation will be based upon socio-economic surveys undertaken by each provincial planning institute.

9.4.4.2 Public Consultation

The IMEO will take part in periodic public consultation meetings at village and township levels. Monitoring of such meetings will be arranged to evaluate the depth and effect of public participation in the implementation of resettlement planning. Records will be

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9.4.4.2 Public Consultation

The IMEO will take part in periodic public consultation meetings at village and township levels. Monitoring of such meetings will be arranged to evaluate the depth and effect of public participation in the implementation of resettlement planning. Records will be

maintained of all such consultations which show the specific individuals contacted, their positions , their comments and any actions taken or required in response. Also, such organization will discuss with affected people to be abreast of what they know, prefer and desire in respect of their livelihood reestablishment, and then report to the provincial ROs. After relocation, these meetings will focus on discussion of the progress and success of income restoration activities.

9.4.4.3 Complaints/Grievances

In parallel with the consultation program discussed above, the IMEO will make periodic visits to affected sites, evaluating public complaints and the adequacy of their identification and resolution by means of interviews with Village Leaders and affected communities. It will keep continuous monitoring of the efficiency of complaints management, and where necessary, render recommendations, as necessary, on any possible change to the process of complaints management, such that the process will be more efficient.

9.4.4.4 Other Responsibilities

The IMEO will also advise to the PMOs during the resettlement action plan preparation and on the physical progress and adequacy of resettlement implementation, by monitoring the following indicators:

- a) Disbursement of compensation cost;
- b) Land redistribution;
- c) Preparation and adequacy of host sites;
- d) Housing;
- e) Resettler relocation;
- f) Training of resettlers for income restoration;
- g) Reestablishment of vulnerable groups;
- h) Provision of community and major infrastructure (both newly and reestablished);
- i) Compensation for lost assets;
- j) Compensation for lost work time;
- k) Subsidy in transition period;
- l) Compensation for replacement of lost properties;
- m) Time schedule of the above activities (as applicable); and
- n) Organization of resettlement network

Table 9-1 outlines the draft program by which the IMEO will monitor and evaluate the resettlement program.

9.4.5 Monitoring and Evaluation Measures

- a) In the process of resettlement monitoring, the IMEO will make their personnel available for sample surveys and field visits on a regular or irregular basis, to identify

any problem as early as possible, and cause project offices at different levels to solve such problems, with monitoring and evaluation reports submitted to the owners.

- b) Follow-up monitoring of income and living standard restoration will be undertaken utilizing a random sampling methodology, stratified according to means of livelihood generation, educational level, sex, economic status, age, and area. Minimum sampling will be one in two hundred individuals, or one in fifty households. Sites will be arranged by the IMEO, with data collected by rural statistical staff, and remunerated by the IMEO.
- c) A public input-output analysis model will be developed to enable analysis and forecast of typical resettlement administrative units.
- d) Summary resettlement evaluations will be prepared by the IMEO, and assistance provided in the identification and establishment of areas for demonstration of successful reestablishment experiences following resettlement.

9.4.6 Process and Cost Estimate

The duration of independent monitoring and evaluation will cover the project construction period and a 2-year period upon completion of the project, with reports provided on a biannual basis at least.

All reporting will be provided to the SR, PRO and ORC, with copies to CoROs. Reports will include data records for the monitoring period (see **Attachment 9-A**), and analysis of the situations encountered, with identification of short-fallings and recommendations for their resolution and steps taken to initiate these measures.

In addition, the IMEO will cooperate visiting World Bank missions and with the Panel of Experts in evaluating the project's resettlement performance.

Contracting of a common IMEO by each of the project provinces is expected to be undertaken by the end of 1999.

9.5 Supervisor of Resettlement

During resettlement implementation, the quality, progress and cost of project components involved in resettlement (as separate from the main project works supervised by the Engineering Construction Supervisor) will be subject to the supervision of a Supervisor of Resettlement (SR), (as qualified and authorized by the Government), with any problems identified and reported to CoROs and PMOs for early solution with construction contractors, thus avoiding the intensification and evolution of such problems. It is proposed to contract a single organization for this work, under separate contracts with each PRO.

9.5.1 Purpose

The SR will exercise schedule, quality and cost control of resettlement implementation and community infrastructure reestablishment, arrange acceptance of completed works, in order to facilitate smooth completion of the resettlement component according to quality and schedule requirements.

9.5.2 Scope of Work and Methodology

The following section, in describing SR work methodology uses the term RO to represent the RO at the relevant level for the construction works involved.

a) Supervision Prior to Resettlement

- Review of the institutional arrangements and schedule proposed by ROs and contractors and completion of resettlement schedule (see **Attachment 9-B, Schedule 1**);
- Review of the labor arrangements, building materials and construction equipment supply plans proposed by resettlement implementation organizations on the basis of the schedule and complete labor arrangement, building material and construction equipment supply plan review form (see **Attachment 9-B, Schedule 2**);
- Review of the relocation and production reestablishment balance sheets (i.e. quarterly statement of income and expenditure) provided by the ROs, to enable proper financing and application of resettlement costs, and complete balance sheet review form(see **Attachment 9-B, Schedule 3**);
- Review of community infrastructure subcontractors, partners and suppliers selected by the ROs, and complete subcontractor, partner and supplier qualification review form (see **Attachment 9-B, Schedule 4**). When a contractor is selected according to the conditions of contract, normally no subcontractor or partner shall be otherwise selected unless approved by the supervision engineer;
- Review the task managers selected to be responsible for community infrastructure reconstruction and production reestablishment projects. The contractor will provide information on the past experience of the candidates, including experience in similar projects, to the SR for review, with task manager qualification review form completed (see **Attachment 9-B, Schedule 5**).
- Careful review of resettlement sites prior to the start of resettlement, to ensure readiness, before approval can be given for the commencement of the project, and cause ROs to start work as provided for in the contract.

b) Quality Control

- The SR will examine the performance of ROs field management and quality control systems, which will in turn require the contractor to properly handle his internal quality control and construction records. Any inadequacies will be promptly reported to ROs for early correction
- The SR will arrange inspection and acceptance of completed projects. When any residential site, production reestablishment project or community infrastructure is completed, the engineer will be given 2 days notice to be present at the inspection and acceptance. Representatives of relevant resettlers or departments will be invited to be present at such inspection and acceptance. Where approval is granted, a resettlement quality assessment form will be prepared and completed(see **Attachment 9-B, Schedule 6**).
- The project acceptance standard will be determined according to design requirements,

to conform with the standard as agreed by the RO and the owner.

- The SR will propose, with due care, solutions to any quality accidents encountered in the process of resettlement, and make a record of such instances with a resettlement project quality accident (non-conformance) review form and quality problem notice (see **Attachment 9-B, Schedules 7, 8**). In the event of any major accident, on-the-spot material evidence will be photographed or videotaped evidence will be appended to these records (see **Attachment 9-B, Schedule 9**).
- The SR will be entitled to instruct suspension of work due to quality accidents or any other reasonable reasons in the process of resettlement, with notices of suspension prepared and issued. Work will not be resumed unless quality problems are solved and the RO has received the SR's notice of resumption. (see **Attachment 9-B, Schedule 10**).

c) Resettlement Schedule Control

- The SR will check resettlement progress on a monthly basis, and prepare supervision monthly reports. In the event of any delay or dispute related to construction progress, the SR will notify the RO, in writing, for prompt remedial actions.
- RO are obliged to complete their resettlement tasks on schedule as stated in the contract, and in accordance with any approved extension to the completion date. Approval of any extension, will be subject to the SR's review and the owner's approval, with written notice given to the RO.

d) Resettlement Cost Control

ROs and construction contractors are obliged to complete their resettlement tasks within the resettlement budget as included in the contract. In the event of any variation of work quantities and increase/decrease of items as a result of design changes, detailed prices or unit rates will be estimated by the RO, and then directly verified or amended by the SR, with a written confirmation given to RO and the owner for implementation.

Resettlement costs will be paid in installment according to the terms of payment as stated in the contract. Prior to each payment, the SR will carefully check the quantity and quality of completed work, calculate the due amount of payment, check that the interim payment requested by ROs and contractors is consistent with the quantity of completed work. Payment certificates will be issued after examination, permitting payment to be made by responsible departments.

For community infrastructures to be undertaken by contractors or subcontractors, 5% of each installment shall be retained, and paid to contractors or subcontractors upon the expiry of default liabilities.

e) Resettlement Project Acceptance

- When the resettlement component is completed (or partly completed), the SR will participate in the initial inspection and acceptance of the whole or part of works, with any ungraded works (or location) carefully recorded according to the contract and design requirements, then corrected or rebuilt by contractors (see **Attachment 9-A, Schedule 10**) and ROs until meeting quality standards and requirements, and finally

formally accepted by the SR. If the acceptance is granted, certificates of completed resettlement project acceptance will be issued by the SR together with relevant organizations. The date of signature will be the date of completion.

- Upon completion of the resettlement component, the SR will hand over all and any related technical file to the owner for record.
- For any project where 5% of costs have been retained, the SR will require the contractor to adequately remedy any defects in the defaults liability period. A certificate of completion of contractor defaults liabilities will be issued, with the retained monies, on expiration of the liability period.

9.5.3 Responsibilities

- a) Explanation to ROs and construction contractors of resettlement planning and construction drawings, supervise the finalization of resettler relocation, production reestablishment and community infrastructure construction in compliance with the contract documents, specifications and construction drawings;
- b) Review and approval of the resettlement plans, implementation schemes, construction drawings and revisions prepared by county ROs as required by the contract;
- c) Inspection of resettlement-oriented hauling trucks, building materials, special equipment and installation quality against resettlement planning, contracts and construction drawings. Also, supervision of RO's submission of design documents, completion reports and test data for file and reference;
- d) Provision of implementation requirements for ROs and contractors in accordance with design documents and construction drawings, and response to any question raised by ROs and contractors during construction;
- e) Review and accounting of disbursement plans and payments, in advance of the project owners payment;
- f) Adequate implementation of the work guidelines developed by the headoffice, completion of various forms as required, and incorporation of such into the project file together with other technical documents;
- g) Submission of resettlement implementation details to provincial PMOs and IMEOs on a monthly basis; and
- h) Cooperation with project management organizations, IMEOs and Panel of Experts.

9.5.4 Organization

The SR will include a headoffice and field supervision teams on the basis of different tasks in different affected areas. The headoffice will be staffed with a chief engineer, and 2 full-time staff to be responsible for office and field work. Each SR team will have a team leader, an engineer and a resident person. (see **Figures 9-2 to 9-4**).

9.5.5 Work Process and Cost

Supervision will be exercised in the entirety of the resettlement implementation process, with a wrap-up report provided upon completion of the resettlement construction components. Supervision work will commence by the end of 1999. Financial requirements for supervision purposes are estimated at 10.22 million yuan, (3.74, 3.94,

and 2.56 million yuan for Hunan, Hubei and Jiangxi provinces, respectively) have been included in the total resettlement cost estimate (see Table 5.1).

9.6 Overall Resettlement Coordinator

Establishment of the Overall Resettlement Coordinator (ORC) as described in section 6.5, is proposed to provide a necessary link between the resettlement activities of the three provinces. The ORC will consist of a full-time administrator, and assistant, responsible for the coordination of YBFCP resettlement operations throughout the three project provinces. The ORC will report to a committee comprising one representative from each of the three PROs. The ORC, working with each PRO, will prepare reports describing the overall status of the YBFCP resettlement, incorporating the results of each province's monitoring. The ORC can then provide the necessary support to POE and other World Bank missions as required. This support will involve furnishing these regular reports to the missions, facilitating field visits and meetings with relevant agencies, and responding to various queries as required.

9.7 International Panel of Experts on Resettlement

9.7.1 Need for Panel

An International Panel of Experts on resettlement (POE) will be established to make periodic evaluations of project resettlement performance and based on this to make recommendation on measures which may need to be taken so that project resettlement performance will comply with requirements specified in the Government-Bank Loan Agreement for the project. The POE is to be an independent panel, reporting both to the Government and the Bank, but with administrative services for the panel's function furnished by the Government. The POE is expected to be of significant guidance in planning/implementing the resettlement program, and to be beneficial to the early resolution of complex problems to be encountered in resettlement work, thus avoiding delays and losses, and helping to ensure smooth progress.

9.7.2 Establishment of Panel

The Panel will be comprise three experts in resettlement, including 1 foreign and 2 local experts. These experts are to be persons who are not MWR staff and who are not WB staff. The suggested list of experts includes: Ferguson, Shi Guoqing, and Wan Guosheng.

9.7.3 Responsibilities of Panel

The Panel will review and evaluate the overall resettlement progress, including resettlement work done by all agencies involved in the resettlement program. The work of the Panel will include not only review/evaluation of resettlement progress but furnishing of assistance to any/all agencies involved in the resettlement program to help in the resolution of outstanding significant problems.

9.7.4 Schedule

Two Panel meetings, each of 12 working days (plus travel time) will be held each year from 2000 to 2002, covering the period of project construction. At a later time the Government and Bank will evaluate the possible need for Panel function during the operation period following completion at construction. The first meeting is scheduled to

take place in June 2000.

9.7.5 Reporting System

- a) For each meeting of the Panel the ORC will prepare a report, to be given to the Panel at start of its meeting, which represents a comprehensive review of resettlement progress over the reporting period. In addition, the ORC will furnish to the Panel at the start a memorandum which presents and explains the recommended work program for the Panel on a day-by-day basis, and which delineates the specific problems to which the Panel should give priority attention.
- b) Each Panel member will prepare their own report on the Panel's review/evaluation. There will be annexes to the Overall Panel report.
- c) The foreign member will be in the lead for preparing the Overall Panel Reports based on the three individual reports, to produce a final Overall Report which represents the Panel consensus.
- d) The Overall Panel Report, including the individual annex reports, are to be submitted both to the Government and the Bank.

9.7.6 Cost Estimate

The Panel cost estimate is included in foreign expenditures. This amounts to approximately \$116,000 per year.

9.8 Summary and Conclusions

Efficient supervision and monitoring are key to effective implementation of the resettlement program. Both internal and external (independent) monitoring mechanisms are needed to ensure a transparent and smooth resettlement implementation program.

Resettlement monitoring requires the integration of various parameters reflecting both the timely and satisfactory progress of physical works and programmed activities, as well as the performance of resettled communities and implementing organizations in achieving production reestablishment goals and social integration. Other monitoring indicators include timely and correct disbursement of funds, contracts performance, conclusion of agreements, reestablishment of vulnerable groups, host sites' preparation, transition period arrangements, safety network and project management and resettlement organization and training.

Public consultation and grievance redressal are key aspects of resettlement monitoring and supervision. Consultation needs to be undertaken at regular intervals with both the resettler population and the host communities' including women and vulnerable groups. Well defined channels of grievance registration need to be put in place and procedures for speedy resolution of any problems and disputes.

In YBFCP resettlement, the PMOs will be responsible for internal monitoring of land acquisition and resettlement work. The responsible PMO staff will have appropriate experience and will facilitate coordination between different agencies involved in resettlement. Training will be imparted to staff in monitoring and supervision as detailed in Chapter 6. The PMOs will monitor the performance of ROs at various levels (cities, counties, and village) during project implementation, coordinating resettlement work by all parties, and keeping abreast of resettlement implementation status. Key activities will include (i) resettler relocation, sites allocation and housing progress, (ii) quality of

production reestablishment projects, (iii) recommendation on any problems encountered in implementation, (iv) income restoration, (v) infrastructure and community facility construction, (vi) reestablishment of vulnerable groups, (vii) timely disbursement of funds, (viii) maintaining public consultation, (viii) resettlement training services, and (ix) project and organization management. The PMO will submit monitoring summary reports to the Overall Resettlement Coordinator and World Bank twice a year.

An Independent Monitoring and Evaluation Organization (IMEO) viz., the Yellow River Resettlement Monitoring and Evaluation Co. Ltd. will be retained by the PMOs for monitoring and evaluation of land acquisition and resettlement work under the YBFCP. Responsibilities of the IMEO will include technical consultation services, monitor and supervise overall resettlement implementation, evaluate the resettlement supervision organizations (SRs), and report resettlement to the PMOs/PROs and the ORC on the status of resettlement progress. The IMEO will also take part in periodic public consultation meetings at village and township levels. During its periodic site visits the IMEO will evaluate public complaints and monitor the efficiency of grievance redressal process and make recommendations as necessary on any possible change to the process. The duration of independent monitoring and evaluation will cover the project construction period and a two-year period after project completion. A common IMEO is expected to be contracted by each of the project provinces by the end of 1999.

Supervision of resettlement will be delegated to a Supervisor of Resettlement (SR) who will supervise resettlement implementation, resettlement project cost, and identify any and report to ROs and PMOs for early solution with construction contractors, thus avoiding the intensification and evolution of such problems. The SR will exercise schedule, quality and cost control of resettlement implementation and community infrastructure reestablishment, arrange acceptance of completed works, in order to facilitate smooth completion of the resettlement component according to quality and schedule requirements. The SR will include head office staff and field supervision teams. Typical staff profile will include a chief engineer, and 2 full-time staff to be responsible for office and field work. Supervision work will start no later than December 1999, and financial estimates put the total cost at 10.22 million yuan and have been included in the total resettlement cost estimate.

A position of an Overall Resettlement Coordinator (ORC) will be created at the Central Project Coordination Office (CPCO), who will coordinate the resettlement operations in all the three provinces. The ORC will work with an overall resettlement coordination committee comprising one representative from each of the three PROs. The ORC will report to the Ministry of Water Resources, the Yangtze Water Resource Commission (CWRC) and the World Bank on matters pertaining to YBFCP resettlement. The ORC, working with each PRO, will prepare reports describing the overall status of the YBFCP resettlement, incorporating the results of each province's monitoring and reporting to the Panel of Experts (POE), the World Bank missions and MWR and CWRC officials as required. This support will involve furnishing these regular reports to the missions, facilitating field visits and meetings with relevant agencies, and responding to various queries as required.

A Panel of Experts (POE) on Resettlement will be established to make periodic evaluations of project resettlement performance and provide recommendation on measures which may need to be taken so that project resettlement performance will comply with requirements specified in the Government-Bank Loan Agreement for the

project. The POE is to be an independent panel, reporting both to the Government and the Bank and is expected to provide guidance in planning/implementing the overall resettlement program. Two Panel meetings, of 12 days duration have been planned each year from 2000 to 2002, covering the period of project construction. At a later time the Government and Bank will evaluate the possible need for Panel function during the operation period. After each meeting of the Panel the ORC will prepare a report, to be given to the Panel at start of its meeting, which represents a comprehensive review of resettlement progress over the reporting period. In addition, the ORC will furnish to the Panel at the start a memorandum which presents and explains the recommended work program for the Panel on a day-by-day basis, and which delineates the specific problems to which the Panel should give priority attention. Each Panel member will prepare their own report on the Panel's review/evaluation. The Overall Panel Report will be submitted both to the Government and the World Bank. The cost for POE has been estimated at \$116,000 per year and is included in the foreign currency component of the resettlement budget.

Figure 9-1 Internal Monitoring Process

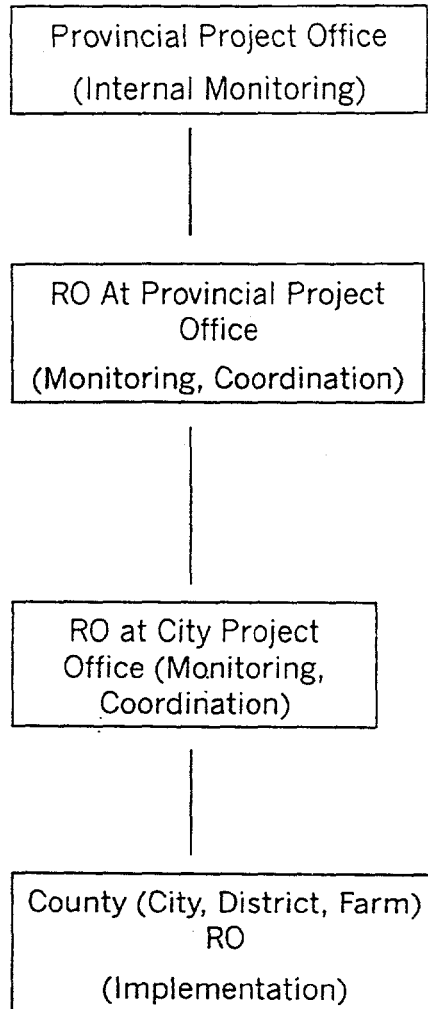


Figure 9-2 Project Supervision Organization Chart of Hunan Province

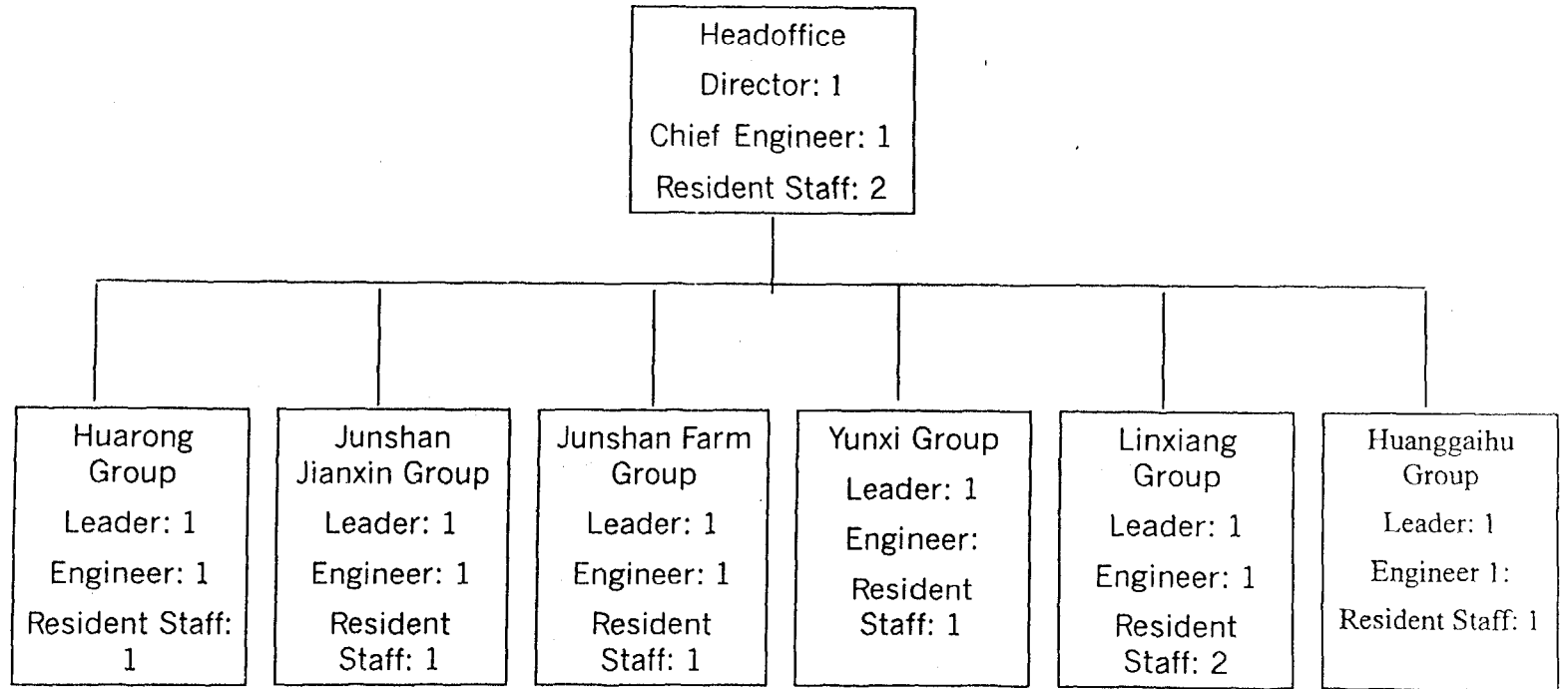


Figure 9-3 Project Supervision Organization Chart of Hubei Province

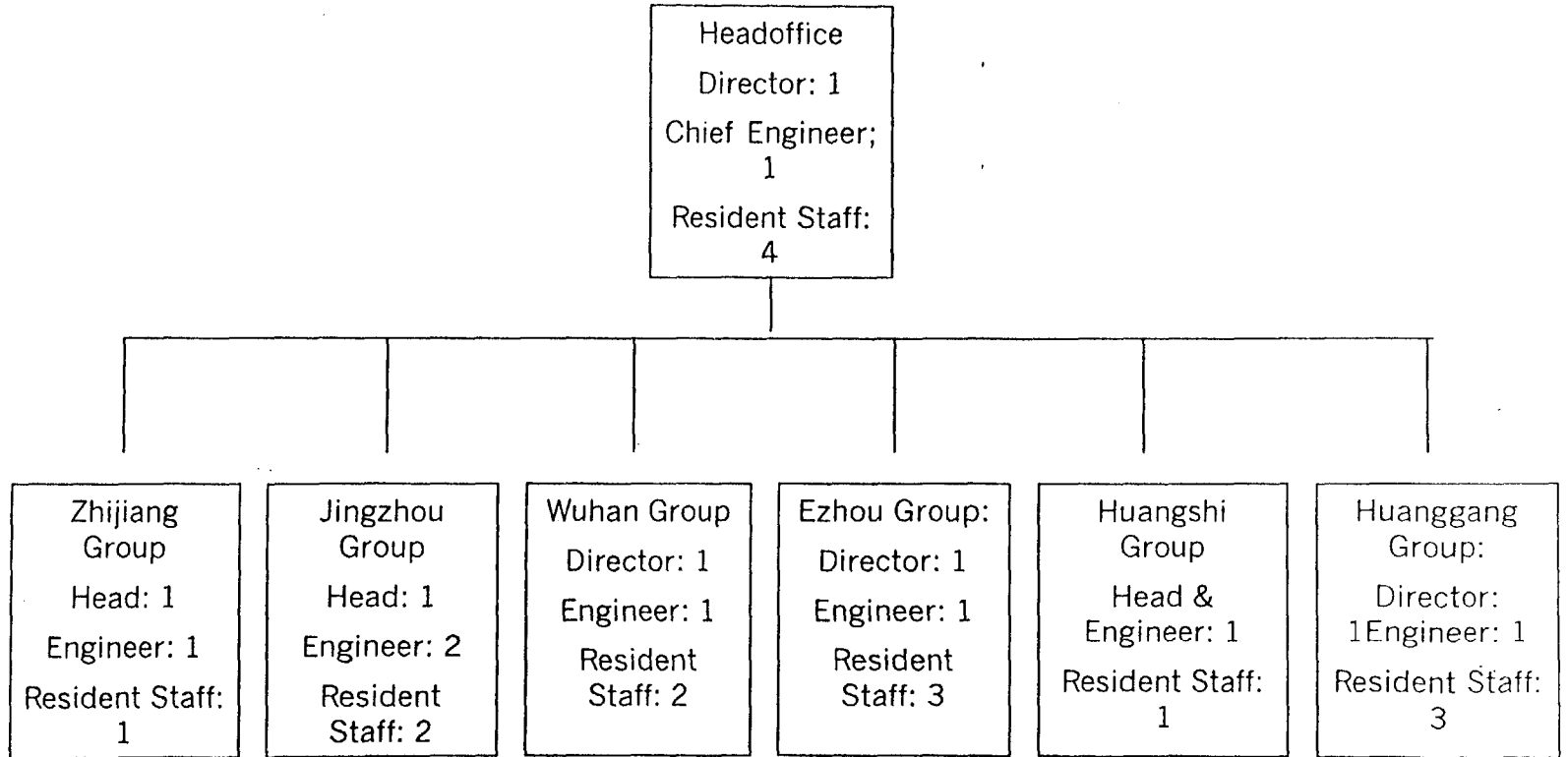


Figure 9-4 Project Supervision Organization Chart of Jiangxi Province

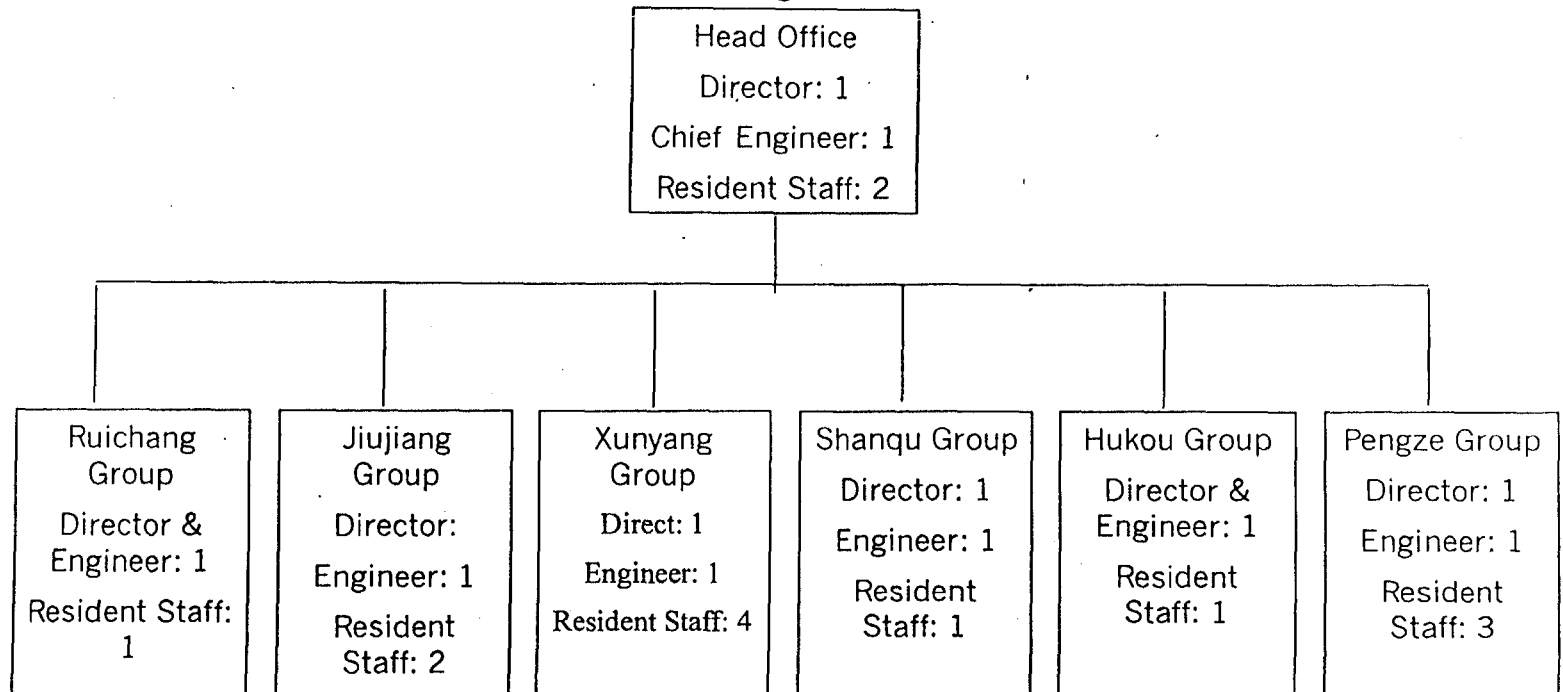


Table 9-1 Internal and Independent Monitoring Programs

MONITORING REQUIREMENTS	YBFCP RESPONSE	
	Internal Monitoring	Role of the IMEO
Community Reestablishment		
Disbursement of compensation to villagers (for assets, structures etc)	CoRO reports on progress of disbursement against schedule and budget	IMEO to evaluate CRO progress reports, cross-check disbursement progress with affected people through public meetings and interviews in affected villages
Progress and quality of housing	SR and Village Leaders supervise house reconstruction, compliance with agreed standards (including sanitation standards). CoRO to identify very poor and single parent/single elderly households	IMEO evaluate the sufficiency of resettlement budget for replacement costs, cross-check with affected people through public meetings and interviews
Progress and quality of infrastructure	SR to provide progress and quality control, reporting to the CoRO and PRO	IMEO to evaluate initial plans and then CRO and RS records of progress relevant to relocation timing
Resettlement site preparation	SR to supervise resettler and host village preparations, CoRO to contract for required major infrastructure	IMEO to review progress of preparations including infrastructure and land preparations
Production Reestablishment		
Protection of pre-project living standards (particularly vulnerable groups)	Village Leaders consult with affected households, grievance resolution/channeling	IMEO to evaluate employment/housing of vulnerable households during regular resettlement village visits (direct interview)
Maintenance of affected enterprises not relocated		IMEO surveys to include affected enterprises (evaluate employees and production). Random site checks of affected villages during consultation
Resettler employment and education	Individual Village Leaders will monitor the success of villagers in maintaining employment, and maintaining access to education. CR to monitor employment of villagers trained in non-agricultural skills	IMEO to review records of CRO in regard to post training employment, and CRO summary of village production reestablishment activities
Adequacy of transitional support	Village Leaders to monitor income restoration	IMEO review evaluation through village visits and CoRO reports

MONITORING REQUIREMENTS	YBFCP RESPONSE	
	Internal Monitoring	Role of the IMEO
<p>Public Awareness and Participation</p> <p>Progress, adequacy and application of village land compensation</p> <p>Villager awareness of project and impacts incl. resettlement</p> <p>Incorporation of measures for supporting vulnerable groups</p>	<p>CoRO monitors village progress, and adequacy of funds for host/resettlement development</p> <p>PRO reviews progress of planning in undertaking surveys and inventories, where project awareness is initiated</p> <p>CoROs via the Village Leaders to identify requirements</p>	<p>IMEO to review recorded disbursements in relation to timing adequacy for production reestablishment, and compliance with agreed application of funds</p> <p>IMEO to undertake regular village meetings, pre- and post project to ensure villager awareness and participation in resettlement planning</p> <p>IMEO to review progress in signing of land share agreements between resettler and host villagers</p> <p>IMEO to evaluate plans (particularly training and transitional support)</p>
<p>Grievance Resolution</p> <p>Villager awareness of grievance resolution channels</p> <p>Recorded grievances</p> <p>Promptness of grievance resolution</p>	<p>Grievance records maintained by village ROs and PROs</p> <p>Village Leaders to report timing of grievance initiation, response taken, time and method and nature of resolution</p>	<p>Villager awareness included in questionnaires and surveys distributed by the IMEO and planning institutes</p> <p>IMEO to assess the record of grievances to assess the utility of the system in actually channeling and solving issues</p> <p>IMEO to evaluate response times and adequacy of resolution based on PRO records and field interviews with villagers and village leaders</p>
<p>Institutional Aspects of Resettlement</p> <p>Efficiency and timeliness of conducted duties</p> <p>Adequacy of personnel for duties</p> <p>Effectiveness of organizational structure and processed for implementation</p>	<p>PROs, based on CRO reports, to identify any shortfalls</p> <p>CoROs to report evaluation of staffing conditions to PRO in regular reporting</p>	<p>IMEO to evaluate and make recommendations where required for improved efficiency</p> <p>IMEO to make evaluation and recommendations related to staffing to the PRO</p> <p>IMEO to review and make recommendations to the PROs</p>

Attachment 9-A Forms for Independent Monitoring and Evaluation

Schedule 1 Questionnaire for Background Information

No: _____

Family Head: _____

_____ Group _____ Village _____ Township (Farm Branch) _____ County (District, City, Farm)

1. Background of Family

Name	Sex	Age	Occupation	Education	Relation to Family Head

Township (Farm) (common seal): _____

Investigator: _____

2. Statistics on Housing Area

Type\Area		Before RS (m ²)	After RS (m ²)
House	Brick & concrete		
	Brick & Timber		
	Earth & Timber		
Sundry	Brick & Timer		
	Earth & Timber		
Total			

Township (Farm) (common seal): Investigator:

3. Statistics on Family Property

Description\Qty	Before RS (set)	After RS (set)
TV		
Washing machine		
Electric fan		
Bicycle		
Sewing machine		
Car		
Tractor		
Boat		
Farm cattle		
Others		

Township (Farm) (common seal): Investigator:

4. Statistics on Farmland Area and Crop

Description		Unit	Qty	
			Before RS	After RS
A. Total Land Area		mu		
1. Farmland	Subtotal	mu		
	Irrigated field	mu		
	Dryland	mu		
	Slopleland	mu		
2. Pond		mu		
3. Vegetable plot		mu		
4. Forestland		mu		
5. Commodity vegetable plot		mu		
6. Residential plot		mu		
B. Grain crop				
1. Rice	Cropped area	mu		
	Yield	kg		
2. Oil crop	Cropped area	mu		
	Yield	kg		
3. Wheat	Cropped area	mu		
	Yield	kg		
4. Sweet potato	Cropped area	mu		
	Yield	kg		
C. Cash crop				
1. Cotton	Cropped area	mu		
	Yield	kg		
2. Sugarcane	Cropped area	mu		
	Yield	kg		
D. Vegetable		mu		

5. Statistics on Income and Expenditure

Description/Qty	Before RS (yuan)	After RS (yuan)
A. Agricultural income		
1. Grain crop		
2. Cash crop		
B. Forestry income		
1. Fruit		
2. Chinese herb medicine		
3. Tea		
C. Animal husbandry		
1. Pig		
2. Cattle		
3. Sheep		
4. Chicken, duck, goose		
D. Aquaculture		
1. Fishery		
E. Industrial sideline		
1. Temporary worker		
2. Long-term contract worker		
F. Other income		
Total income		
A. Production expenditure		
B. Living expense		
Total expenditure		
Net income		

6. Questionnaire for Psychological Study

Date:

Name		Domicile: ___ Village ___ Township ___ County
What are you most interested in?		
What are you most concerned about?		
Investigator		

Schedule 2 Questionnaire for Background Information on Host Communities

Place	Name	Sex	Age	Education	Family Size	Original Farmland (mu)		Present Farmland (mu)		Agricultural Income, Rice (kg)		Income Variation due to RS (yuan)	
						Irrigated	Dryland	Irrigated	Dryland	Before Land Redistribution	After Land Redistribution	Increase	Decrease

Schedule 3 Questionnaire for Completion of Resettlement Agreement

Township	To Be Signed		Signed		%	
	Number of Family	Number of People	Number of Family	Number of People	by Family	by People

Schedule 4 Questionnaire for Host Sites

Host Township	Decentral RS		Refuge Platform RS		To Market Town		Total			
	Number of Family	Number of People	Number of Family	Number of People	Number of Family	Number of People	Number of Family	%	Number of People	%

Schedule 5 Questionnaire for Production Reestablishment

Township	Village	RS Population	RS by Land Redistribution				RS by 2nd & 3rd Industry			
			Project	To Be Resettled	Completed	%	Project	To Be Resettled	Completed	%

Schedule 6 Questionnaire for RS Training

Description	Time	Place	Number of People

Schedule 7 Questionnaire for Background Information on Host Sites

Township	Village	Site	Number of Family	Number of People	House (Family)		Infrastructure		
					Leveled Residential Plot	Completed House	Water Supply	Power Supply	Road

Schedule 8 Questionnaire for RS Cost Use

_____ Village _____ Township (Farm Branch) _____ County (City, District, Farm)

Name of Project	Project Planning		Completion Progress			
	Work Qty	Cost Estimate (10 ⁴ yuan)	Completed Qty	%	Completed Cost (10 ⁴ yuan)	%

Schedule 2 Review of Labor Force Arrangement, Material, Construction Equipment Supply

Name of Project		Date	
Location		Specialty	
Participant			
Review:			
Engineer's comments:			
Chief Engineer			

Schedule 3 Review of Statement of Income and Expenditure

Name of Project		Date	
Location		Specialty	
Participant			
Review			
Engineer's comments:			
Chief Engineer:			

Schedule 4 Review of Subcontractor, Partner and Material Supplier's Qualification

Description:
Review:
Chief Engineer: Date:
Approval by upper level: Date:

This form is in triplicate, with one copy held each of the contractor, owner and engineer.

Schedule 5 Review of Key Personnel Qualification

Description:
Review:
Chief Engineer Date:
Approval by upper level:
Date:

This form is in quadruplicate, with one copy held by each of the contractor, owner, engineer and RO.

Schedule 6 Review of RS Project Quality

Name of Project		Location		Contractor	
Date of Completion:			Date of request for inspection:		
Description of inspection:					
Review:					
Quality control officer:		(common seal)			
Technical officer:		Date:			
RS representative:					
Engineer's certification:					
common seal					
Chief Engineer:		Date:			

This form is in triplicate, with one copy held by each of the owner, RO and engineer.

Schedule 7 Review of RS Quality Accident

Name of Project		Date	
Contractor		Designer	
Description of accident:			
Contractor's proposal:			
Engineer's comments:			
Chief Engineer:			

Schedule 8 Notice on Quality Problem

Name of Project		Date:	
Outstanding problem:			
Addressed to: When the above mentioned problem is settled, the result will be reported to the issuer of this notice.			
Engineer quality control officer:			

This form is in triplicate, with one copy held by each of the owner, contractor and engineer.

Schedule 9 Photograph of On-the-spot Material Evidence

Time of Photo	
Name of spot	
Brief Description	<p style="text-align: center;">Photograph</p>
Brief Description	<p style="text-align: center;">Photograph</p>

Schedule 10 Instruction to Rework

[No.]

Name of Project

Name of Contractor: _____ Contractor No. _____

<p>To contractor:</p> <p>As a result of the following causes, you are herein instructed to carry out and complete the captioned reworks according to the following requirements, and to ensure that the reworks will meet the applicable standard.</p> <p>Engineer:</p> <p>Signed by:</p> <p>Date:</p>	
Cause of Rework	<input type="checkbox"/> Quality defect as tested <input type="checkbox"/> Failure to construct according to design <input type="checkbox"/> Design change <input type="checkbox"/> Variation of works or contract conditions <input type="checkbox"/>
Rework Requirement	<input type="checkbox"/> Removal <input type="checkbox"/> Replacement of material <input type="checkbox"/> Remedy of defect <input type="checkbox"/> To be constructed by other qualified construction crew <input type="checkbox"/> To be constructed by construction crew as designated by owner <input type="checkbox"/>
Notes:	<input type="checkbox"/> Any cost accrual to rework will be incurred by the contractor himself. <input type="checkbox"/> Cost accrual to rework will be separately included in future certificate of payment. <input type="checkbox"/>

To: Contractor

CC:

Schedule 11 Notice of Work Suspension (Resumption)

Name of Project		Contractor	
Place of Work Suspension (Resumption)		Place of Work Suspension (Resumption)	
Cause of work suspension or resumption (as applicable):			
Chief Engineer:		Date:	

Schedule 12 Engineer's Monthly Statement (RS Project Description)

Name of Project		Contractor	
Description			
Problem to be solved	Chief Engineer: Date:		

Schedule 13 Engineer's Monthly Report (RS Progress Deviation Analysis)

Name of Project		Date	
<p>Name of project:</p> <p>Planned progress:</p> <p>Physical progress:</p> <p>Cause of deviation:</p> <p>Proposed measure:</p> <p>Chief Engineer:</p>			

Schedule 14 Engineer's Monthly Report (on Other Matters)

Name of Project		Date	
<p>Chief Engineer:</p>			

Schedule 15 Records of Chief Engineer's Inspection Tours

Name of Project		Contractor	
Place of Sample Check			
Description of Sample Check			
Problem and settlement:			
Signed by contractor:		Name of inspector:	
		Position:	
Date:		Date:	

This form is in triplicate, with one copy held by each of the owner, contractor and engineer.

TABLE OF CONTENTS

10. RESETTLEMENT IMPLEMENTATION SCHEDULING..... 10-1

10.1 INTRODUCTION 10-1

10.2 PRINCIPLES FOR SCHEDULING 10-1

10.3 SCHEDULE FOR RESETTLEMENT IMPLEMENTATION 10-2

10.4 IMPLEMENTATION STATUS 10-2

 10.4.1 *Compensation Standards and Funds Availability* 10-2

 10.4.2 *Housing Restoration* 10-3

 10.4.3 *Enterprises and Public Buildings* 10-3

 10.4.4 *Land Development and Income Restoration* 10-4

 10.4.5 *Infrastructure* 10-4

 10.4.6 *Resettlement Organization and Management* 10-4

 10.4.7 *Public Consultation and Social Adjustment* 10-4

10.5 SUMMARY AND CONCLUSIONS 10-5

FIGURES

Table 10-1 Resettlement Implementation Schedule 10-9

10. Resettlement Implementation Scheduling

10.1 Introduction

Review of experiences elsewhere in China (and in other developing countries) shows that incorporating resettlement made into the planning of major projects is difficult to achieve, simply because this type of detailed resettlement planning is relatively new in major project planning history in all developing countries, and became the primary interest of the planners is focused on achieving the project's engineering construction goals, resulting in insufficient attention to resettlement planning/implementation so that when the time cover for people to move, the resettlement facilities for living/employment are not yet ready. Based on these lessons, a very important part of the present project's resettlement program is to ensure that adequate attention is given to the project's resettlement component so that resettlement will proceed as scheduled with the houses/community facilities ready to receive them and with arrangements already completed to enable them to begin proper earnings in their new situations. Chapter 10 presents the schedule for implementation of the tasks described in the RAP, and the status of implementation to date, including an outline of agreements made for ensuring implementation standards meet those described in this RAP.

10.2 Principles for Scheduling

- a) Set-back Houses: Because the resettlers in these instances are primarily rural villagers, limitation related to agricultural production must be considered while formulating the schedule. Land acquisition, relocation and house construction should be scheduled for the idle period, i.e. from September to April, to minimize the impact on agricultural production.
- b) Resettlement Sites: Because the resettlers are mainly rural township residents, seasonal impact on production is minimal. Land acquisition and relocation may therefore be undertaken at any time throughout the year, but completed in advance of construction.
- c) Payment of compensation, and allocation of replacement houseplots should commence at least 3 months before the dismantling of houses.
- d) The establishment/reestablishment of public utilities/infrastructure should be completed before housing construction starts to minimize the impact on the livelihood of the resettlers.
- e) At the major sites where resettlement workload is rather light, resettlement should be completed in one phase. At those places with a heavy resettlement workload, resettlement should be divided into not more than 3 phases.
- f) The reconstruction of the community infrastructure should be scheduled during the final phases of dyke works each year so as to minimize the impact of project construction on the Major Items.
- g) Training for resettlers is scheduled for 3 periods per year, each lasting 30 days. These sessions would be timed for ebb periods, one third, halfway into, and at the closure of the agricultural production season.

10.3 Schedule for Resettlement Implementation

The duration of resettlement implementation is estimated at some five years. In Hunan, plans and implements action will span from August 1998 to April of 2001, in Hubei from December 1998 to December 2002, and in Jiangxi from January 1999 to December 2000.

The detailed resettlement implementation schedule is shown in **Figure 10-1**.

10.4 Implementation Status

Implementation of priority project works commenced urgently following the 1998 floods, and thus resettlement is underway throughout the project area. As described below, the dis-aggregation of YBFCP resettlement data from the overall flood control projects being undertaken is difficult as World Bank participation remains to be confirmed. The status described below is based on consultation and data collection undertaken with resettlement implementing organizations in the three provinces during the Project Pre-Appraisal Mission of October 1999. Photographs from these site visits are included in Part B of this report.

In Jiangxi, urban resettlement, which accounts for more than of half overall resettlement in the province is underway, with an estimated 20 percent or 1,200 people relocated to date. Similarly, rural resettlement commenced at the end of 1998 in many villages.

Resettlement in Hunan has commenced in well underway. Acquisition of structures to date is estimated at 596,000m², (inclusive of 158,00m² of enterprise and public buildings), representing over 50 percent of provincial structural acquisition. The associated resettled population reported by the City ROs is 11,992 people from 2,507 households.

In most cases in Hubei, project implementation is awaiting confirmation of World Bank participation. Some rural resettlement in priority areas has been undertaken, but urban resettlement has not yet commenced.

10.4.1 Compensation Standards and Funds Availability

As involvement of the World Bank and confirmation of the YBFCP as a separate project within the overall program is yet to be confirmed, resettlement is being undertaken according to a wide range of compensation standards and modes of disbursement within the project area, a situation governed primarily by the availability of funds. ~~In general, adequacy of currently implemented compensation standards was noted as follows:~~

- Urban resettlement in Jiangxi, for both house-for-house and cash compensation is close to conformance with the standards set out in this RAP, and sufficient for replacement of lost housing
- Compensation for enterprise structures is below the required standard, being provided only for structures, and not for lost production and wages, or associated facilities, causing loss in employment, and in some cases stalling restoration of enterprises or public buildings.
- Compensation standards for land, where proposed, are below standard, and in most instances have not yet been disbursed, preventing rural land development and consequent land re-allocation and livelihood restoration programs.

- Where compensation was provided for lost crops, this was below the standards proposed in the RAP.

The PMOs have committed to complying with the compensation standards stated in the YBFCP RAP in accordance with the appropriate local and national regulations by the end of November 1999. In doing so, current compensation standards for all project areas will be made uniform, and supplementary compensation to resettlers already compensated at the lower standards will be made to the YBFCP RAP standards.

10.4.2 Housing Restoration

- Urban housing provided in Jiangxi under the house-for-house program was in accordance with the RAP (sufficient area, amenities, siting from original location), and resettlers were satisfied with the new conditions.
- Rural houseplot allocations have been provided in conformance with standards described in the RAP. In each internal resettlement area visited these were less than 300 meters from the original sites, and all of the resettlers interviewed were satisfied with the location of the new sites.
- Rural housing reconstruction has been managed by resettlers, based on both recommended layouts and individual preferences. In most instances, resettlers have made significant increase in size and quality of housing.
- While no resettlement to townships has yet been undertaken, sites have been identified, and resettlers interviewed in Hubei were aware of, and satisfied with the relocation sites and proposed conditions.

Urban housing resettlement thus appear to be well implemented, with sufficient compensation and timely implementation. However issues in the effective implementation of the rural households restoration program were also noted:

- Compensation for rural structures has been less than adequate for housing replacement, leaving resettlers to rely on personal savings and loans.
- Disbursement scheduling in most instances has been linked to the commencement of demolition of existing houses, leaving no time for resettlers to construct replacement housing in advance of relocation and thus extending periods of temporary accommodation.

In addition to application of the proposed compensation standards as described above, the following measure is proposed to improve rural housing restoration:

Commencement of disbursement a minimum of three months in advance of demolition to allow for house completion before demolition, thus avoiding (or at least minimizing) any need for temporary accommodation.

10.4.3 Enterprises and Public Buildings

As noted above compensation for enterprises is low, only allowing for the affected structures, with no provision for lost production and lost wages for employees.

Similar to issues of rural housing restoration, enterprise reconstruction is further stifled by the lateness of disbursement. Rectification of the compensation standards (including compensation for lost production and wages) and disbursement timing as recommended above would address these shortcomings.

10.4.4 Land Development and Income Restoration

Currently proposed land compensation standards are far below those of the RAP, and even so, few of the visited affected villages had received compensation for lost land. No agricultural land development or alternative income restoration measures have been undertaken, and in most cases village lands have not been re-allocated.

This situation is primarily linked to the availability of funds, which will be resolved on the disbursement of funds in compliance with the compensations standards recommended in the RAP.

The County/Township ROs have agreed to carry out land readjustment and provide land/productive compensation as soon as possible in accordance with the guidelines and standards specified in the RAP which will fund land improvement and agricultural extension activities to improve the productivity of the land available to resettlers after relocation.

10.4.5 Infrastructure

In the rural and urban sites visited, infrastructure restoration was minor or not required. In the affected areas visited, infrastructure restoration had been completed and was of acceptable standards.

10.4.6 Resettlement Organization and Management

Consultation with Provincial, City, and County ROs, and relevant township and village officials highlighted the necessity for immediate implementation of the training program, and staffing levels proposed in the RAP.

Management of resettlement information at all levels was poor, insufficient levels of permanent staff are allocated to the resettlement task, and little coordination between the various levels was evident.

The PMOs have committed to the following

Confirm establishment of project specific ROs at all levels, with staffing in accordance with the requirements outlined in the RAP.

Commencement of the proposed training programs for the ROs by the end of December 1999, and issuance of guidelines on the management of funds to all ROs.

Appointment of Independent Monitoring and Evaluation Organizations and Supervisors for Resettlement by the end of 1999.

10.4.7 Public Consultation and Social Adjustment

In urban areas, public consultation and information dissemination was undertaken well, with distribution of posters within the project affected area, and bulletins and interviews with affected households and enterprises. Agreements were also made, and interviews with resettlers confirmed their satisfaction and awareness of the resettlement process and compensation policies.

In rural areas, resettlers had participated in inventories, and signed off on their affected assets, however they did not hold agreements in regard to compensation, and although they felt compensation standards were too low, did not see any avenues for redress.

Commensurate with the application of the compensation standards recommended in the

RAP, the following actions will be taken:

Agreements to be made with all affected households, enterprises and villages (for both future resettlement and in areas where resettlement has already commenced).

Arrangement of relevant land tax, levy and grain quota reductions where appropriate for resettlers.

Arrangement for the exemption of resettlers from the requisite annual labor on dike maintenance in the year of resettlement.

Immediate preparation and issuance of the resettlement entitlement booklets which describe compensation standards and other entitlements, the grievance process, income restoration programs, and the responsibilities of both resettlers and resettlement implementing organizations in realizing the RAP.

10.5 Summary and Conclusions

Chapter 10 outlines the major criteria in determining resettlement scheduling and presents proposed resettlement schedules for the three provinces which accords with these guiding principles by; (i) avoiding timing of construction which will disrupt agricultural production, (ii) ensuring compensation and land allocation to resettlers a minimum of 3 months in advance of relocation, (iii) provision or replacement of infrastructure and utilities in advance of resettlement, (iv) scheduling resettlement construction to minimize impacts on the overall YBFCP works, and (v) scheduling resettler training in production ebb periods

Resettlement for the YBFCP is scheduled for implementation following the floods of 1998 through to the end of 2002. Resettlement activities have commenced in each of the provinces. The implementation of these activities in respect to the standards outlined in the RAP, and the agreed measures to rectify any shortfalls are described below.

As involvement of the World Bank and confirmation of the YBFCP as a separate project within the overall program is yet to be confirmed, resettlement is being undertaken according to a wide range of compensation standards and modes of disbursement within the project area, a situation governed primarily by the availability of funds.

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- Where compensation was provided for lost crops, this was below the standards proposed in the RAP.

The PMOs have committed to complying with the compensation standards stated in the YBFCP RAP in accordance with the appropriate local and national regulations by the end of November 1999. In doing so, current compensation standards for all project areas will be made uniform, and supplementary compensation to resettlers already compensated at the lower standards will be made to the YBFCP RAP standards.

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The County/Township ROs have agreed to carry out land readjustment and provide land/productive compensation as soon as possible in accordance with the guidelines and standards specified in the RAP which will fund land improvement and agricultural extension activities to improve the productivity of the land available to resettlers after relocation.

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In urban areas, public consultation and information dissemination was undertaken well, with distribution of posters within the project affected area, and bulletins and interviews with affected households and enterprises. Agreements were also made, and interviews with resettlers confirmed their satisfaction and awareness of the resettlement process and compensation policies.

In rural areas, resettlers had participated in inventories, and signed off on their affected assets, however they did not hold agreements in regard to compensation, and although they felt compensation standards were too low, did not see any avenues for redress.

Commensurate with the application of the compensation standards recommended in the RAP, the following actions will be taken:

Agreements to be made with all affected households, enterprises and villages (for both future resettlement and in areas where resettlement has already commenced).

Arrangement of relevant land tax, levy and grain quota reductions where appropriate for

resettlers.

Arrangement for the exemption of resettlers from the requisite annual labor on dike maintenance in the year of resettlement.

Immediate preparation and issuance of the resettlement entitlement booklets which describe compensation standards and other entitlements, the grievance process, income restoration programs, and the responsibilities of both resettlers and resettlement implementing organizations in realizing the RAP.

Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998			1999			2000			2001			2002																	
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10
1	I. Implementation Plan - Hunan	945 days	[Solid bar]																													
2	Project Preparation	150 days	[Solid bar]																													
3	Project Design and Assessment	150 days	[Hatched bar]																													
4	Project Implementation	945 days	[Solid bar]																													
5	Huazhong County	697 days	[Solid bar]																													
6	Livelihood Resettlement	672 days	[Solid bar]																													
7	House Dismantling and Relocation	429 days	[Solid bar]																													
8	House Compensation	414 days	[Hatched bar]																													
9	House Rebuilding	542 days	[Solid bar]																													
10	Move to Concentrated Area	175 days	[Solid bar]																													
11	Back-off Relocation	324 days	[Hatched bar]																													
12	Production Resettlement	623 days	[Solid bar]																													
13	Land Acquisition	115 days	[Hatched bar]																													
14	Agricultural Resettlement	595 days	[Solid bar]																													
15	Improvement of Low Output Farmland	590 days	[Hatched bar]																													
16	Transformation of Dry Land into Irrigation Land	415 days	[Hatched bar]																													
17	Allocate Land from Other Villages	328 days	[Hatched bar]																													
18	Secondary & Tertiary Industry Resettlement	609 days	[Solid bar]																													
19	Hospitality Industry	282 days	[Hatched bar]																													
20	Shops	414 days	[Hatched bar]																													
21	Rearrange Land within Village	435 days	[Hatched bar]																													
22	Recovery of Infrastructure	701 days	[Solid bar]																													
23	Transportation	308 days	[Hatched bar]																													
24	Power Supply	308 days	[Hatched bar]																													
25	Telecommunications	306 days	[Hatched bar]																													
26	Broadcasting Facilities	303 days	[Hatched bar]																													
27	Others	306 days	[Hatched bar]																													
28		0 days																														
29	Junshan District	615 days	[Solid bar]																													
30	Livelihood Resettlement	615 days	[Solid bar]																													
31	House Dismantling and Relocation	329 days	[Hatched bar]																													
32	House Compensation	567 days	[Hatched bar]																													
33	House Rebuilding	588 days	[Solid bar]																													
34	Back-off Relocation	332 days	[Hatched bar]																													

Oct. 27, 1999

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Abstract [Solid bar]

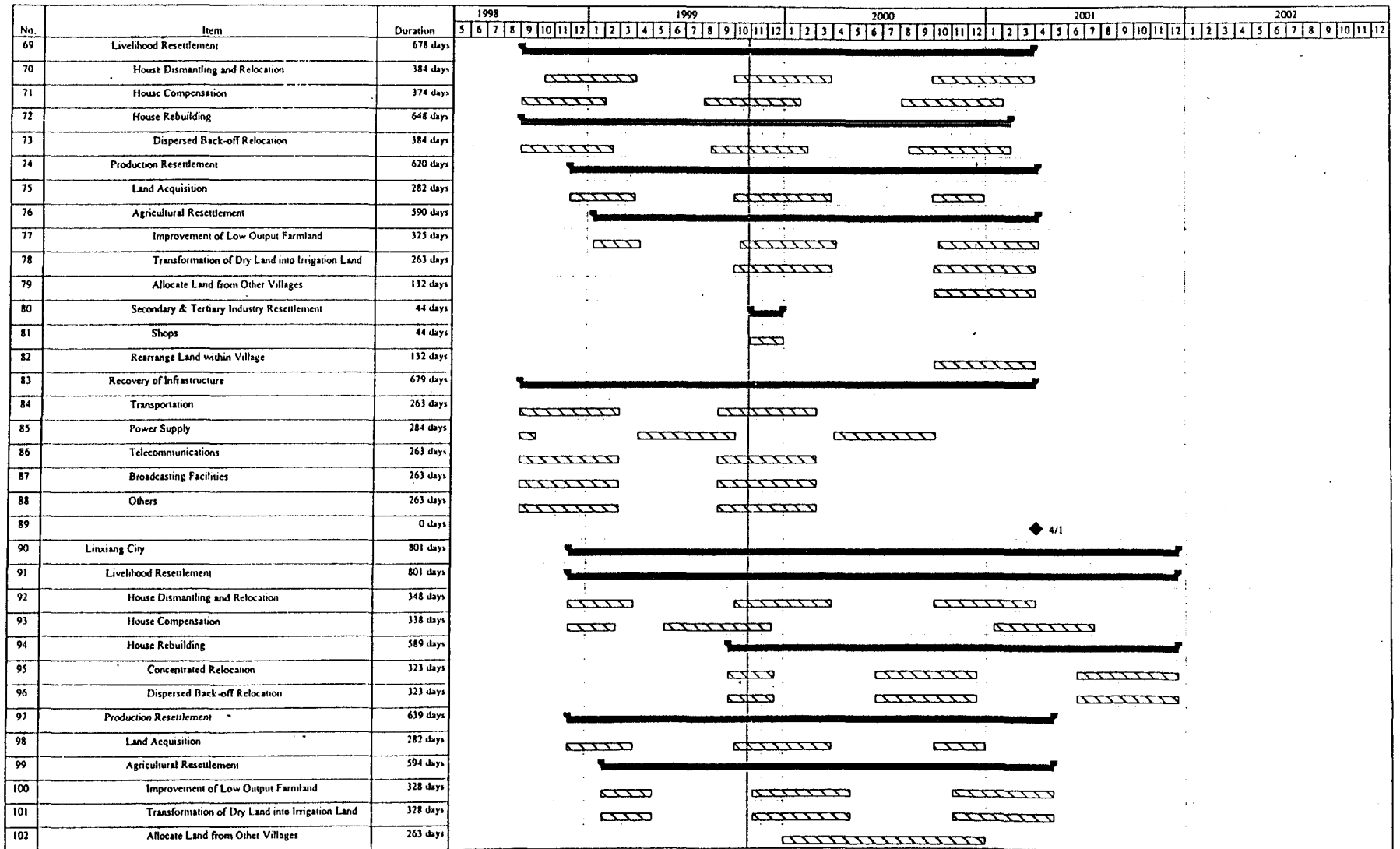
Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998												1999												2000												2001												2002											
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
35	Production Resettlement	570 days	[Solid bar]																																																											
36	Land Acquisition	108 days	[Hatched bar]																																																											
37	Agricultural Resettlement	567 days	[Solid bar]																																																											
38	Improvement of Low Output Farmland	345 days	[Hatched bar]																																																											
39	Transformation of Dry Land into Irrigation Land	344 days	[Hatched bar]																																																											
40	Rearrange Land within Village	132 days	[Hatched bar]																																																											
41	Recovery of Infrastructure	591 days	[Solid bar]																																																											
42	Transportation	261 days	[Hatched bar]																																																											
43	Power Supply	309 days	[Hatched bar]																																																											
44	Telecommunications	262 days	[Hatched bar]																																																											
45	Broadcasting Facilities	262 days	[Hatched bar]																																																											
46	Others	262 days	[Hatched bar]																																																											
47		0 days																																																												
48	Junshan Farm	659 days	[Solid bar]																																																											
49	Livelihood Resettlement	658 days	[Solid bar]																																																											
50	House Dismantling and Relocation	347 days	[Hatched bar]																																																											
51	House Compensation	598 days	[Hatched bar]																																																											
52	House Rebuilding	658 days	[Solid bar]																																																											
53	Concentrated Relocation	262 days	[Hatched bar]																																																											
54	Dispersed Back-off Relocation	285 days	[Hatched bar]																																																											
55	Production Resettlement	614 days	[Solid bar]																																																											
56	Land Acquisition	348 days	[Hatched bar]																																																											
57	Agricultural Resettlement	614 days	[Solid bar]																																																											
58	Improvement of Low Output Farmland	325 days	[Hatched bar]																																																											
59	Transformation of Dry Land into Irrigation Land	263 days	[Hatched bar]																																																											
60	Allocate Land from Other Villages	132 days	[Hatched bar]																																																											
61	Recovery of Infrastructure	569 days	[Solid bar]																																																											
62	Transportation	303 days	[Hatched bar]																																																											
63	Power Supply	304 days	[Hatched bar]																																																											
64	Telecommunications	304 days	[Hatched bar]																																																											
65	Broadcasting Facilities	304 days	[Hatched bar]																																																											
66	Others	304 days	[Hatched bar]																																																											
67		0 days																																																												
68	Yunxi District	685 days	[Solid bar]																																																											

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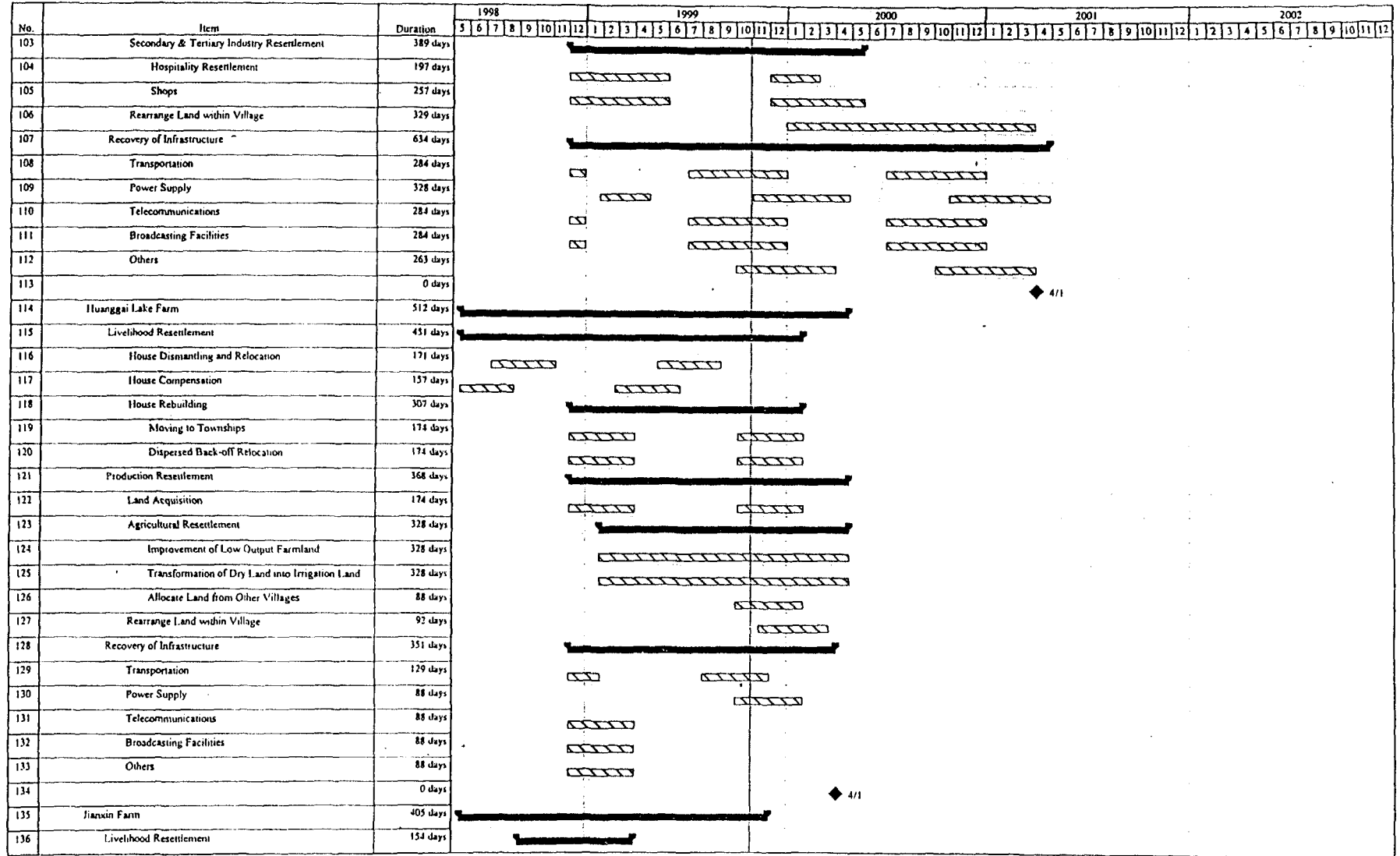
Resettlement Implementation Schedule for the YBFCP



Oct. 27, 1999

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Resettlement Implementation Schedule for the YBFCP



Oct. 27, 1999

Task Progress Point Abstract

Resettlement Implementation Schedule for the YBFCP

No.	Item	Duration	1998												1999												2000												2001												2002											
			5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
307	Production Recovery of Enterprises	701 days																																																												
308	Recovery of Infrastructure	369 days																																																												
309	Transportation	180 days																																																												
310	Power Supply	141 days																																																												
311	Telecommunications	139 days																																																												
312	Broadcasting Facilities	134 days																																																												
313	Others	136 days																																																												
314	Resettler Training	630 days																																																												
315	Training Arrangement	90 days																																																												
316		0 days																																																												
317	III. Implementation Plan - Jiangxi	485 days																																																												
318	Verification of Physical Index	88 days																																																												
319	Determine Compensation Criteria and Disburse Compensation	174 days																																																												
320	Allocate Land for Accommodation	176 days																																																												
321	Assign Land to Resettlers of Agricultural Resettlement	259 days																																																												
322	Build/Purchase Houses, Decoration	367 days																																																												
323	Infrastructure Construction at the New Location	324 days																																																												
324	Resettler Relocation	307 days																																																												
325	Go through Formalities, Certificate of Land for Accommodation	1 day																																																												
326	Resettler Training and Employment	1 day																																																												
327	Dealing with Particular Issues and Complaints	1 day																																																												
328		0 days																																																												

TABLE OF CONTENTS

11.	SUMMARY AND CONCLUSIONS.....	11-1
11.1	EVALUATION OF SALIENT ASPECTS OF RESETTLEMENT PROGRAM.....	11-1
11.1.1	<i>Project Impact</i>	11-1
11.1.2	<i>Resettlement Plan</i>	11-1
11.1.3	<i>Resettlement Progress</i>	11-1
11.1.4	<i>Investment and Fund Raising</i>	11-2
11.1.5	<i>Resettlement Organizations</i>	11-2
11.2	OVERALL EVALUATION OF RESETTLEMENT PROGRAM.....	11-2
11.3	SUMMARY AND CONCLUSION.....	11-3

11. Summary and Conclusions

11.1 Evaluation of Salient Aspects of Resettlement Program

11.1.1 Project Impact

(a) The YRFCP involves 29 counties (cities, districts or farms), affecting a population of 52,859 (12,599 households), including 19,213 people (4,464 households) in Hunan Province, 22,100 people (5,400 households) in Hubei Province, and 11,546 people (2,735 households) in Jiangxi Province. A total amount of 2.3032 million m² of houses will be relocated, including 1.029 million m² in Hunan, 0.8022 million m² in Hubei, and 0.4721 million m² in Jiangxi.

(b) Seven counties have been involved in Hunan Province, with more 70% of resettlement occurring in three area: 7,447 people will be relocated in Linxiang City, 3,871 people in Huarong County, and 2,556 people in Junshan Farm, accounting for 38.76%, 20.15% and 13.30% of the total resettlement population of Hunan respectively.

(c) Sixteen counties have been involved in Hubei Province. 7,447 people will be relocated in Linxiang City, 3,871 people in Huarong County, and 2,556 people in Junshan Farm, accounting for 38.01%, 28.91% and 18.48% of the total resettlement population of Hubei respectively.

(d) Six counties have been involved in Jiangxi Province with more than 80% of resettlement occurring in three area: 4,389 people will be relocated in Xunyang District, 3,338 people in Pengze County, and 2,134 people in Jiujiang County, accounting for 38.01%, 28.91% and 18.48% of the total resettlement population of Jiangxi respectively.

(e) Most of the above affected population belongs to the rural area, and according to our sampling investigation, 58% of their income comes from agriculture.

11.1.2 Resettlement Plan

(a) As a component of the overall planning of the project, the resettlement schedule has been completed by the project design organizations with the help of local authorities. As the affected population scatters along the river bank, the impact of the project on local social and economic system is not large, and thus they could be relocated locally.

(b) Resettlement location plans are formulated according to local conditions, and there are mainly two means of resettlement: concentrated resettlement and dispersed resettlement. In the affected area of the project, a total population of 52,859 (12,599 households) has to resettle. This includes 27,246 adopted concentrated resettlement, accounting for 51.56%; 25,596 adopted dispersed resettlement, accounting for 48.44%.

(c) Agricultural resettlement is the main form of production resettlement, complemented by non-agricultural channels. Through increasing input, improving unit output of farmland, improving the infrastructure and service facilities, the environmental capacity of the relocation areas remains adequate after population increase. It can be expected that the living standards of the resettlers will reach and/or exceed their original level.

11.1.3 Resettlement Progress

Overall the implementation of the resettlement plan will extend to Year 2002. It has been started at some locations. To ensure the resettlement work progress on schedule, detailed

resettlement implementation plans have been formulated, and the resettlement implementation process is being supervised, monitored and evaluated. The structure and duties of resettlement management organizations are determined according to the characteristics of resettlement work. In order to improve the implementation capability of the resettlement management organizations and their managerial competence, technical training is provided. Special attention is paid to those locations with a large population of resettlers (such as Linxiang City, Hunan, Honghu City, Hubei and Xunyang District, Jiangxi) to control the implementation progress.

11.1.4 Investment and Fund Raising

Total investment for the resettlement of the Bank Strengthening Project is 1.3943488 billion yuan (501.6646 million for Hunan, 56.15646 million for Hubei, and 33.11196 million for Jiangxi), accounting for 22.4% of the total investment of this project. The World Bank loan will include 278.51532 million yuan for resettlement. Remaining funds will be 525.62 from the central Government, and 580.2106 million yuan from local governments.

11.1.5 Resettlement Organizations

Resettlement organizations have been set up according to resettlement tasks in the three provinces. Both national investment and provincial planning give priority to developmental resettlement. The various resettlement organizations coordinate with local authorities to improve productivity so as to solve the problems encountered in the resettlement implementation process.

11.2 Overall Evaluation of Resettlement Program

(a) Resettlement Plan Is Feasible

According to the characteristics of this project and the distribution of affected population, livelihood resettlement consists of concentrated resettlement and dispersed resettlement. Production resettlement of the rural population is mainly by agricultural resettlement, complemented by non-agricultural resettlement. The destination villages could use the compensation to improve agricultural productivity and set up village enterprises to make up their loss. As project construction progresses and the development of local economy deepens, the above resettlement methods will not only ensure but improve the original income level of the affected population.

(b) Living Conditions Are Adequate

Although the total accommodation area of the resettlers decreases after relocation, due to careful planning the quality of their houses is higher than before, water supply, education, and health service facilities have improved, and the overall quality of living environment is better than before. In summary, their living conditions will generally improve.

(c) Relocation Arrangement Is Reasonable

Relocation progresses with the project. It is planned to be finished in the Year 2002. To ensure the plan is carried out on schedule, the resettlement organizations will strengthen management. In addition, the supervising and monitoring organizations will strengthen their control over progress, quality and fund.

(d) Resettlement Compensation Is Suitable

Based on the resettlement plan, in accordance with national and provincial policies and

regulations, and with World bank guidelines, the resettlement compensation is determined, with project characteristics and local conditions taken into account. Basic contingency and contingency cost for price difference is listed as required. Before relocation, local resettlement authorities will determine the amount of compensation according to the actual asset of each household, and sign agreements with them. After resettlement compensation is approved, timely disbursement is planned to meet the demands of the implementation plan and achieve the goal of at least keeping the original living standards of the resettlers. A specialized monitoring and assessment organization will be hired in each province to monitor and investigate the living condition and production situation of both the resettlers and the residents in the host destination area.

11.3 Summary and Conclusion

(a) The YBFCP is a flood prevention, hazard minimizing project, and it brings safety and assurance to the Project area, so it is welcomed by local residents. Even the residents to be resettled seem very supportive of this project. Though they are required to be resettled by the project, they are also among the beneficiaries, so they seem generally willing to make contributions to their own benefits and project construction as well. The host destination areas are beneficiaries too, and the resettlers are expected to live harmoniously with the original residents. This project is different from other reservoir projects in the respect of the resettlers' willingness, which is a very beneficial factor toward successful resettlement.

(b) The farmland acquired by the project accounts for only a small fraction of the total amount of farmland available, and land acquisition is limited to belt shapes, hence farmland acquisition is being readily accomplished. In addition, the affected population is not concentrated, so the resettlement of agricultural population does not have obvious pressure on local economy, and most of them will be relocated through land rearrangement within townships/villages or land improvement. Local governments will use land compensation and resettlement subsidy to carry out production development to increase the unit output of farmland and to develop local economy.

(c) All in all, the resettlement plan of this project is concluded to be quite feasible. The living conditions seem adequate, the resettlement arrangement seem reasonable, the compensation seem suitable, and the plan seems to be actively supported by the affected residents. It can be expected that, as long as RS management is competent and fair, and the resettlement fund is disbursed on time, the resettlement work of this project will finish on schedule, the resettlers will be resettled satisfactorily, and the social, economic and environmental conditions in the resettlement areas will have the potential for continuing development at adequate quality of life levels.

12. References

1. Resettlement Action Plan for the Yangtze Basin Flood Control Project – Hunan Province Section, Hunan Water Conservancy and Hydropower Survey and Design Institute, September 1999
2. Resettlement Action Plan for the Yangtze Basin Flood Control Project – Hubei Province Section, Hunan Water Conservancy and Hydropower Survey and Design Institute, July 1999
3. Resettlement Action Plan for the Yangtze Basin Flood Control Project – Jiangxi Province Section, Jiangxi Water Resource Planning and Design Institute, September 1999
4. Briefing of Yangtze Valley Comprehensive Utilization Planning” (revised in 1990)
5. Comprehensive Three Gorges Project Resettlement Action Plan, Changjiang Water Resources Commission, December 1998.
6. Yangtze Flood Emergency Rehabilitation Project, January 1999, World Bank Memorandum Report No. P-7285-CHA
7. The state’s “Ninth-Five” Plan and “the Development Outline of 2010-Year Plan”
8. World Bank Operational Policy Guidelines on Involuntary Resettlement, September 1999 (OP 4.12)
9. World Bank Operational Directive 4.20, Indigenous Peoples
10. World Bank Operation Policy 4.11, Safeguarding Cultural Property in Bank-Financed Projects
11. Land Management Act of the People's Republic of China, State Council, 1998
12. Water Act of the People's Republic of China, 1988
13. Purchased Land Compensation and Resettlement Regulation for Large and Medium-Sized Water Conservancy & Hydropower Projects, State Council promulgated Order No. 74, February 15, 1991
14. Design Regulation for Flooded Reservoir Area Treatment at Water Conservancy and Hydropower Projects, 1985, the Ministry of Hydropower
15. Investigation Details for the Reservoir-flooded Physical Substances at Water Conservancy and Hydropower Project, Ministry of Hydropower, 1986, Chapters 1,2,3,5
16. Standards for Village/Town Planning, the Ministry of Construction, September 27, 1993, 2) Classification of Villages and Towns; 4) Standards for Construction-occupied Land
17. Hunan Province Land Management Implementation Method, Hunan Province, April 28, 1992, Chapter 4, Land for National Construction
18. Hubei Province Land Management Implementation Method, Hubei Province, September 3, 1987
19. Jiangxi Province Implementation of Land Management Act, July 15, 1989, Chapter 4 – Land for use in State Construction

20. City Planning Law in People’s Republic of China, Dec 26, 1989
21. Rules of Township Construction, June 29, 1993
22. Resettlement Rules for Urban Flood Engineering in Jiujiang City, Dec 30, 1998
23. Capital Construction Management Regulations
24. YBFCP/EIA, Yangtze Water Resources Protection Scientific Research Institute, 1999
25. Staff Appraisal Report-Xiaolangdi Resettlement Project, 1994, World Bank
26. Administration Litigation Law of China
27. Conditions of Contract, Civil Works, Water and Hydropower Project

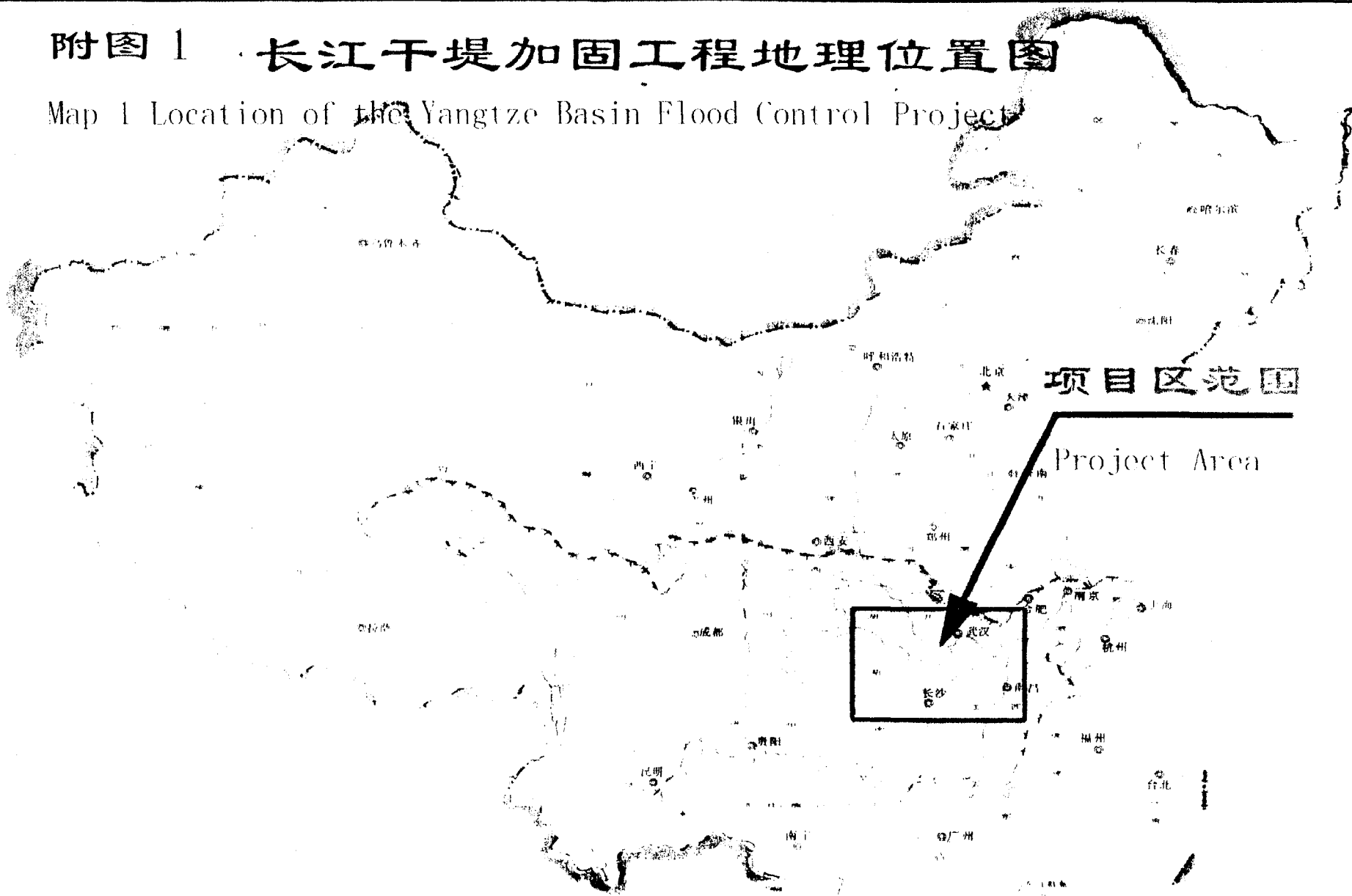
PART B

MAPS AND DRAWINGS

- Figure 1 General Location Map of the Yangtze Basin
- Figure 2.1 Impact Area of the YBFCP
- Figure 2.2 Project Area and Project Features of the YBFCP
- Figure 3.1 Land Acquisition and Resettlement for the YBFCP – Hunan Province
- Figure 3.2 Land Acquisition and Resettlement for the YBFCP – Jiangxi Province
- Figure 3.3 Land Acquisition and Resettlement for the YBFCP – Hubei Province
- Figure 4 Type A Houses for Internal Resettlement
- Figure 5. Type B Houses for Internal Resettlement
- Figure 6 Type C Houses for Internal Resettlement
- Figure 7 Typical Resettlement House Design – Brick and Wood Structure, Hunan
- Figure 8 Typical Resettlement House Design – Brick and Concrete Structure, Hunan
- Figure 9 Resettlement Township Layout, (Luohuoxinqu, Tuanfeng County, Hubei)
- Figure 10 Resettlement Township Layout, (Fuchi Township, Yiangxin County, Hubei)
- Figure 11 Type A Houses for Resettlers at Relocation Townships, Hubei Province
- Figure 12 Type B Houses for Resettlers at Relocation Townships, Hubei Province
- Figure 13 Overview of Safety Platform Layout for YBFCP Resettlement
- Figure 14 Layout of Safety Platform at Daqingjiang, Hunan Province
- Figure 15 Layout of No. 1 Safety Platform at Caijiazhuang Village, Hunan
- Figure 16 Resettlement Planning Chart for Honghu City
- Figure 17 Layout of Residential Area at Honghu, Hubei Province
- Figure 18 Plane Figure of Resettlement Planning (Section A), Honghu City
- Figure 19 Resettlement Housing Types for Section A, Honghu City
- Figure 20 Road Planning for Section A, Honghu City
- Figure 21 Power and Telecommunication
- Figure 22 Location Figure for Collective Resettlement Site in Jiujiang City, Jiangxi
- Figure 23 Typical House Design for Collective Sites in Jiujiang City, Jiangxi

附图 1 长江干堤加固工程地理位置图

Map 1 Location of the Yangtze Basin Flood Control Project



Map 2 Scope and Impact of Land Acquisition and Resettlement for ABICP
 图2 长江防汛项目征地移民示意图

LEGEND

Province & County/District 省县或区
Persons Planned to move 搬迁人口
House Affected 拆迁房屋
Land Required 征地

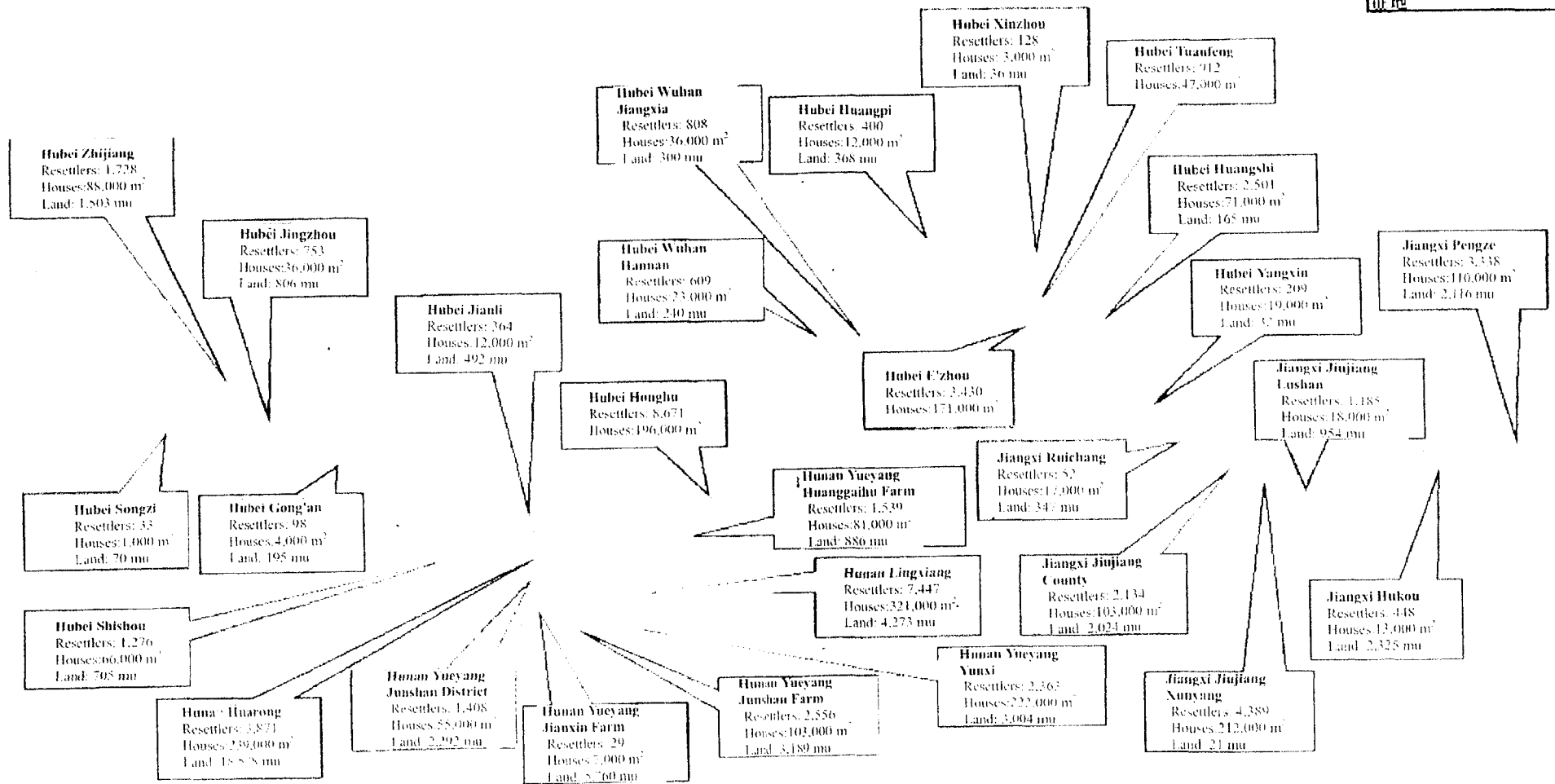
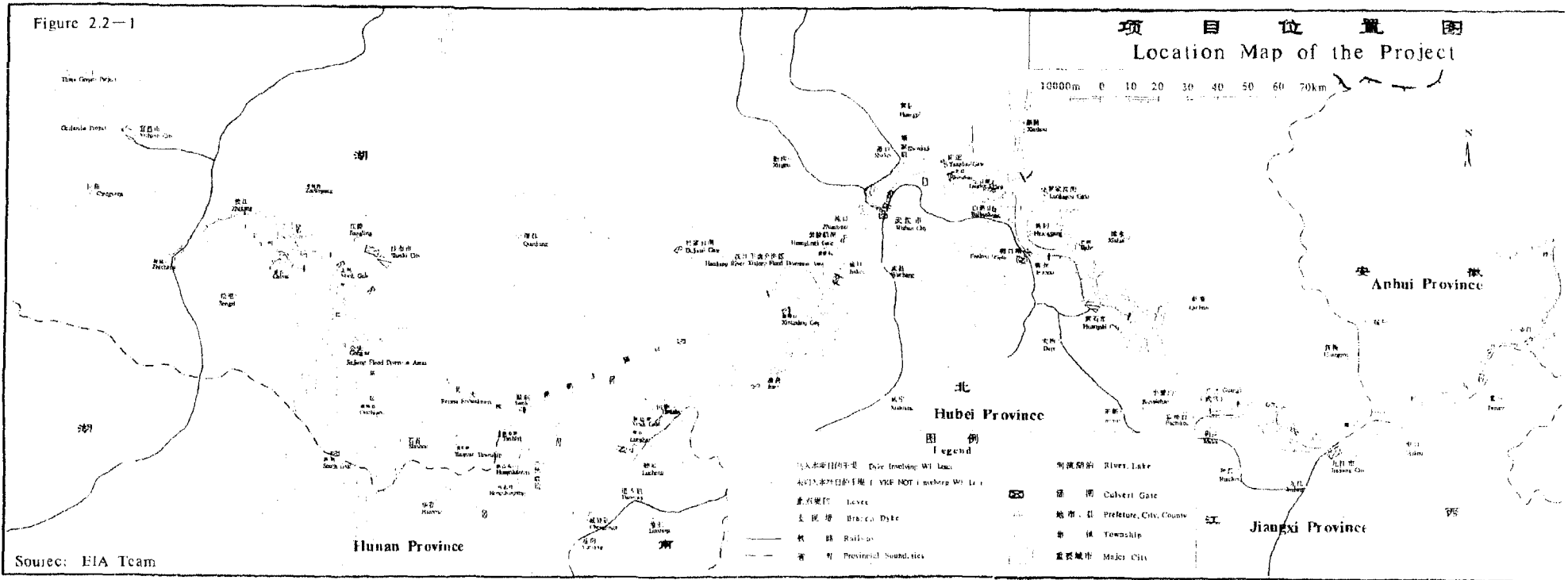


Figure 2.2-1

项目位置图
Location Map of the Project

1:80000 0 10 20 30 40 50 60 70km



Source: EIA Team

MAP 3 -1 LAND ACQUISITION AND RELOCATIOPN PLAN DIGRAM IN HUNAN

图3-1 长江干堤湖南段加固工程占地拆迁分布示意图

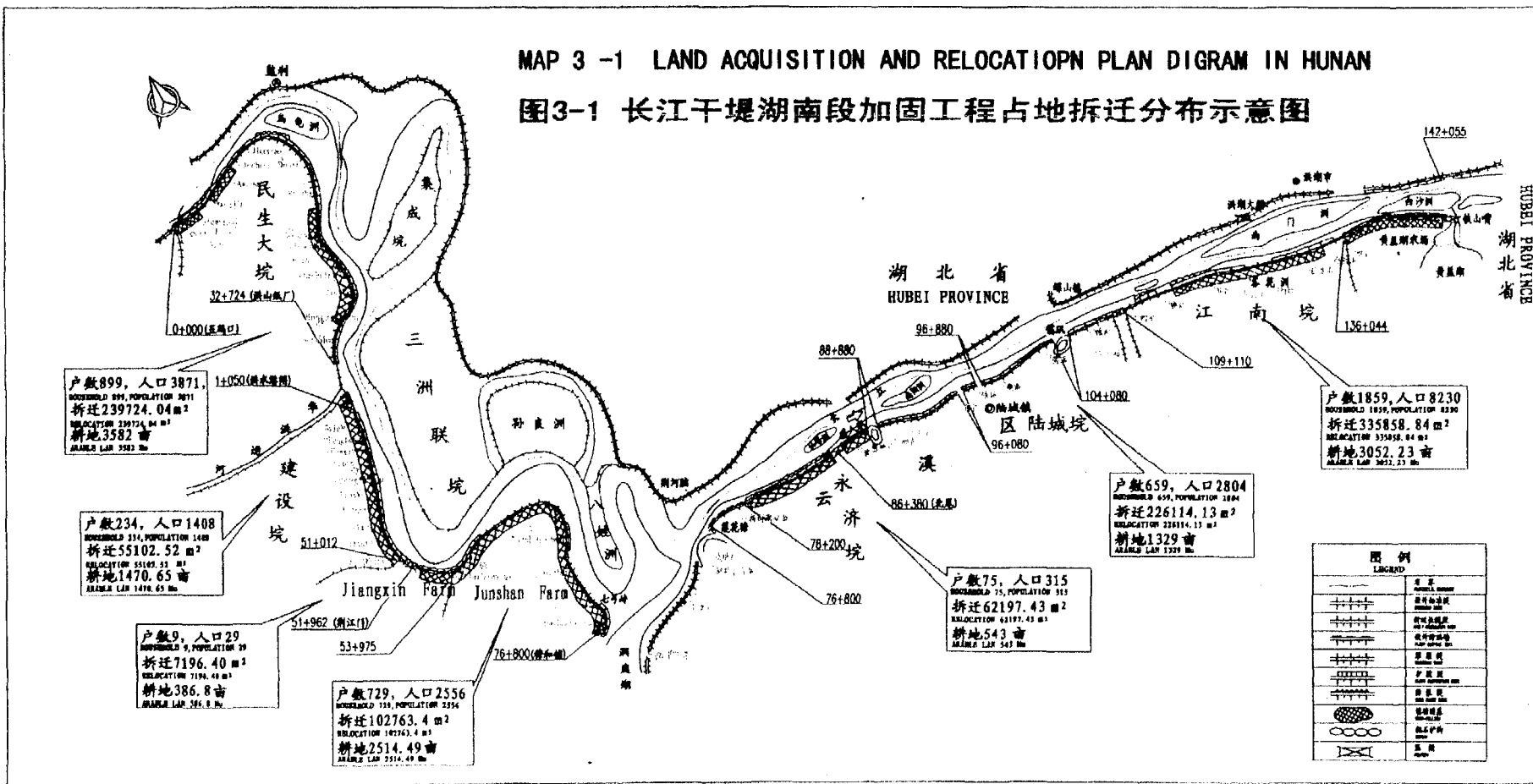
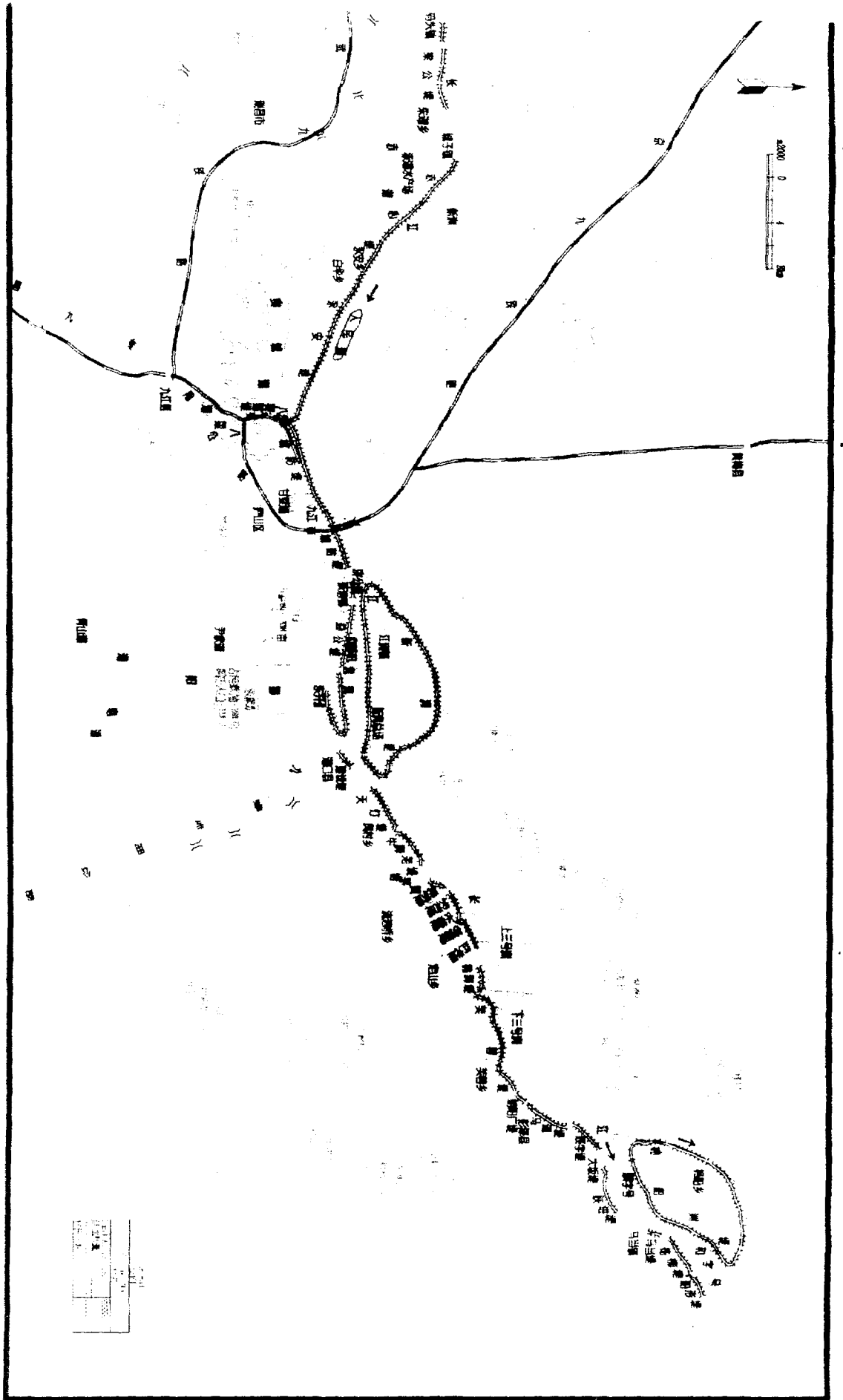
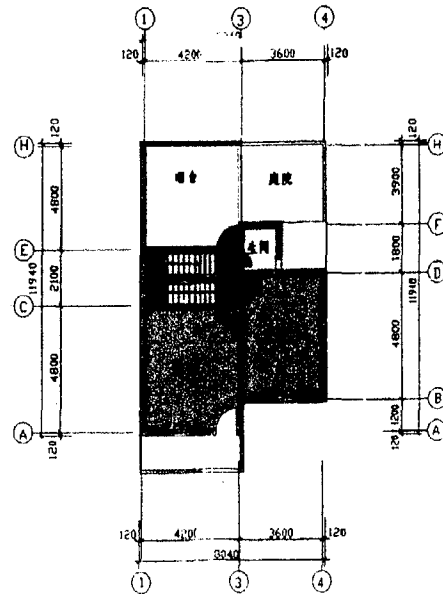
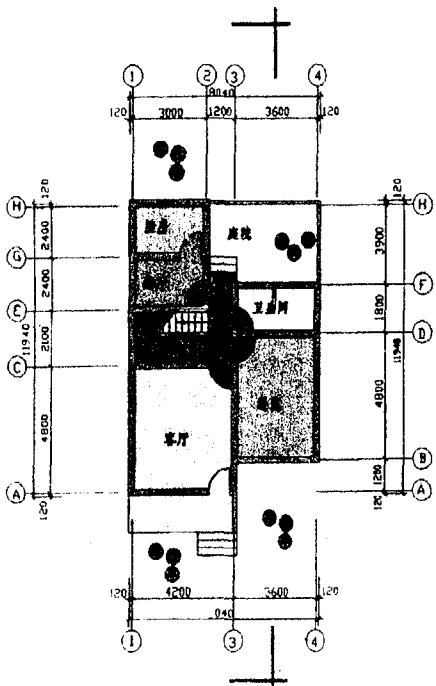


图 3-2 江西省征地移民情况分布图

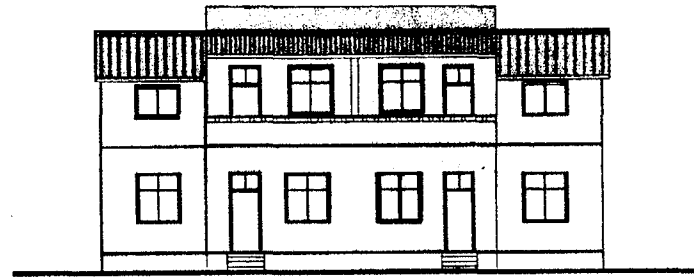


Map 4 House Type Designed for Resettlers Moving Back in the Original Village (Type A)

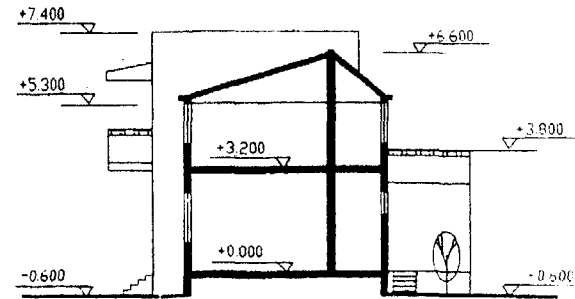
图 4 就近后靠分散安置住宅选型图 (A型)



二层平面 1:200

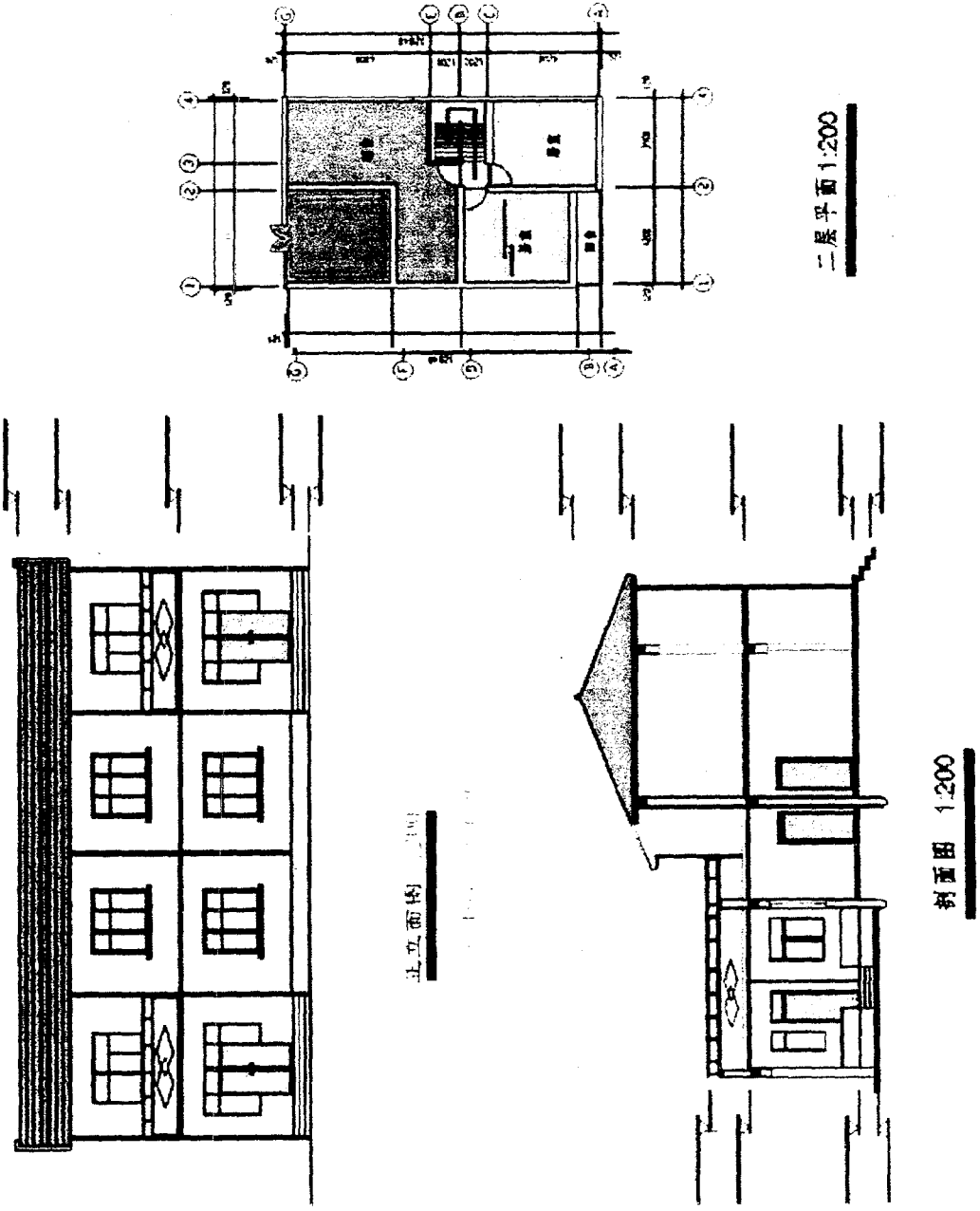


正立面 1:200



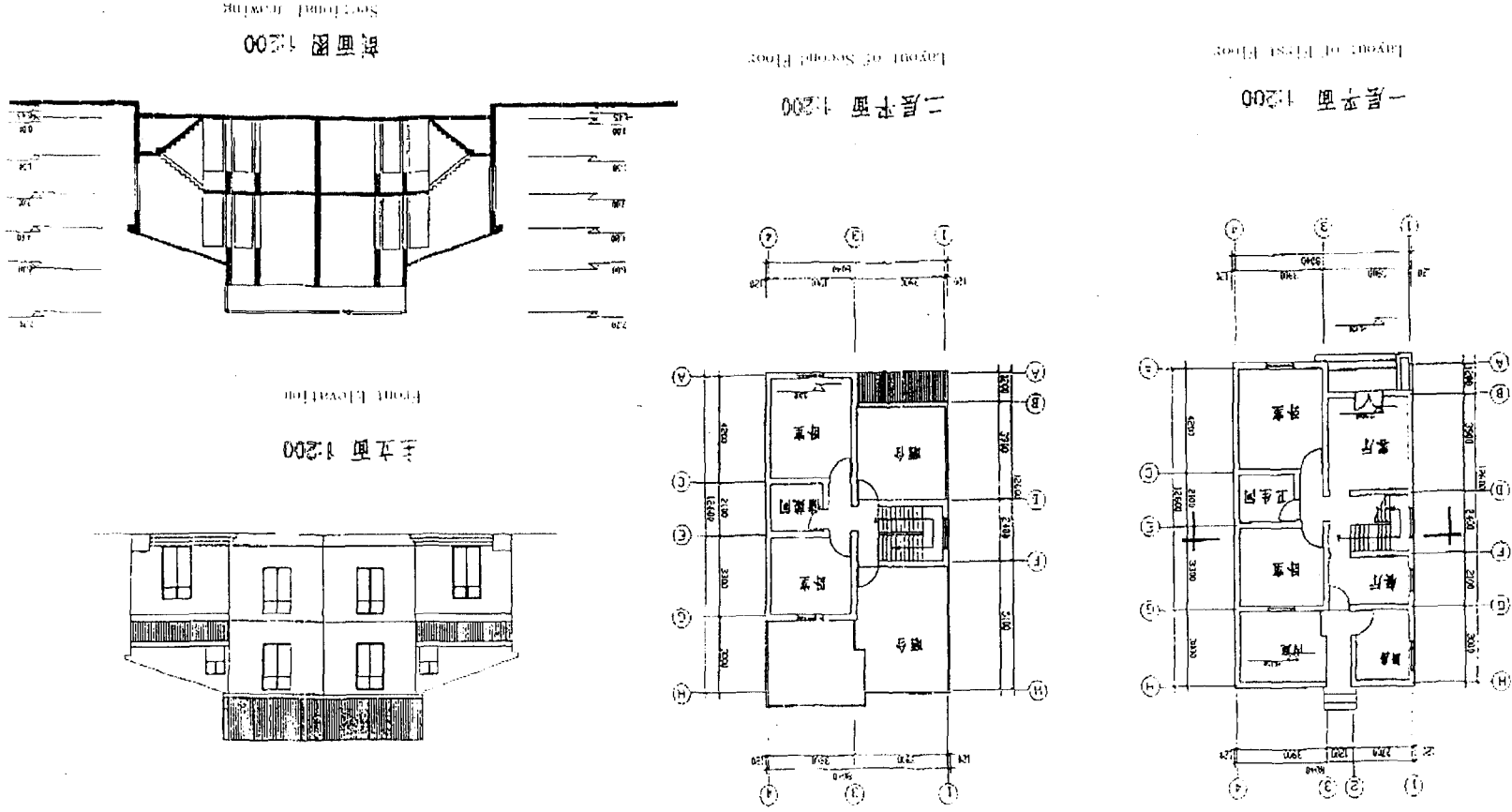
剖面图 1:200

图5 就近后靠分散安置住宅选型图



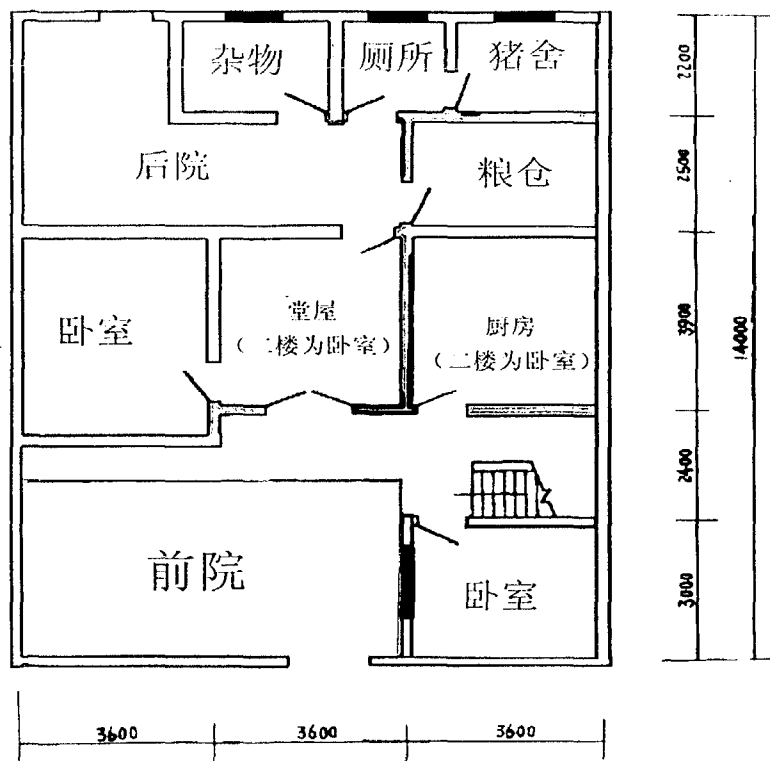
Map 6 House Type Designed for Resettlers Moving Back in Original Village (Type C)

图 6 就近后靠分散安置住宅选型图 (C型)



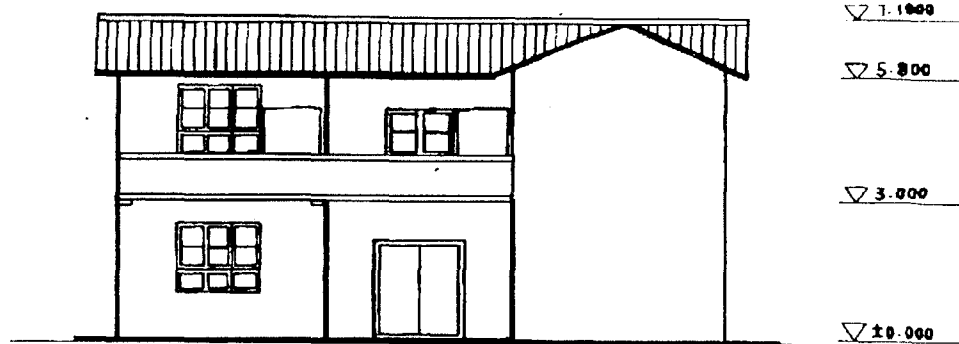
Map 7 House Type Designed for Resettlers from Hunan (Brick-wood Type)

图 7 湖南省移民安置典型房屋设计 (砖木结构)



正面图

1:100
Layout of house



立面图

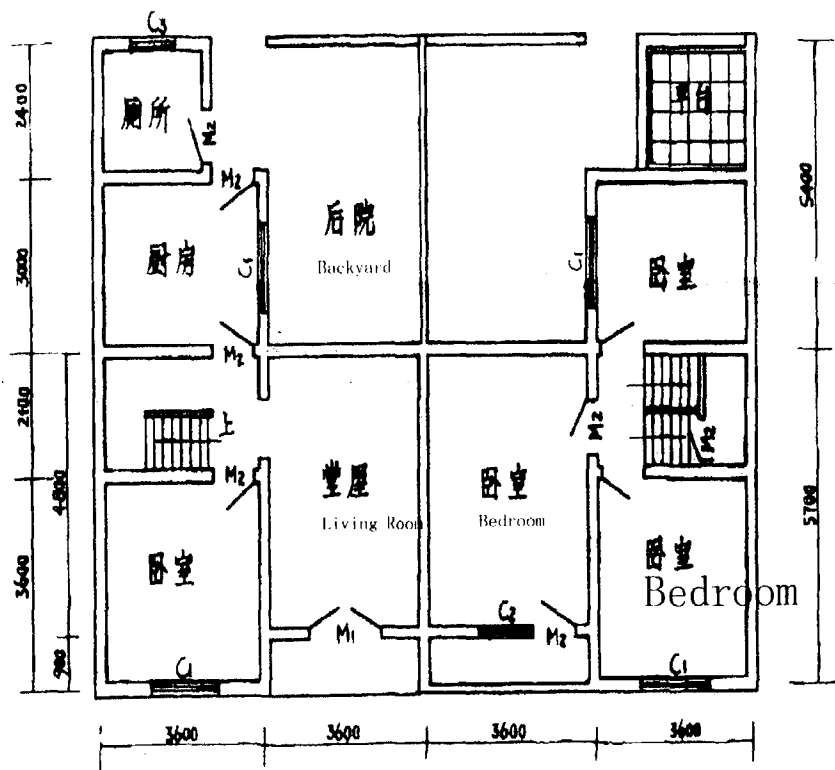
Front Elevation

用地面积: 157.21m²
Land Occupation

房屋面积: 171.85m²
Construction Area

Map 8 House Type Designed for Resettlers from Hunan (Brick-Cement Type)

图 8 湖南省移民安置典型房屋设计 (砖混结构)

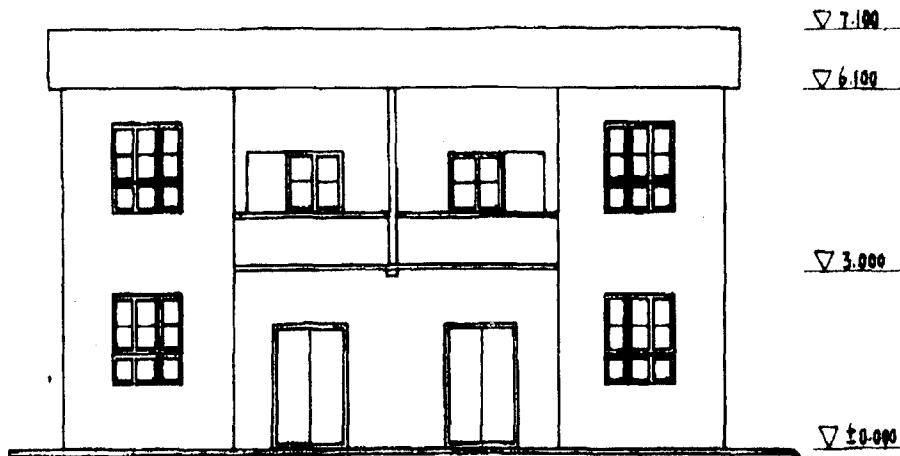


底层平面图

Bottom plane

二层平面图

Layout of Second Floor



立面图

1:100

Front Elevation

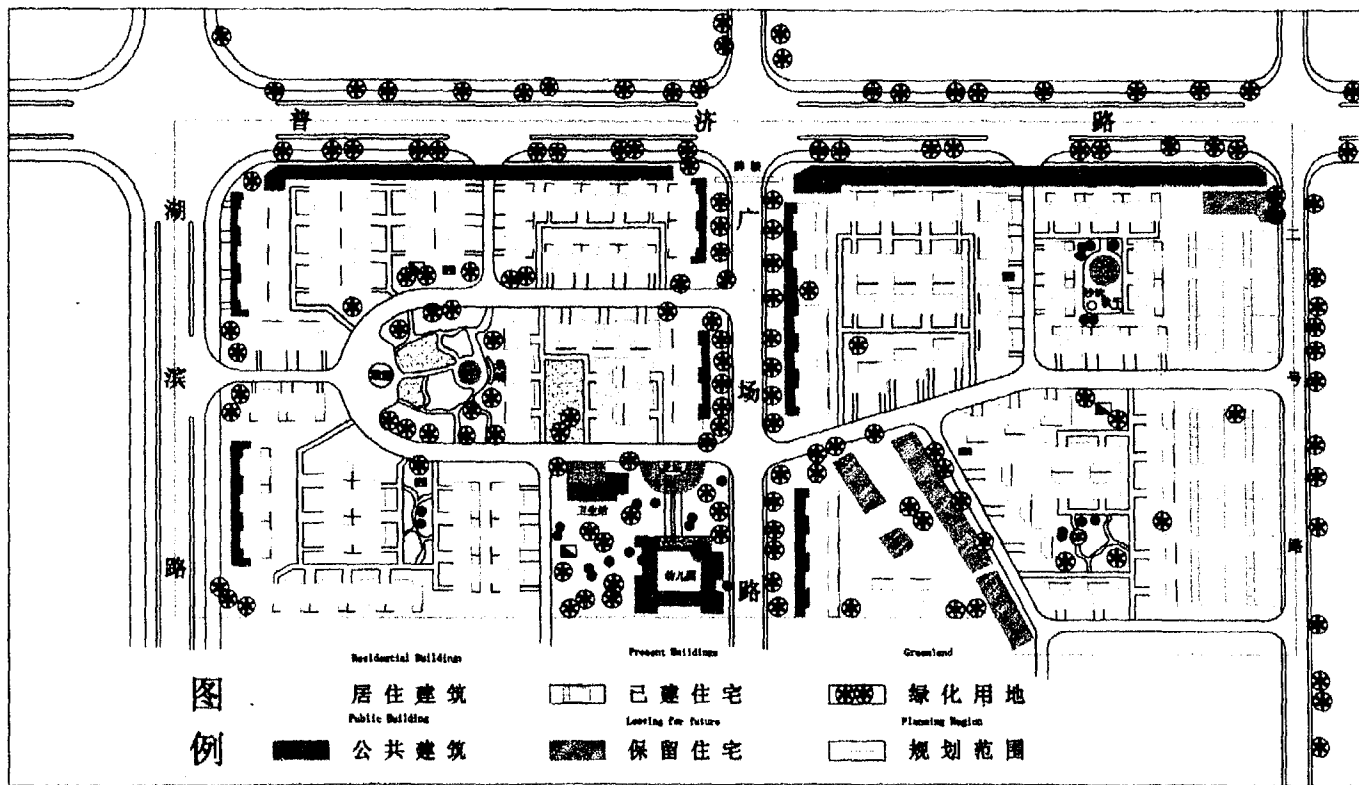
用地面积: 79.92m² 房屋面积: 134.64m²

Land Occupation

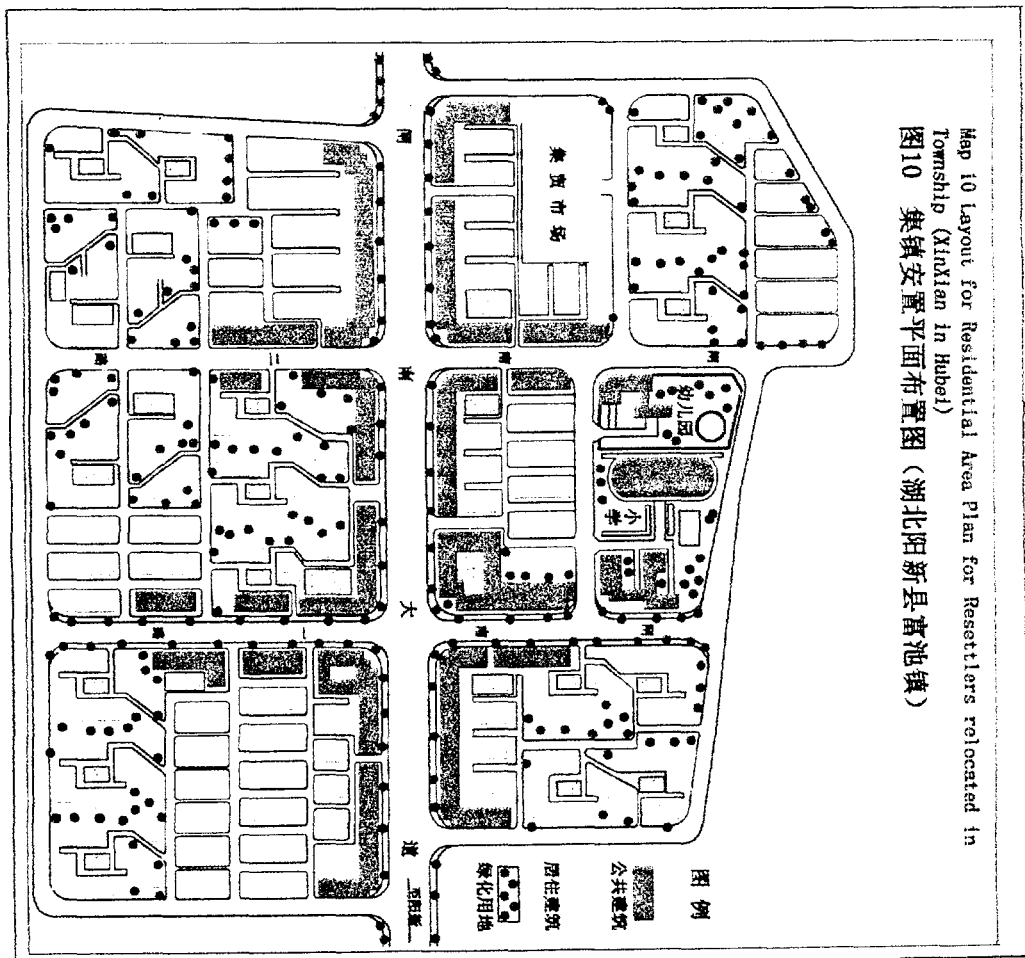
House area

Map 9 Layout of Residential Area Plan for Resettlers Moving to Township (in Tuanfeng in HUBEI)

图9 长江干堤加固工程集镇安置平面规划图 (湖北团风县罗霍洲新区)

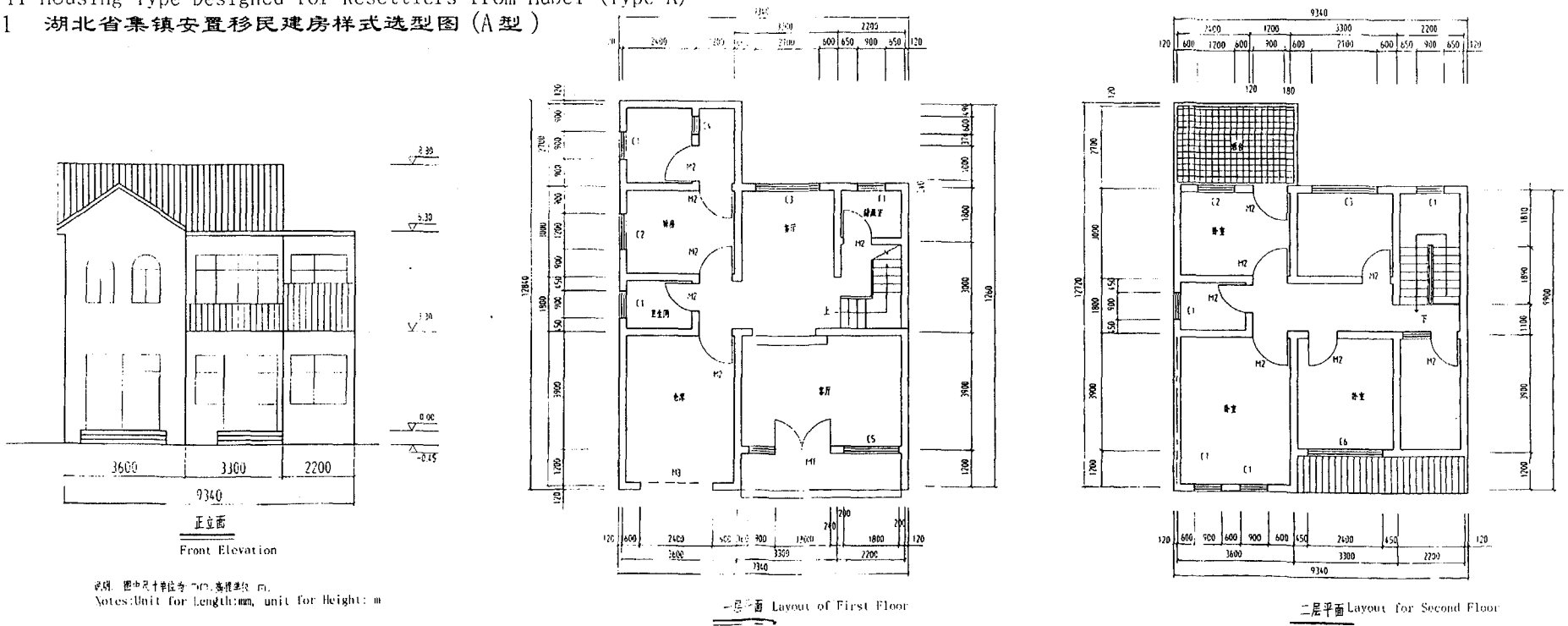


Map 10 Layout for Residential Area Plan for Resettlers relocated in
 Township (XinXian in Hubei)
 图10 集镇安置平面布置图 (湖北阳新县富池镇)



Map 11 Housing Type Designed for Resettlers from Hubei (Type A)

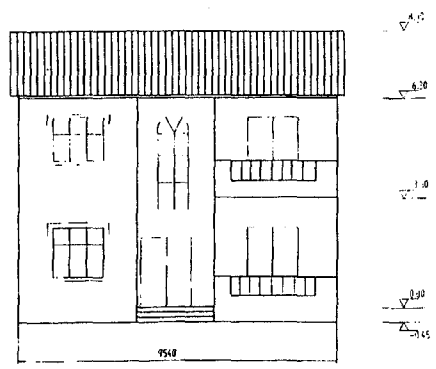
图 11 湖北省集镇安置移民建房样式选型图 (A型)



说明: 图中尺寸单位为 mm, 高程单位为 m.
Notes: Unit for Length: mm, unit for Height: m

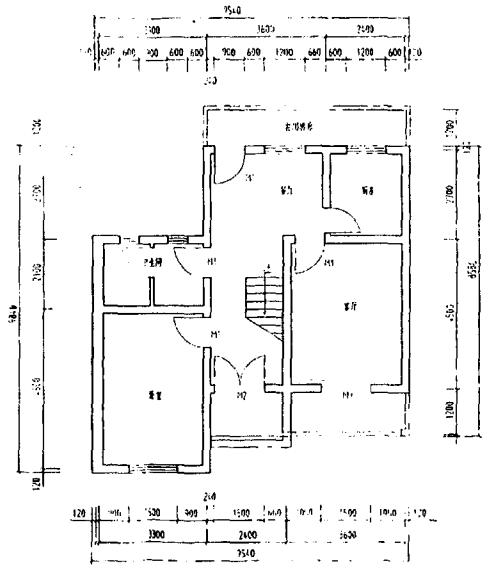
Map12 Housing Types Designed for Resettlers Relocated in Township (Type B)

图 12 湖北省集镇安置移民建房式样选型图 (B型)

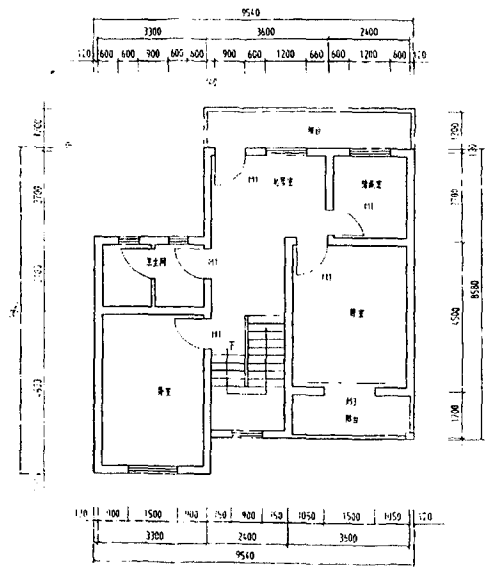


正立面
Front Elevation

说明: 图中尺寸单位为mm, 高程单位为m.
Notes: unit:mm, m



一层平面
Layout of First Floor

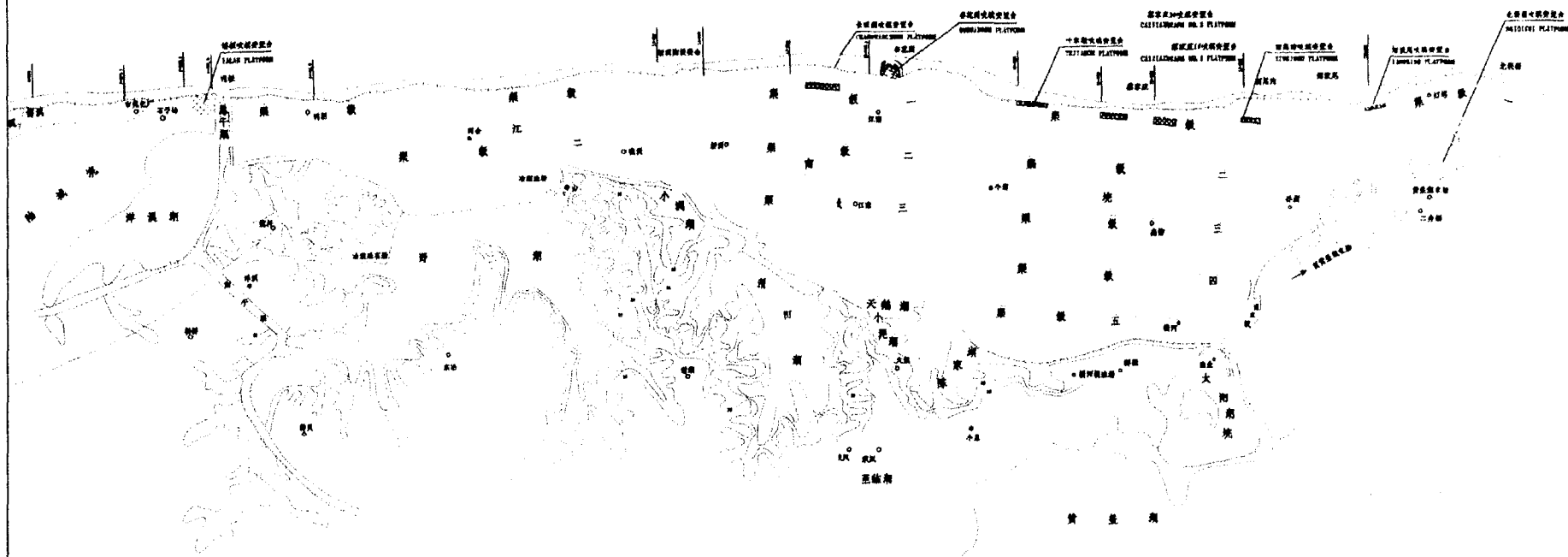


二层平面
Layout of Second Floor

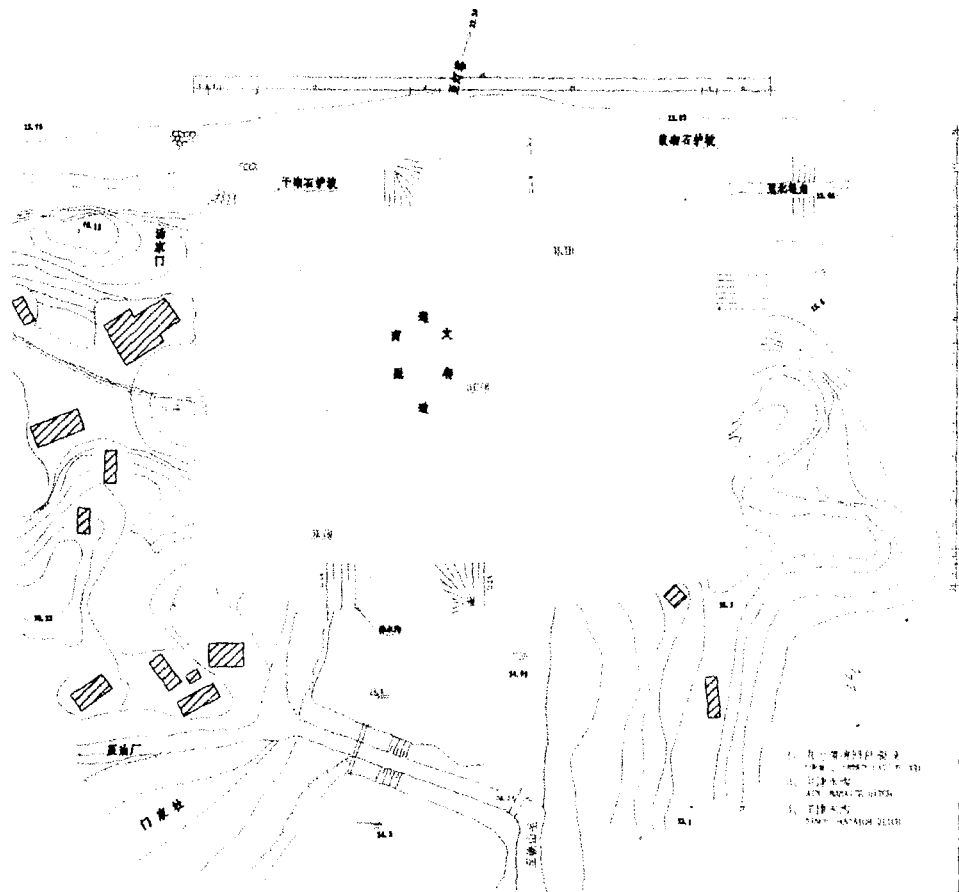
Map 13 Layout of Safety Islands for Residential Sites for Resettlers from Hunan Provincial Section

附图13 长江干堤加固工程安全台总体布置图（湖南段）

长江
CHANGJIANG



Map 14 Layout of Daqingjiang Safety Island for Resettlers from Hunan
 图14 湖南省大靖江安全台平面布置图



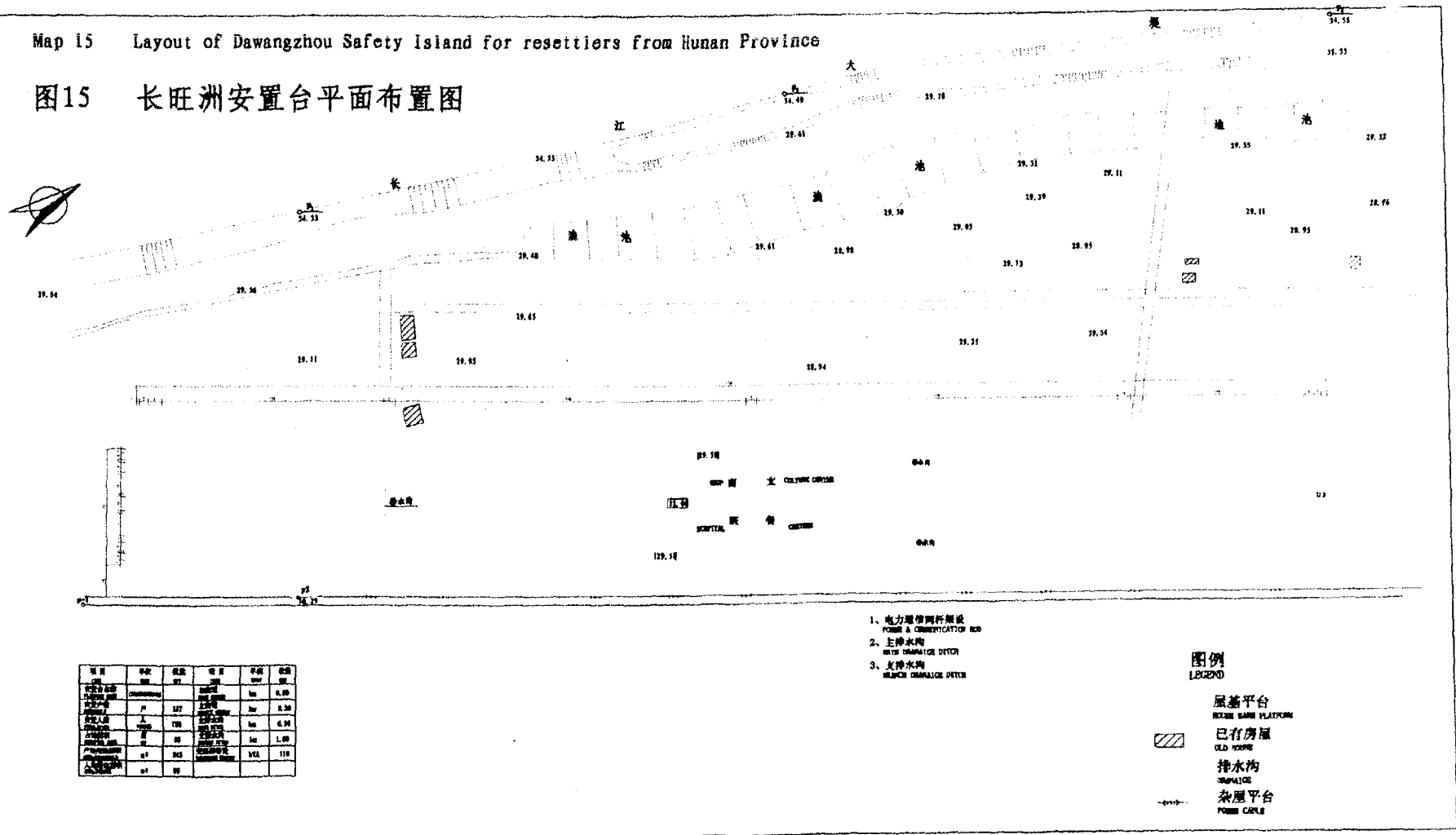
图例
 LEGEND

- 屋基平台
HOUSE BASE PLATFORM
- 已有房屋
OLD HOUSE
- 排水沟
DRAINAGE

项目	单位	数量	项目	单位	数量
ITEM	UNIT	QTY	ITEM	UNIT	QTY
房屋基座	块	179	土脚墙	m	6.17
房屋平台	m ²	179	土脚墙	m	1.38
房屋平台	m ²	600	土脚墙	m	0.54
房屋平台	m ²	90	土脚墙	m	0.90
房屋平台	m ²	280	房屋基座	块	100
房屋平台	m ²	90			

Map 15 Layout of Dawangzhou Safety Island for resettlers from Hunan Province

图15 长旺洲安置台平面布置图



项目	单位	数量	备注	说明	数量
房屋	间	127	新建	房屋	127
房屋	间	78	原有	房屋	78
房屋	间	80	原有	房屋	80
房屋	间	365	新建	房屋	365
房屋	间	19	原有	房屋	19

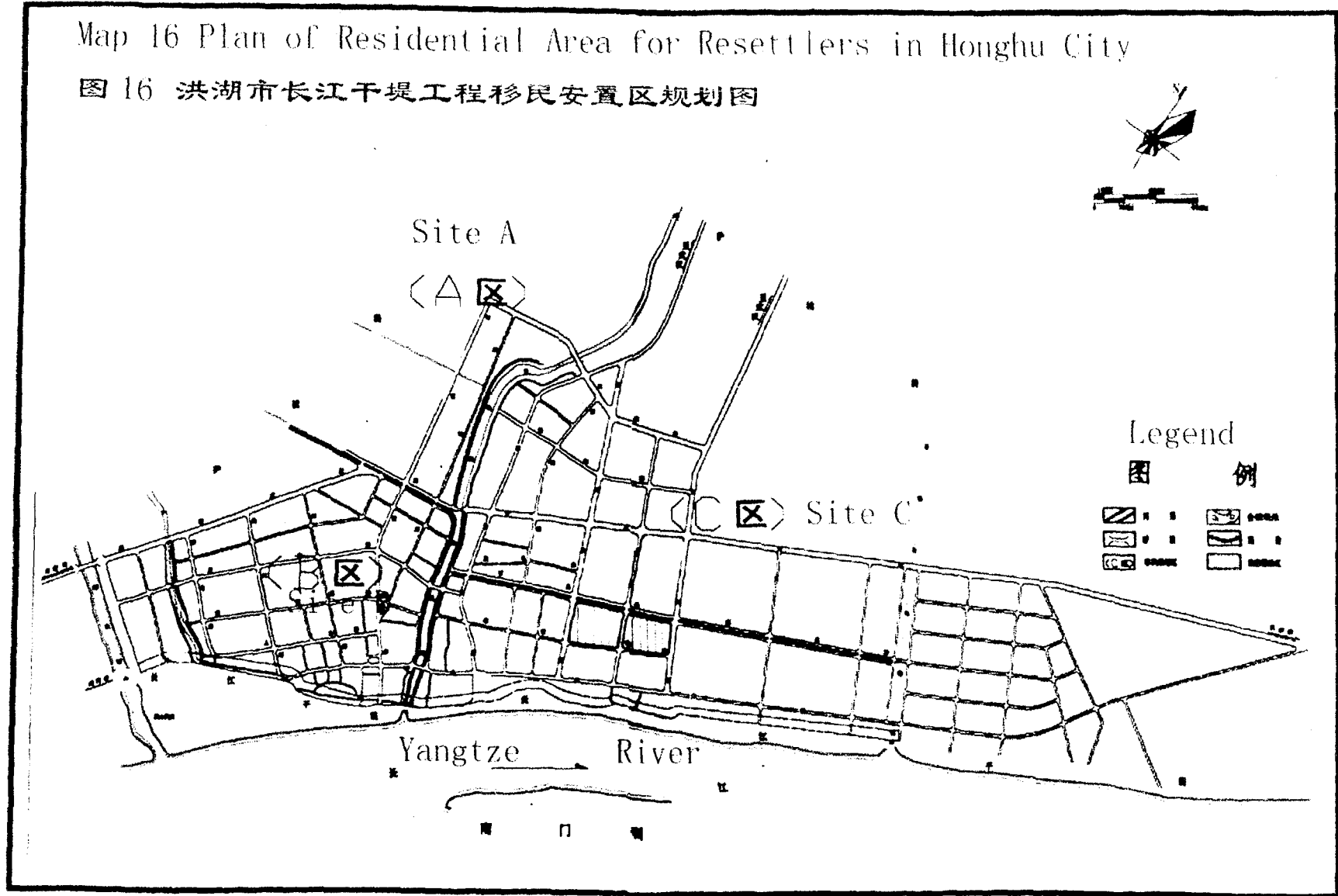
- 1、电力通信杆架线
POWER & COMMUNICATION POLE
- 2、主排水沟
MAIN DRAINAGE DITCH
- 3、支排水沟
BRANCH DRAINAGE DITCH

图例
LEGEND

- 房屋平台
HOUSE BANK PLATFORM
- 已有房屋
OLD HOUSE
- 排水沟
DRAINAGE
- 杂屋平台
POWER CANAL

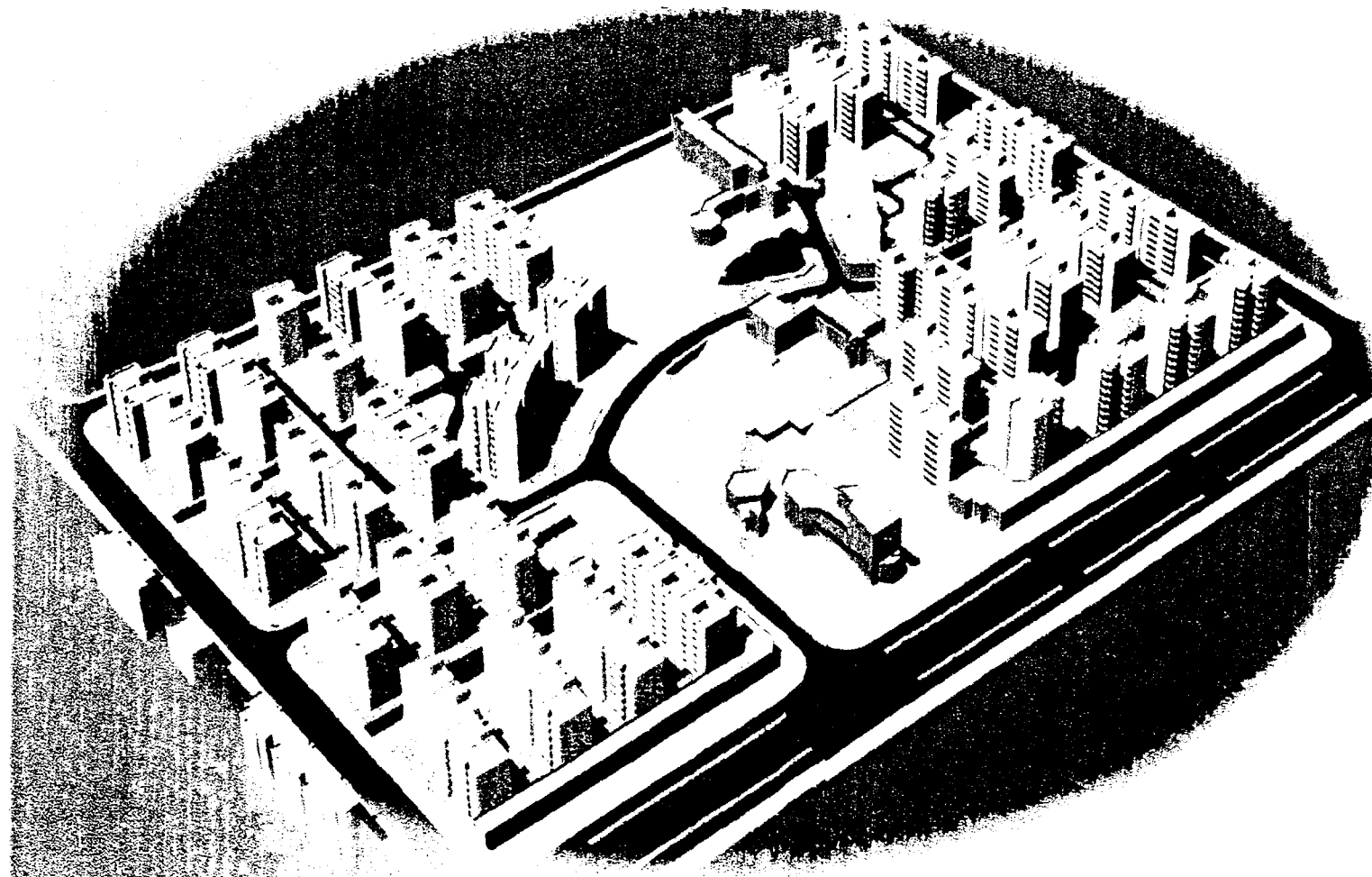
Map 16 Plan of Residential Area for Resettlers in Honghu City

图 16 洪湖市长江干堤工程移民安置区规划图

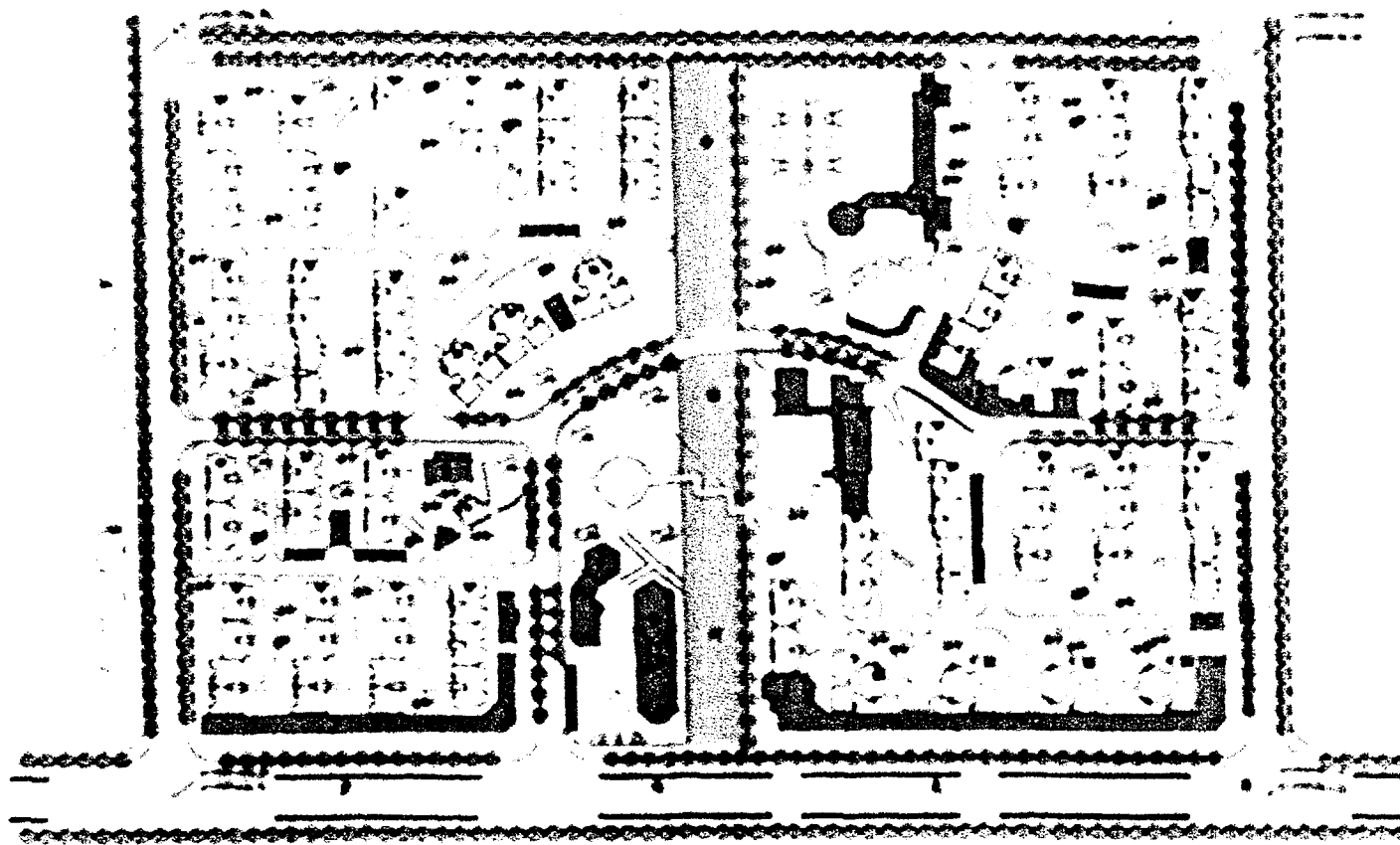


Map 17 Plan of Residential Area for Resettlers in Honghu City

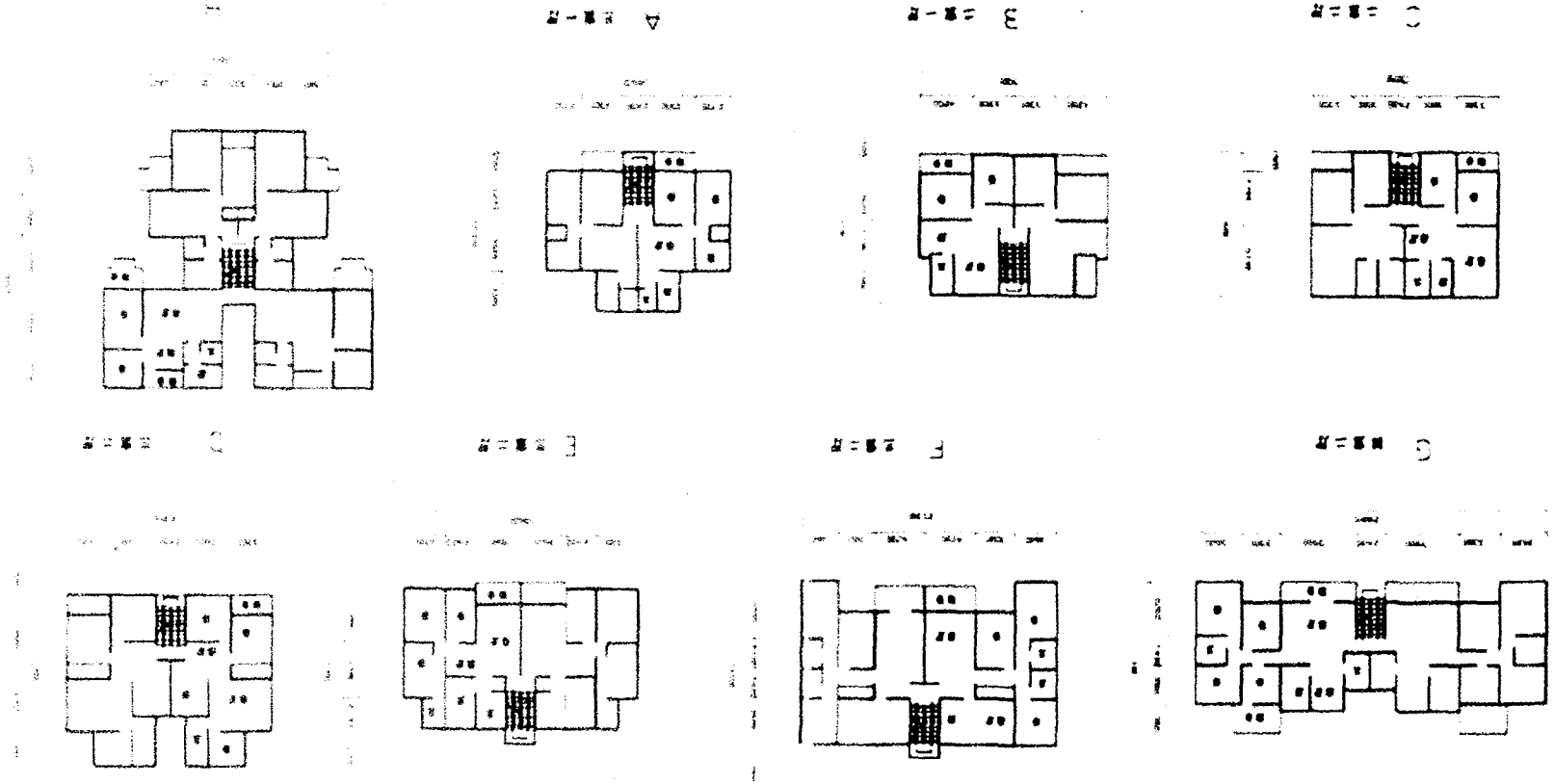
图 17 湖北省洪湖市移民小区规划图



Map18 Layout of Residential Area for Resettlers from Honghu City (Area A)

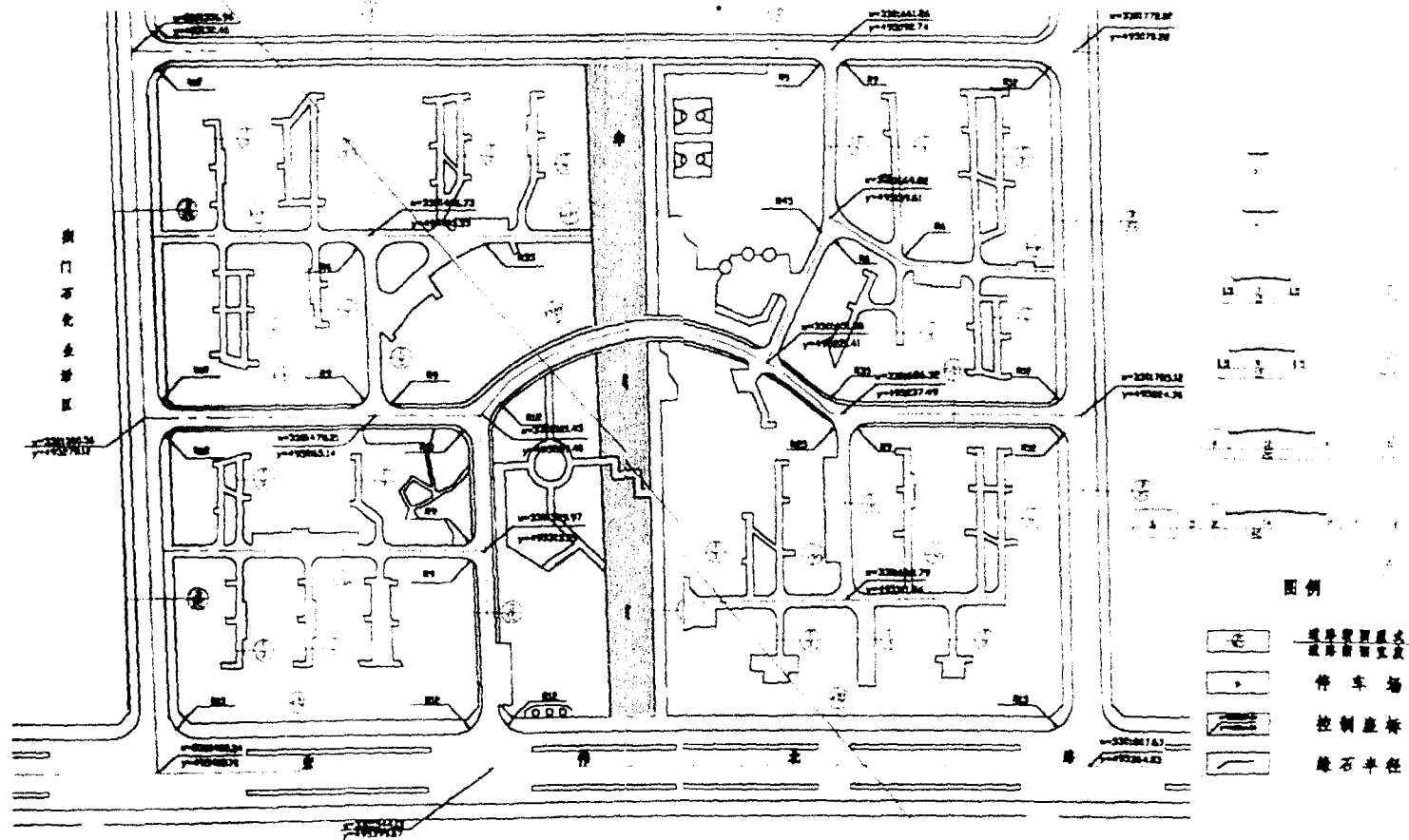


Map 19 House Type Designed for Resorters in Honghu City (Site A)
 图 19 洪湖市移民新区住宅选型图 (A区)



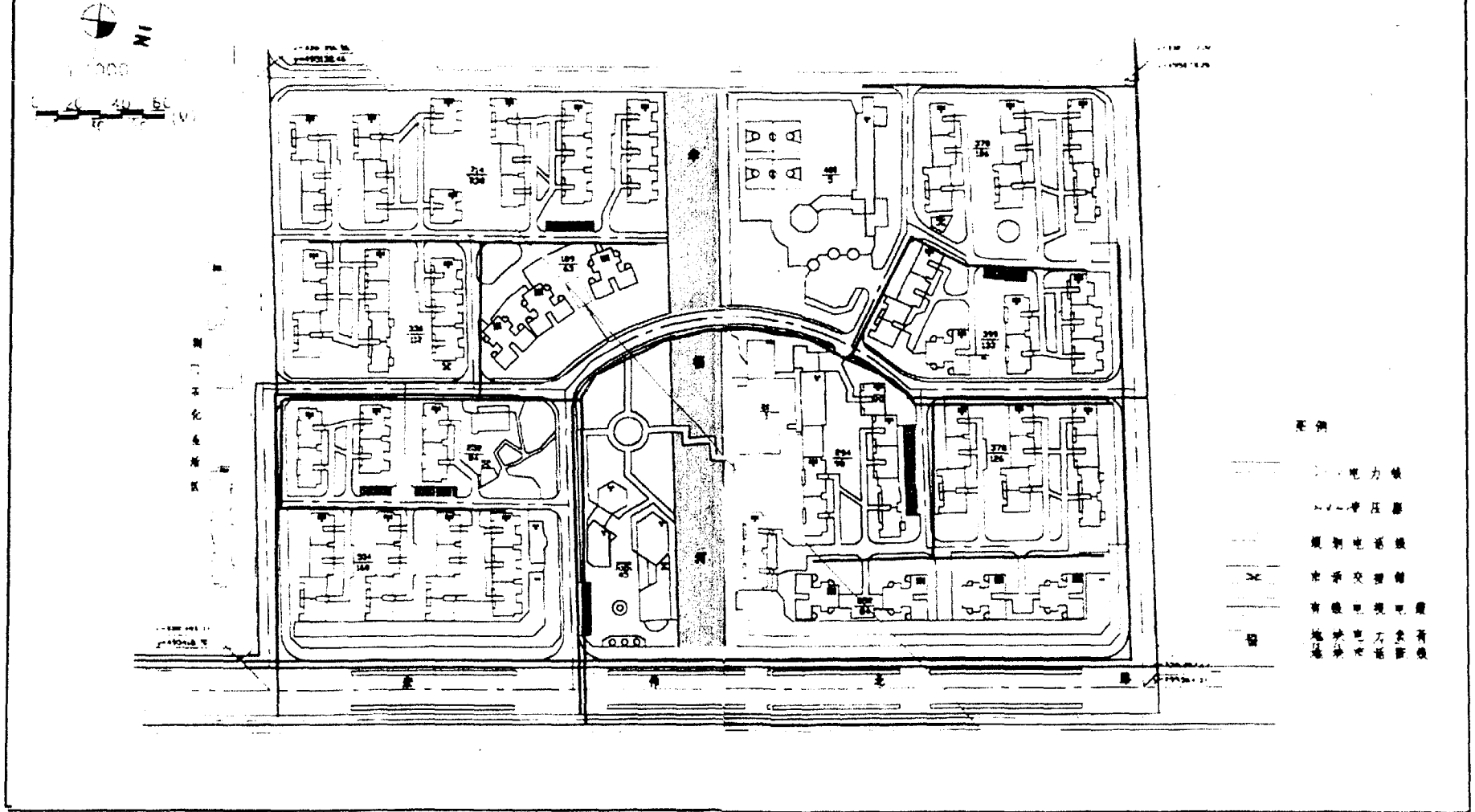
Map 20 Road Plan in Resettlement Ste in Honghu City (Site A)

图 20 洪湖市移民新区道路规划图 (A区)



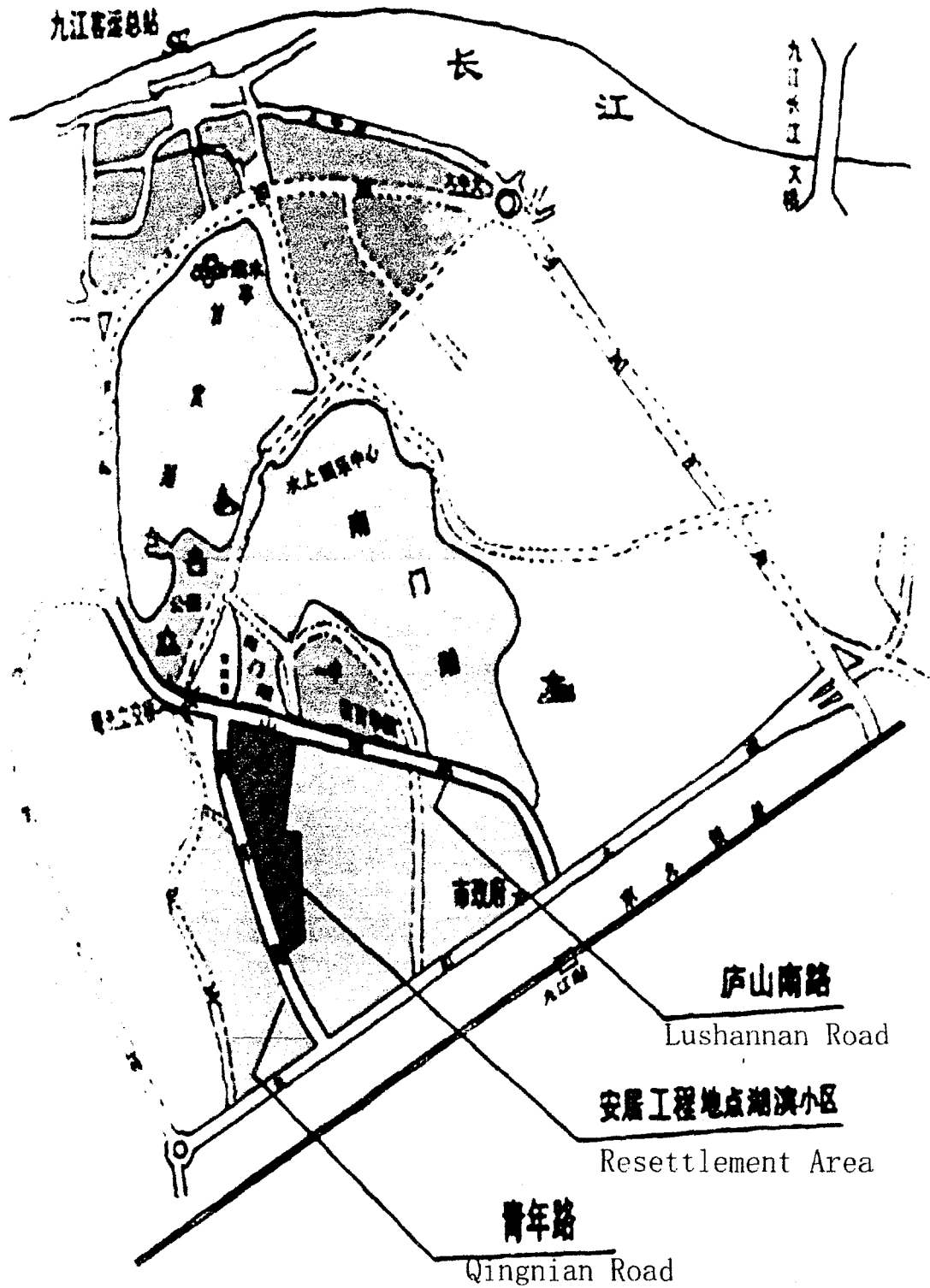
Map 21 Power and Communication Plan in Resettlement Site in Honghu City (Site A)

图 21 洪湖市移民新区电力通讯规划图 (A区)



Map 22 Location of Resettlement Area in Jiujiang City

图 22 江西九江市移民安置点位置图



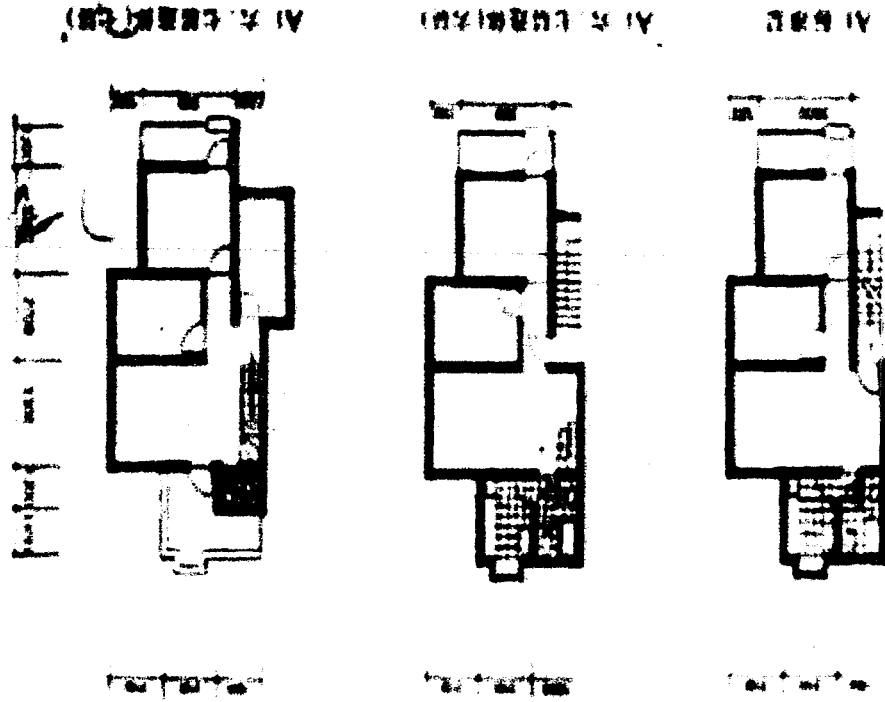


图 11 江西九江市移民安置点湖溪小区房屋设计图

1. 房屋设计图 2. 房屋设计图 3. 房屋设计图 4. 房屋设计图 5. 房屋设计图 6. 房屋设计图 7. 房屋设计图 8. 房屋设计图 9. 房屋设计图 10. 房屋设计图 11. 房屋设计图 12. 房屋设计图 13. 房屋设计图 14. 房屋设计图 15. 房屋设计图 16. 房屋设计图 17. 房屋设计图 18. 房屋设计图 19. 房屋设计图 20. 房屋设计图 21. 房屋设计图 22. 房屋设计图 23. 房屋设计图 24. 房屋设计图 25. 房屋设计图 26. 房屋设计图 27. 房屋设计图 28. 房屋设计图 29. 房屋设计图 30. 房屋设计图 31. 房屋设计图 32. 房屋设计图 33. 房屋设计图 34. 房屋设计图 35. 房屋设计图 36. 房屋设计图 37. 房屋设计图 38. 房屋设计图 39. 房屋设计图 40. 房屋设计图 41. 房屋设计图 42. 房屋设计图 43. 房屋设计图 44. 房屋设计图 45. 房屋设计图 46. 房屋设计图 47. 房屋设计图 48. 房屋设计图 49. 房屋设计图 50. 房屋设计图 51. 房屋设计图 52. 房屋设计图 53. 房屋设计图 54. 房屋设计图 55. 房屋设计图 56. 房屋设计图 57. 房屋设计图 58. 房屋设计图 59. 房屋设计图 60. 房屋设计图 61. 房屋设计图 62. 房屋设计图 63. 房屋设计图 64. 房屋设计图 65. 房屋设计图 66. 房屋设计图 67. 房屋设计图 68. 房屋设计图 69. 房屋设计图 70. 房屋设计图 71. 房屋设计图 72. 房屋设计图 73. 房屋设计图 74. 房屋设计图 75. 房屋设计图 76. 房屋设计图 77. 房屋设计图 78. 房屋设计图 79. 房屋设计图 80. 房屋设计图 81. 房屋设计图 82. 房屋设计图 83. 房屋设计图 84. 房屋设计图 85. 房屋设计图 86. 房屋设计图 87. 房屋设计图 88. 房屋设计图 89. 房屋设计图 90. 房屋设计图 91. 房屋设计图 92. 房屋设计图 93. 房屋设计图 94. 房屋设计图 95. 房屋设计图 96. 房屋设计图 97. 房屋设计图 98. 房屋设计图 99. 房屋设计图 100. 房屋设计图